Volksbanken Raiffeisenbanken
cooperative financial network

2018
Half-Year Financial Report

DZ BANK Group

Contents

Wolfgang Kirsch (Chief Executive Officer)

Dear Shareholders,

The DZ BANK Group's business performance was encouraging in the first half of 2018. At €1.03 billion, our profit before taxes was higher than the figure for the prior-year period of €939 million.

This good result reflects the strong performance of the operating business and an unremarkable risk situation. In particular, the loss allowances recognized for the shipping portfolio of DVB Bank were reduced significantly. At the same time, we made changes to the structure of the DZ BANK Group. Less than a year after the end of integration work within the amalgamated DZ BANK, the merger of DG HYP and WL BANK was completed on August 1 to form DZ HYP, one of the leading real estate banks in Germany. VR LEASING, which will operate under the VR Smart Finanz brand going forward, forged ahead with its transformation into a digital provider of finance for the self-employed and small businesses. We are also making rapid progress in selling significant parts of DVB Bank. During the first half of 2018, we again demonstrated that we are implementing our plans with a firm but steady hand.

The key results in detail: The DZ BANK Group's net interest income held steady at €1.42 billion (first half of 2017: €1.43 billion). At €958 million, net fee and commission income again reached a high level thanks to another good performance by Union Investment (first half of 2017: €977 million). Gains and losses on trading activities fell from a net gain of €304 million to a net gain of €206 million owing to a smaller contribution from trading income at DZ BANK AG. Other gains and losses on valuation of financial instruments declined from a net gain of €34 million to a net loss of €48 million. This was mainly due to a significant reduction in positive measurement effects arising from government bonds in DZ HYP's wind-down portfolio, particularly in the case of Italian government bonds. Net income from insurance business amounted to €299 million, compared with €451 million in the first half of 2017. This decrease was primarily attributable to an exceptionally high net gain on investments held by insurance companies in the prior-year period. Nonetheless, customer business continued to perform very well in the period under review, with record levels of premium income. Overall, loss allowances amounted to a net reversal of €44 million (first half of 2017: net addition of €396 million), mainly due to the sharp fall in loss allowances required at DVB Bank. Administrative expenses were virtually unchanged at €2.02 billion (first half of 2017: €2.00 billion), and increased expenses at DZ HYP resulting from the merger were offset by lower project costs at DZ BANK AG.

These solid results reflect the significant commitment of our employees. My colleagues on the Board of Managing Directors and I would like to express our appreciation and thanks to them.

The DZ BANK Group's capital situation remains sound thanks to consistent management of risk 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, 2018 was 13.7 percent (December 31, 2017: 13.9 percent).

We anticipate stable economic conditions during the second half of the year. Our economists forecast that Germany's economy will expand by 1.7 percent in 2018 as a whole. However, this encouraging outlook is subject to uncertainties stemming from trade policy and geopolitical factors. Our target for the year remains at the lower end of the long-term earnings range of €1.5 billion to €2 billion, especially in view of macroeconomic conditions and further capital expenditure on the ongoing development of the DZ BANK Group.

At the same time, we are working hard to ensure our organization is ready for the future by increasing efficiency and continuing to digitize our structures and processes. We are also focusing even more on our customers. One example of this is our range of activities aimed at enhancing the joint lending business with the local cooperative banks, for which we have set ourselves ambitious growth targets. Furthermore, we are refining the management of our financial services group. We refer to this portfolio of future-driven topics as 'Verbund First 4.0'.

During the first half of 2018, our organization demonstrated its ability to deliver successful customer business through constant renewal. We are pleased that we will also be able to count on the support of Ulrike Brouzi in this regard, who will be Member of the Board of Managing Directors effective from September 1, 2018.

Kind regards,

Wolfgang Kirsch
Chief Executive Officer

Interim group management report

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 management of the DZ BANK Group

The business model and the management of the DZ BANK Group are described in detail on page 8 and page 15 onward of the 2017 Annual Report. Those disclosures are also applicable to the first half of 2018. The merger, completed on July 27, 2018, of the two real estate companies Deutsche Genossenschafts-Hypothekenbank AG, Hamburg, (DG HYP) and WL BANK AG Westfälische Landschaft Bodenkreditbank, Münster, (WL BANK) to form DZ HYP AG, Hamburg and Münster, (DZ HYP) was already reflected in the description of the management of the DZ BANK Group.

2 Strategic focus as a network-oriented central institution and financial services group

The DZ BANK Group's strategic focus is described in detail on page 9 onward of the 2017 Annual Report. Those disclosures are also applicable to the first half of 2018.

2.1 Reorganization of real estate activities in the DZ BANK Group

In March 2017, the DZ BANK Group announced that it was planning to reorganize its real estate activities following the merger of the central institutions. The two real estate companies DG HYP and WL BANK then entered into merger discussions. On May 25 and 28, 2018, the shareholders of the two banks consented to the planned merger by adopting resolutions at their Annual General Meetings. The merger was entered in the commercial register on July 27, 2018. From a commercial perspective, the merger took place with retrospective effect from January 1, 2018.

The joint real estate bank operates under the brand name DZ HYP within the DZ BANK family of brands and continues to serve all four of the current customer segments – small business and self-employed customers, the housing industry, local authorities, and retail customers.

2.2 New corporate identity for VR LEASING

VR-LEASING Aktiengesellschaft, Eschborn, (VR-LEASING AG; subgroup abbreviated to VR LEASING) has been operating in the market under its new brand name, VR Smart Finanz, since mid-July 2018. This step is part of its transformation into a digital provider of finance for the self-employed and small businesses, a process that began in 2017. The new name underlines the clear focus of VR LEASING's business activities on assisting the cooperative banks with the provision of finance to small and medium-sized enterprises.

II Business report

1 Economic conditions

The German economy's uptrend weakened noticeably in the first six months of 2018. Adjusted for inflation, average overall economic output in the first half of the year was 1.0 percent higher than in the second half of 2017. By contrast, the rate of growth in the half-year period prior to that had been 1.4 percent.

Compared with the respective preceding quarter, German economic output was up by 0.4 percent in the first quarter and by 0.5 percent in the second quarter of 2018. In the fourth quarter of 2017, however, economic output had increased by 0.6 percent compared with the previous quarter.

The boost to the German economy provided by the rise in spending by consumers and the government during the reporting period also diminished slightly, with consumer spending dented by a slight increase in the rate of inflation. However, the 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.

Given the generally stable domestic economy and strong increases in tax revenues, German public finances are likely to finish the current year with a small budget surplus once again.

The economy of the eurozone also lost momentum in the first six months of 2018. Following economic expansion of 1.4 percent in the second half of 2017 compared with the first half of 2017, the eurozone's economic output in the period under review rose by 0.9 percent. The rate of growth in the first quarter of 2018 was 0.4 percent. In the second quarter, the economy also grew by 0.4 percent compared with the previous quarter.

By contrast, the economy in the United States was very buoyant in the first half of 2018. The tax reforms introduced at the start of 2018 brought significant tax relief for households and companies alike, thereby providing an extra boost to overall economic demand. In the first half of 2018, a further upturn in consumer spending – the most important driver of growth – was again a key factor in the country's robust economic performance. Capital spending on plant and equipment was also stepped up markedly. Other contributors to the strong economic growth were the further improving situation in the labor market and the sustained recovery of the US real estate market.

Economic difficulties persisted in some emerging economies, particularly in Latin America, during the reporting period. These were often attributable to structural problems and political uncertainty. Meanwhile, China's economic growth held steady.

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

The first half of 2018 was marked by far-reaching changes. In early May 2018, the United States withdrew from the nuclear deal entered into with Iran. Furthermore, the US government imposed customs tariffs on imports from China, the EU, Canada, and Mexico in the first few months of the year. Both of these factors increased uncertainty for the affected companies, as did the retaliatory punitive tariffs imposed by China and the EU on various US products. The price rises caused by the customs tariffs are squeezing consumers' disposable income and, in the medium term at least, will reduce the demand for goods. If the trade disputes were to escalate, both global trade and global economic growth would suffer.

The approach of Brexit, the political turmoil that arose in Italy in the second quarter of 2018, and the challenges faced by the EU as a result of US President Donald Trump's latest protectionist measures have made it abundantly clear that the advantages of globalization can only be assured across the EU if politicians succeed both in containing the negative effects of globalization and in mitigating the developments that reduce prosperity as a result of giving up the benefits of international freedom of movement and division of labor.

Globalization has clearly brought about huge social shifts, and it is evident that not enough has been done at a political level to protect people from their impact. Unemployment remains at a very high level, especially in southern eurozone countries. The European Commission wants to intervene in the event of significant increases in unemployment rates by setting up support programs at national level. Moreover, the German government's coalition agreement envisages contributing to an investment budget for individual eurozone countries that are lagging behind in terms of science, technology, and innovation. This agreement between the coalition partners is designed to support the aim of promoting economic convergence between the EU member states.

Proposals for an overhaul and strengthening of European Monetary Union (EMU) in view of the changed situation have notably been put forward by French President Emmanuel Macron and German Chancellor Angela Merkel. The first steps toward joint EU-wide implementation were decided upon at the EU summit at the end of June 2018.

The core aspects of the resolutions adopted at this summit include using the European Stability Mechanism (ESM) – the eurozone's crisis fund – as a backstop for the bank resolution fund in the future. However, the ultimate amount of this backstop has not yet been decided. It was also agreed that the finance ministers of the eurozone countries would define the core refinements to the ESM by the end of 2018.

Besides the aforementioned macroeconomic measures, however, the implementation of structural reforms aimed at reducing national debt – for which the individual EU countries are responsible themselves – is also crucial to increasing the stability of the eurozone.

On the whole, only limited progress was made in reducing new and total borrowing in the eurozone. These efforts were supported by the ongoing phase of low interest rates and the continued steady path of economic recovery in the first half of 2018, although the increase in the eurozone's economic output of 0.9 percent during the reporting period compared with the second half of 2017 was lower than the rise of 1.4 percent in the first half of 2017 compared with the second half of 2016.

At the end of the first quarter of 2018, the total borrowing of the 19 eurozone countries equated to 86.8 percent of their gross domestic product (GDP), a year-on-year decrease of 2.4 percentage points compared with the figure of 89.2 percent as at March 31, 2017.

Even though France and Italy, countries that are important in generating overall economic growth in Europe, along with Portugal and Spain, which had been reliant on EU aid during the sovereign debt crisis, all made further gains in economic efficiency in the first quarter of 2018 compared with the first quarter of 2017, they continued to suffer from a high level of indebtedness in the same way as some other eurozone countries, notably Greece.

Greece's public debt as a percentage of GDP stood at 180.4 percent in the first quarter of 2018 (first quarter of 2017: 177.7 percent) and its economy's growth was muted at the start of the year. After Greece had implemented a range of further reforms to satisfy certain preconditions, European lenders reached agreement in June 2018 on granting the country further debt relief and giving it the final sum of €15 billion from the €86 billion bailout program approved in 2015, which expires on August 20, 2018. The agreement also provides for a program of enhanced surveillance by the European Commission that includes a quarterly reporting cycle. The only role of the International Monetary Fund (IMF) will be to participate in this future monitoring process.

Italy is suffering from a high volume of non-performing loans and, above all, from having the highest relative government debt ratio in the eurozone after Greece; its public debt as a percentage of GDP stood at 133.4 percent in the first quarter of 2018 (first quarter of 2017: 133.8 percent). This reflects a serious structural crisis, requiring sweeping reforms. However, the government agenda of the coalition formed in early June 2018 by the right-wing nationalist Lega and populist Five Star Movement (M5S) parties specifies not only the reversal of social cutbacks but also measures to reduce the tax burden for citizens and companies. The total cost of this program is at least €100 billion per year. This planned level of spending will probably cause Italy's budget deficit to climb to at least 5 percent of GDP. In this environment, yields on Italian government bonds – and subsequently on those of other eurozone periphery countries – shot up in the weeks after the new government was formed.

Portugal's public debt as a percentage of GDP stood at 126.4 percent in the first quarter of 2018 (first quarter of 2017: 130.1 percent) and the country made further progress on stabilizing its economy during the first half of the year. However, the banking sector continues to have significant legacy issues in the form of non-performing loans. Positive influences on the Portuguese economy included stable consumer demand and, above all, brisker investing activities, albeit still at a far lower level than before the sovereign debt crisis.

Spain's public debt as a percentage of GDP stood at 98.8 percent in the first quarter of 2018 (first quarter of 2017: 99.7 percent) and its economy continued to expand rapidly at the start of this year. The existing conservative government led by Mariano Rajoy was dissolved following a vote of no confidence in June 2018. Rajoy was replaced as prime minister by socialist Pedro Sanchez, who, like his predecessor, is reliant on the support of other parties. As a result, the difficulties in securing the necessary majorities in votes have returned. The political instabilities continue to hamper Spain's progress in reducing its substantial national debt.

France's public debt as a percentage of GDP stood at 97.7 percent in the first quarter of 2018, only a slight reduction compared with the figure a year earlier (first quarter of 2017: 98.9 percent). Nevertheless, President Emmanuel Macron introduced and implemented initial structural reforms in his first year of office, in particular labor market reforms. Changes to unemployment insurance and to professional training and development are on the agenda as well. Restructuring of the state-owned rail company and, from 2019, the gradual standardization of the currently more than 25 pension schemes are also planned.

The developments in the eurozone described above show that the European Central Bank (ECB) with its policy of quantitative easing has 'bought' the necessary time for the EMU countries burdened with significant debt to reduce their fundamental budget deficits. Nonetheless, most of the countries mentioned above have made only limited efforts to reduce their high levels of indebtedness and bring in the necessary structural reforms or, as has recently happened in Italy, have consciously set out to oppose such steps. This is especially worrying because it is questionable whether the EU countries concerned will be in any position at all (because of the size of their debt burden) to cope with substantially higher interest rates arising from further normalization of the ECB's monetary policy.

It is clear that the current low level of interest rates has also had a negative impact on 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 EMU countries are still seeing strong political movements that oppose the jointly agreed stabilization efforts of the single currency area. Even if, especially in France, EU skepticism has given way to a pro-European political majority, the parliamentary elections in Austria, Italy, and Hungary have shown that increasingly anti-EU forces are gaining momentum and, in the case of Italy, have even made it into government.

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 aforementioned program put forward by the Italian government adds a whole new dimension to the conflict with this commitment.

At the same time, 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. Furthermore, 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.

There is also a danger that future interest-rate rises in individual eurozone countries will lead to a wave of bankruptcies among companies with chronic profitability problems. This may subdue economic growth and even trigger a recession if the situation worsens sufficiently. The countries giving rise to concerns about a sharp rise in insolvencies in the event of an interest-rate hike are Portugal, Italy, and Ireland, because they each have a high proportion of non-performing loans to companies. This indicates a prevalence of firms with a sustained lack of profitability.

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

At its meeting on June 14, 2018, the ECB raised the prospect of ending the bond-buying program that it began back in March 2015. It has announced that bond purchases, which amounted to a monthly volume of €30 billion in the first half of 2018, would be halved to a volume of €15 billion per month from October 2018 and would stop completely at the end of December 2018. Explaining this move, ECB President Mario Draghi said that there was increased confidence that inflation in the eurozone was moving permanently in the direction of the central bank's target of below, but close to, 2 percent. The ECB also decided to leave the main refinancing rate unchanged at 0.00 percent and the deposit facility for banks at minus 0.40 percent.

By contrast, the US Federal Reserve (Fed) raised its target range for the federal funds rate by 25 basis points on March 21, 2018 and then again on June 13, 2018, ultimately taking the target range to 1.75 percent to 2.00 percent.

Against a backdrop of challenging market conditions, nearly all the major German banks reported a fall in operating income in the first half of 2018. The net additions to loss allowances made by the major banks in the first six months of last year were not repeated in the reporting period, with most of them reporting an unchanged position overall or a net reversal of loss allowances. Administrative expenses increased slightly across the board.

3 Financial performance

3.1 Financial performance at a glance

The DZ BANK Group successfully consolidated its position in the half-year under review in challenging market conditions influenced primarily by the extremely low level of interest rates and demanding regulatory requirements.

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 2017 were as described below.

Operating income in the DZ BANK Group amounted to €3,008 million (first half of 2017: €3,335 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, net income from insurance business, and other net operating income.

Net interest income (including income from long-term equity investments) in the DZ BANK Group decreased by 0.4 percent year on year to €1,422 million (first half of 2017: €1,427 million).

Net interest income (excluding income from long-term equity investments) at DZ BANK went up by €33 million. At BSH, net interest income fell by €36 million, at DZ PRIVATBANK by €27 million, and at DVB by €23 million. At TeamBank and VR LEASING, it increased by €10 million and €6 million respectively.

Net income from long-term equity investments in the DZ BANK Group rose by 76.9 percent to €46 million (first half of 2017: €26 million). The figure for the prior-year period had been affected by losses reported by some equity-accounted entities in the DVB subgroup.

Net fee and commission income in the DZ BANK Group decreased by 1.9 percent to €958 million (first half of 2017: €977 million).

At DZ BANK, net fee and commission income rose slightly, by €2 million. Net fee and commission income at UMH declined by €45 million, at DVB by €10 million, at TeamBank by €8 million, and at

VR LEASING by €3 million. It increased by €32 million at DZ PRIVATBANK and by €10 million at BSH.

The DZ BANK Group's **gains and losses on trading activities** came to a net gain of €206 million, compared with a net gain of €304 million in the first half of 2017. This was largely attributable to the gains and losses on trading activities at DZ BANK amounting to a net gain of €195 million (first half of 2017: net gain of €298 million).

Gains and losses on investments advanced by €10 million to a net gain of €98 million (first half of 2017: net gain of €88 million). The main reasons for the year-on-year change were the factors described in the details for the DZ BANK and DVB operating segments.

FIG. 1 – INCOME STATEMENT

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017	Change (%)
Net interest income	**1,422**	1,427	-0.4
of which: income from long-term equity investments[1]	**46**	26	76.9
Net fee and commission income	**958**	977	-1.9
Gains and losses on trading activities	**206**	304	-32.2
Gains and losses on investments	**98**	88	11.4
Other gains and losses on valuation of financial instruments	**-48**	34	>100.0
Net income from insurance business	**299**	451	-33.7
Loss allowances	**44**	-396	>100.0
Administrative expenses	**-2,018**	-2,000	0.9
Staff expenses	**-906**	-904	0.2
Other administrative expenses[2]	**-1,112**	-1,096	1.5
Other net operating income	**73**	54	35.2
Profit before taxes	1,034	939	10.1
Income taxes	**-303**	-451	-32.8
Net profit	**731**	488	49.8

1 Total of current income and expense from income from other shareholdings, current income and expense from investments in subsidiaries, current income and expense from investments in associates, income/loss from using the equity method, and income from profit-pooling, profit-transfer, and partial profit-transfer agreements; see note 8 in the notes to the interim consolidated financial statements.

2 General and administrative expenses plus depreciation/amortization expense on property, plant and equipment, and investment property, and on other assets; amount for first half of 2017 restated, see note 2 in the notes to the interim consolidated financial statements.

Other gains and losses on valuation of financial instruments in the DZ BANK Group amounted to a net loss of €48 million in the reporting half-year (first half of 2017: net gain of €34 million). Of the figure reported for the DZ BANK Group, a gain of €30 million (first half of 2017: gain of €161 million) was accounted for by DZ HYP and a loss of €87 million (first half of 2017: loss of €131 million) by DVB.

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, and insurance business operating expenses. In the reporting period, this figure decreased by 33.7 percent to €299 million (first half of 2017: €451 million).

The rise in premium income was unable to fully offset the decline in gains and losses on investments held by insurance companies and other insurance company gains and losses, the increase in insurance benefit payments, and the growth of insurance business operating expenses.

Loss allowances, which were calculated in accordance with IFRS 9 for the first time in the reporting period, amounted to a net reversal of €44 million (first half of 2017: net addition of €396 million).

Further detailed disclosures regarding the level of, and changes in, loss allowances can be found in note 47 in the notes to the interim consolidated financial statements.

Administrative expenses in the DZ BANK Group rose slightly, by €18 million or 0.9 percent, to €2,018 million (first half of 2017: €2,000 million), including an increase in staff expenses of €2 million (0.2 percent) to €906 million (first half of 2017: €904 million) and an increase in other administrative expenses of €16 million (1.5 percent) to €1,112 million (first half of 2017: €1,096 million).

The DZ BANK Group's **other net operating income** came to €73 million (first half of 2017: €54 million). The main reasons for this change compared with the first half of 2017 were the factors described in the details for the DZ BANK, DVB, UMH, and VR LEASING operating segments.

Profit before taxes for the first half of 2018 stood at €1,034 million, compared with €939 million in the first half of 2017.

The DZ BANK Group's **cost/income ratio** (i.e. the ratio of administrative expenses to total operating income) for the reporting half-year came to 67.1 percent (first half of 2017: 60.0 percent).

The DZ BANK Group's **income taxes** amounted to €303 million in the period under review (first half of 2017: €451 million). The increase in the tax expense in the first half of last year included the effects of deferred taxes.

Net profit for the first half of 2018 stood at €731 million, compared with €488 million in the first half of 2017.

FIG. 2 – SEGMENT INFORMATION

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

€ million	DZ BANK	BSH	DVB
Net interest income	591	387	80
Net fee and commission income	185	-12	42
Gains and losses on trading activities	195	-	-4
Gains and losses on investments	74	11	11
Other gains and losses on valuation of financial instruments	19	3	-87
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	-	-	-
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 Jun. 30, 2018	289,868	70,480	21,562

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2017

€ million	DZ BANK	BSH	DVB
Net interest income	533	423	103
Net fee and commission income	183	-22	52
Gains and losses on trading activities	298	-	-19
Gains and losses on investments	67	15	-4
Other gains and losses on valuation of financial instruments	15	-1	-131
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	-	-	-
Loss allowances	90	-2	-446
Administrative expenses[1]	-803	-233	-103
Other net operating income	22	23	16
Profit/loss before taxes	**405**	**203**	**-532**
Cost/income ratio (%)	71.8	53.2	>100.0
Regulatory RORAC (%)	11.0	39.5	>100.0
Average own funds/solvency requirement	5,403	1,026	581
Total assets/total equity and liabilities as at Dec. 31, 2017	265,843	68,337	23,414

1 Amount restated.

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR LEASING	Other/ Consolidation	**Total**
	282	33	-	221	6	76	-254	**1,422**
	1	94	-	-5	705	5	-57	**958**
	-	5	-	-	-	-	10	**206**
	4	-	-	-	-7	7	-2	**98**
	30	-2	-	-	-22	-	11	**-48**
	-	-	8,115	-	-	-	-	**8,115**
	-	-	1,269	-	-	-	-54	**1,215**
	-	-	-7,709	-	-	-	-	**-7,709**
	-	-	-1,406	-	-	-	84	**-1,322**
	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	-	34.2	>100.0	0.6	-	**-**
	1,444	349	-	444	351	333	-	**-**
	85,026	18,200	108,179	8,641	2,048	4,770	-70,540	**538,234**

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR LEASING	Other/ Consolidation	**Total**
	282	60	-	211	4	70	-259	**1,427**
	-	62	-	3	750	8	-59	**977**
	7	7	-	-	-	-	11	**304**
	3	-	-	-	-	6	1	**88**
	161	5	-	-	2	-	-17	**34**
	-	-	7,403	-	-	-	-	**7,403**
	-	-	1,883	-	-	-	-36	**1,847**
	-	-	-7,543	-	-	-	-	**-7,543**
	-	-	-1,350	-	-	-	94	**-1,256**
	7	-	-	-34	-1	-6	-4	**-396**
	-126	-116	-	-105	-393	-69	-52	**-2,000**
	2	-6	-4	3	-	4	-6	**54**
	336	**12**	**389**	**78**	**362**	**13**	**-327**	**939**
	27.7	90.6	-	48.4	52.0	78.4	-	**60.0**
	45.3	8.4	11.3	36.8	>100.0	8.1	-	**11.2**
	1,489	295	6,862	425	351	314	-	**16,746**
	85,855	16,802	103,419	8,009	2,445	4,749	-73,279	**505,594**

3.2 Financial performance in detail

Figure 2 above shows the details of the financial performance of the DZ BANK Group's operating segments in the first half of 2018 compared with the corresponding period of 2017.

3.2.1 DZ BANK

In the detailed descriptions, the financial performance of the business lines is presented on the basis of the net income values used by financial planning and control for business management purposes.

Net interest income (excluding income from long-term equity investments) at DZ BANK rose by 12.0 percent to €307 million (first half of 2017: €274 million). This result included an increase in the net interest margin contributions from both money market borrowing and money market investments.

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

In accordance with the cooperative principle of decentralization, the tried-and-tested 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 cooperative financial network has been pivotal in helping to shape the sustained economic upturn experienced by Germany's large and medium-sized companies that began some years ago. This is confirmed by its position in the corporate finance market. Over the past ten years, the cooperative financial network's volume of lending has grown at a much faster rate than that of the market as a whole. In the period March 31, 2017 to March 31, 2018, the cooperative banks (including DZ BANK) grew by 6.3 percent, again exceeding the rate of growth in the overall market.

The macroeconomic conditions in Germany remain positive for the corporate banking business operated jointly by DZ BANK and the cooperative banks; the country's large and medium-sized companies remained in robust financial health. At the same time, however, the competitive environment in corporate banking is becoming increasingly challenging and pressure on credit margins is mounting rapidly. The game changers of our age, digitalization and the accompanying shift in customer behavior, are further intensifying this competition and significantly increasing the need for innovation and optimization in the Corporate Banking business line.

Moreover, the vast majority of large and medium-sized companies continue to be able to meet their capital investment requirements from their own cash flows or reserves thanks to their sound capital and liquidity position. Partly as a result of the stable German economy and companies' robust financial health, large and medium-sized companies are still venturing into international business on a significant scale. DZ BANK has recognized this trend and, in the reporting half-year, entered into a cooperation agreement with Indonesia's third-largest bank, PT Bank Central Asia Tbk. The aim of this agreement is to provide support for each other's corporate customers, i.e. direct and cooperative financial network customers in Germany that are targeting the Indonesian market as well as PT Bank Central Asia's Indonesian customers that are looking to enter the German market.

Although German large and medium-sized companies' propensity to invest is still at a good level, indications of a reluctance to invest started to emerge in the first half of 2018 despite favorable business conditions. One of the key reasons for this is likely to be the shortage of skilled employees, which is an ever-growing concern for these firms. Geopolitical factors, particularly the worldwide trade disputes and the uncertainties linked with the approaching Brexit, are also having an adverse impact.

In the Corporate Banking business line, the net interest margin contribution declined by a total of 9.9 percent to €193.8 million (first half of 2017: €215.1 million), although it should be noted that, unlike in the reporting period, the net interest margin contribution in the first half of 2017 still included an amount of €16.6 million relating to the real estate lending business. This portfolio was segregated from the Corporate Banking portfolio in the second half of 2017 in view of the planned transfer of the real estate lending business to DZ HYP and, in the first six months of 2018, generated a net interest margin contribution of €18.2 million.

The net interest margin contribution in the five regional corporate customer divisions went down by 16.9 percent in total to €98.3 million (first half of 2017: €118.3 million). However, the net interest margin contribution for the first half of 2017 still included an amount of €16.6 million relating to the aforementioned real estate lending portfolio.

Despite a further contraction of margins, the Investment Promotion division was able to increase its net interest margin contribution by 5.7 percent to €31.7 million (first half of 2017: €30.0 million) thanks to the growth in the volume of development lending.

New business in the main areas of development activity within traditional investment finance, which primarily include business start-ups and financing of innovation projects, held steady in this highly competitive field. The significant rise in funding for innovation is also due to the combined efforts of DZ BANK and Kreditanstalt für Wiederaufbau (KfW) [Germany's KfW development bank] in creating attractive program terms and conditions. However, growth was achieved in the development lending portfolio within the private house-building business.

In the product fields of the Structured Finance division, the net interest margin contribution declined by a total of 4.5 percent to €63.8 million (first half of 2017: €66.8 million). The main year-on-year changes in the net interest margin contribution from each of the product fields are described below.

In the acquisition finance/syndicated business product field, the division arranges and structures debt finance to support the acquisition of large and medium-sized companies, primarily in the German-speaking countries. Large numbers of customers made use of the high degree of liquidity in the markets to redeem their loans. The net interest margin contribution fell by 12.8 percent to €10.8 million (first half of 2017: €12.4 million).

There was a slight decrease in the project finance product field's net interest margin contribution in the first half of 2018, which dropped by 2.0 percent to €11.7 million (first half of 2017: €12.0 million).

In the international trade and export finance product field, in which the emphasis is very much on providing support for German large and medium-sized corporate customers involved in international business, the net interest margin contribution fell sharply, by 17.3 percent, to €20.0 million in the first half of 2018 (first half of 2017: €24.2 million).

In the renewable energies/syndicated loans and acquisition finance for the Region West product field, the net interest margin contribution advanced by 10.2 percent to €24.3 million (first half of 2017: €22.0 million). Despite growing competition, there was an increase in renewable energies business during the reporting period, particularly the funding of wind turbines.

Net fee and commission income rose by 1.1 percent to €185 million (first half of 2017: €183 million).

In the Corporate Banking business line, the service contribution declined by a total of 1.1 percent to €72.6 million (first half of 2017: €73.4 million). The figure for the first half of 2017 still included the service contribution from the real estate lending portfolio, which was segregated from the Corporate Banking portfolio in the second half of last year and generated a service contribution of €1.4 million in the first half of this year.

In the five regional corporate customer divisions, the service contribution went down by 9.6 percent in total to €25.8 million (first half of 2017: €28.6 million). However, the service contribution for the first half of 2017 still included an amount of €1.4 million relating to the aforementioned real estate lending portfolio.

The service contribution in the Investment Promotion division, which amounted to minus €3.9 million in the period under review (first half of 2017: minus €3.7 million), was again affected by the margin reimbursement received by the cooperative banks.

In the Structured Finance division, the service contribution rose by a total of 2.0 percent to €49.5 million (first half of 2017: €48.5 million). The main year-on-year changes in the service contribution from each of the product fields in the Structured Finance division are described below.

The acquisition finance/syndicated business product field was characterized by much fiercer competition in the first half of 2018. Nevertheless, the service contribution increased by 44.7 percent in total to €5.9 million due to the encouraging performance of the syndicated business (first half of 2017: €4.1 million).

In the project finance product field, the service contribution was up by 2.8 percent to €4.6 million (first half of 2017: €4.5 million).

The service contribution in the international trade and export finance product field for the reporting period climbed by a substantial 57.6 percent to €5.5 million (first half of 2017: €3.5 million).

By contrast, the service contribution in the international documentary business product field (letters of credit, guarantees, collections) was down slightly year on year at €9.5 million (first half of 2017: €10.0 million).

The asset securitization product field's service contribution grew by 5.5 percent to €22.2 million in the six months under review (first half of 2017: €21.1 million).

In the Capital Markets business line, the comprehensive range of advisory, structuring, and placement services available in relation to capital and mezzanine products again proved popular with customers of the cooperative banks and direct customers of DZ BANK in the reporting half-year.

Based on various ranges of products, DZ BANK managed to prevail against German and international competitors, despite the market remaining fiercely contested. The successfully implemented transactions and the satisfaction of customers are testimony to a high level of product expertise and effectiveness in a constantly changing market environment. For example, DZ BANK was awarded a repeat mandate to implement a share buyback program for Evonik AG in the first half of 2018. The cooperative banks and direct customers value the transaction security offered by DZ BANK in connection with the execution of capital and mezzanine transactions.

The service contribution generated by the Transaction Banking business line was also higher than the equivalent figure reported for the first six months of 2017 as a result of higher income on the back of the growth in the securities custody business.

Gains and losses on trading activities amounted to a gain of €195 million (first half of 2017: gain of €298 million).

The deterioration of gains and losses on trading activities was attributable to market-price-related measurement expenses, specifically spread-induced measurement losses in interest-rate and fixed-income trading and on flow derivative products. Income from trading on behalf of customers matched the high level achieved in the prior-year period.

The other accounting-related influences, including the adjustment of valuation curves for the bank's own issues, interest-rate-related changes in the fair value of cross-currency basis swaps used to hedge investment portfolios, and gains and losses on exchange differences arising from financial instruments in the investment portfolio and from hedge accounting, had countervailing effects on gains and losses on trading activities that, overall, virtually cancelled each other out.

In the period under review, DZ BANK's balance of unrealized and realized gains and losses relating to asset-backed securities (ABSs) amounted to a gain of €1 million (first half of 2017: gain of €13 million).

The key influences on capital markets during the first six months of 2018 were the continuation of the ECB's program of quantitative easing – with a monthly bond-buying volume of €30 billion during the reporting period – and its decision to leave the main refinancing rate unchanged at 0.00 percent and the deposit facility for banks at minus 0.40 percent.

Furthermore, the Fed raised the key interest rate by 25 basis points in March and then again, by the same amount, in June 2018.

The weakening of economic growth that has been discernible in Germany and the eurozone since the start of this year was accompanied by far-reaching changes at geopolitical level. The trade dispute between the United States and China as well as the US withdrawal from the Iran nuclear deal, heightening the already tense situation in the Middle East, adversely affected Germany's heavily export-oriented economy while the customs tariffs already introduced – with the possibility of additional tariffs to follow – acted as a brake on both international trade and global economic growth.

In this environment, the DAX averaged out at 12,658 points in the first half of 2018, which was barely unchanged on the figure of 12,700 points for the second half of 2017. However, share prices were more volatile in the first six months of this year than in the second half of last year.

The regulatory environment also impacted on the markets and market players, which again had to cope with the demanding requirements imposed by banking regulators in the period under review.

The products and services of DZ BANK's customer-oriented capital markets business are geared to the needs of cooperative banks, specialized service providers within the cooperative sector, and their retail and corporate customers. In addition, DZ BANK has business relationships with direct corporate customers and institutional customers in Germany and abroad. The portfolio comprises competitively priced investment and risk management products involving the asset classes of interest rates, equities, loans, and foreign exchange. These products are complemented by a broad range of advisory and research services, structuring expertise, and platforms. In respect of all customer groups, the proportion of business conducted through electronic systems is rising significantly and increasingly replacing traditional telephone trading.

Against the current backdrop of low interest rates, German retail investors' top priorities are safety and understandable investment solutions. Catering to this customer need, DZ BANK works closely with the local cooperative banks and managed to further strengthen its position in the German derivatives market. DZ BANK's performance – as measured by data from the Deutscher Derivate Verband (DDV) [German Derivatives Association] – has been impressive, confirming its market leading position with a market share of 17.6 percent as at the end of March 2018, based on the market volume invested in structured securities.

During the first half of 2018, DZ BANK continued with the targeted stepping up of activities in relation to selling exchange-traded derivative securities products. The comprehensive range of high-quality services also earned DZ BANK the Best Issuer of 2017/2018 award from an independent panel of experts in the annual Investment Certificates Awards, the first time that DZ BANK has received this accolade.

Furthermore, DZ BANK continued to focus on steadily and effectively digitalizing and optimizing securities processes in retail banking. DZ BANK also has an advanced quality management system for customer service and product development based on the new ISO 9001:2015 standard. The system has been audited and certified by DQS GmbH Deutsche Gesellschaft zur Zertifizierung von Management-systemen.

In order to stabilize their financial performance over the long term, the cooperative banks acquired investments with residual maturities of more than 5 years as part of their own-account investing activities. They stepped up their investments in corporate bonds and simply structured credit products in the form of credit-linked notes. Demand for structured bullet maturity bonds and share bonds was also brisk. The cooperative banks also aimed for broad diversification in their securities portfolios, particularly with regard to investments in equities and real estate. To this end, the main focus of demand was on fund products from the Union Investment Group, whose inflows again increased year on year.

Capital markets business with institutional customers proved to be structurally robust during the reporting period. Here too, investment patterns were determined by the ECB's monetary policy of negative interest rates and the accompanying distortion of market prices and thus risk premiums. Income sources were widely spread, ranging across the entire fixed-income product segment but primarily bond trading in the secondary market. In the case of interest-rate structures and credit-linked notes, DZ BANK has been supporting its institutional customers for many years by offering a broad range of products, and it is very highly placed in the relevant rankings.

The growing prevalence of trading business conducted on electronic platforms was again observable in the first two quarters of 2018, resulting in a sharp rise in trading volumes with asset managers and banks both in Germany and abroad. Insurance companies and pension funds are increasingly shifting their activities into alternative asset classes, such as real estate and infrastructure. Multitranches with foreign and supranational issuers were another point of focus. DZ BANK's attractive rating meant that its own issues in the money market were very popular, even those with long terms to maturity.

The capital markets business with large and medium-sized companies as well as major corporations is underpinned by a broad spectrum of products, with a particular focus on currency and interest-rate hedging in order to manage currency and interest-rate risk. This range is complemented by basic products in the core deposit-taking business and securities business for liquidity management.

The ongoing, ECB-driven policy of low interest rates, combined with limited demand for credit given that the majority of large and medium-sized companies have ample liquidity, meant that these companies' interest-rate hedging activities were concentrated on maturities of more than 10 years.

New bond issuance business was significantly influenced by the ECB's aforementioned bond-buying program and policy of zero interest rates in the half-year under review. While the number of issues by public-sector entities was at a low level due to the high tax revenues at national and federal state level, the volume of promissory notes supported for corporates was only just short of the level achieved in the first half of 2017, despite the contraction of the market as a whole. Bucking the market trend, DZ BANK managed to increase its volume of new issues of bank bonds and covered bonds, in some cases significantly. The bank saw growth in its new issuance business, particularly in the segment for sustainable bonds from German and international issuers.

The net gain under **gains and losses on investments** amounting to €74 million (first half of 2017: net gain of €67 million) was essentially attributable to income from the sale of liquidity-pool securities.

Loss allowances, which were calculated in accordance with IFRS 9 in the reporting period, amounted to a net reversal of €96 million (first half of 2017: net reversal of €90 million). This was mainly due to borrowers' rating improvements and to potential for reversals in connection with impaired and written-off loans and advances.

Administrative expenses at DZ BANK amounted to €756 million, a decrease of €47 million or 5.9 percent on the comparable figure in the first half of 2017 (€803 million).

Other administrative expenses went down by €42 million to €432 million (first half of 2017: €474 million), in particular because project expenses were lower than in the prior-year period. Staff expenses fell by €5 million to €324 million (first half of 2017: €329 million), mainly as a result of higher interest income on plan assets to meet defined benefit obligations.

Other net operating income for the first six months of 2018, which totaled €33 million (first half of 2017: €22 million), largely comprised income from the reversal of provisions and accruals – as had also been the case in the prior-year period.

Profit before taxes for the period under review amounted to €437 million. The increase of €32 million compared with the figure of €405 million reported for the first half of 2017 was mainly a consequence of the changes described above.

DZ BANK's **cost/income ratio** came to 68.9 percent in the first half of 2018 (first half of 2017: 71.8 percent).

The **regulatory return on risk-adjusted capital (RORAC)** was 12.4 percent (first half of 2017: 11.0 percent).

3.2.2 BSH

At BSH, **net interest income** declined by 8.5 percent to €387 million (first half of 2017: €423 million).

This change was primarily attributable to the persistently low level of interest rates, which recovered only slightly year on year. Gains and losses on investments in joint ventures and associates accounted for using the equity method were on a par with the first half of 2017, amounting to a net gain of €12 million.

As capital market rates for investments remained low, interest income arising on the investment of available funds in registered securities and bearer bonds declined significantly.

In the case of loans issued under advance or interim financing arrangements, BSH managed to strengthen its income from non-collective business once again in the first half of 2018 on the back of a marked expansion in business over the last few years and despite a fall in average returns. This growth more than made up for the decline in income from home savings loans and other building loans.

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. Home savings deposits rose again, by €1.9 billion, in the reporting period to reach a record volume of €60.2 billion as at June 30, 2018 (December 31, 2017: €58.3 billion).

This impressive volume of home savings deposits reflects customers' appreciation of the financing function of home savings, which enables them to lock in the favorable interest rates for as long a period as possible. It also offers them a reliable basis for calculating their finances in times of volatile financial markets. Almost 60 percent of Germans now take advantage of home ownership as a way of accumulating wealth, compared with just 50 percent in 2013.

The BSH subgroup's **net fee and commission income** improved by €10 million to a net expense of €12 million (first half of 2017: net expense of €22 million).

This improvement was due to the fall 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 300,000 new home savings contracts, thereby beating the impressive level of new home savings business of €15.1 billion achieved in the first half of 2017 by €0.9 billion. The volume for the period under review was €16.0 billion.

Bausparkasse Schwäbisch Hall achieved a new business volume of €6.7 billion in the home finance business, a further rise of €0.3 billion compared with the corresponding amount for the first half of 2017 of €6.4 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 2017: €0.9 billion). If they are included, the total volume of new home finance business came to €7.7 billion, a year-on-year increase of 5.4 percent (first half of 2017: €7.3 billion).

The impressive rate of growth in home savings and home finance can be explained, above all, by the strong inclination of investors to benefit early on from the advantages of using home ownership as a way of saving for old age. Unlike all other forms of investment, the benefit of savings on rent is felt immediately upon purchasing the property without having to wait until retirement.

It is therefore no surprise that, with economic conditions remaining stable, the reporting period saw continued brisk demand for housing. However, there is still a significant level of excess demand despite the further slight increase in the number of homes built in 2017. The construction industry is operating at virtually full capacity. Further reasons why demand for new housing is not being met are the trends of increasing urbanization and the decrease in the average number of people per household.

For the home savings and home finance business, there is also substantial potential for the future as a result of the considerable need to modernize existing real estate, especially as around seven out of ten homes are more than 35 years old. This modernization deficit is not only affecting the quality of living accommodation but also damaging the environment: Residential buildings account for two-thirds of energy consumption in Germany. An increase in the modernization rate alone from the current level of 1 percent to 2 percent would mean an energy-efficient upgrade for 70 percent of the housing stock.

Age-appropriate housing is another key area for future growth, and there is likely to be a substantial increase in the renovation of current housing stock because currently only around 5 percent of the approximately 11 million 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 fees and commissions to be paid to the cooperative banks and to the integrated, bank-supported field sales force across all business lines for the first half of 2018 increased to €284 million. Under IFRS 9 rules, some of these are recognized as interest cost.

The **gains and losses on investments** amounting to a net gain of €11 million (first half of 2017: net gain of €15 million) were primarily attributable to the sale of securities.

Administrative expenses increased by €4 million to €237 million (first half of 2017: €233 million). Within this total, staff expenses fell by €2 million to €111 million (first half of 2017: €113 million). Other administrative expenses advanced by €6 million to €126 million (first half of 2017: €120 million), above all due to higher IT expenses and increased contributions and fees.

Profit before taxes decreased by €31 million to €172 million (first half of 2017: €203 million), primarily as a consequence of the changes described above.

The **cost/income ratio** in the period under review came to 57.7 percent (first half of 2017: 53.2 percent).

Regulatory RORAC was 31.7 percent (first half of 2017: 39.5 percent).

3.2.3 DVB

Net interest income at DVB contracted by 22.3 percent year on year to €80 million (first half of 2017: €103 million).

The reduction in net interest income was largely attributable to the reduced volume of the portfolio as a result of ongoing early repayments of loans. This had a further adverse effect on net interest income because the resulting available funds are invested with the ECB, which pays negative interest rates. The objective of the NCA portfolio, which has been segregated as part of the restructuring of the business lines that was initiated in 2017, is to preserve as much of the value as possible of the assets that are no longer part of core business (non-core assets, NCA).

Net income from long-term equity investments improved by €12 million to €5 million (first half of 2017: net loss of €7 million). The figure for the prior-year period had been affected by losses reported by some equity-accounted entities as a result of loan loss allowances in respect of shipping and container portfolios.

The international transport industry again experienced overcapacity within some segments of the international maritime shipping market during the reporting period, resulting in sharply falling freight rates and considerable pressure on shipping prices.

The DVB subgroup generated new transport finance lending business of €1.9 billion in the first half of 2018 (first half of 2017: €1.8 billion) based on a total of 67 deals (first half of 2018: 65 deals). DVB continues to maintain international branches in Amsterdam, London, Oslo, and Singapore.

At €42 million, **net fee and commission income** was down by €10 million year on year (first half of 2017: €52 million).

The fee and commission income generated by ongoing lending and by new business in transport finance declined by €2 million to €11 million and by €7 million to €14 million respectively. In contrast, fee and commission income from asset management increased by €2 million to €10 million, whereas the equivalent figure from consulting declined by €3 million to €7 million.

Gains and losses on trading activities improved by €15 million to a net loss of €4 million (first half of 2017: net loss of €19 million), largely due to the change in the US dollar/euro exchange rate.

Gains and losses on investments advanced by €15 million to a net gain of €11 million (first half of 2017: net loss of €4 million). The net gain for the reporting period included proceeds of €7 million from the sale of an entity measured at cost and proceeds of €4 million from the disposal of aircraft by an equity-accounted long-term equity investment.

Other gains and losses on valuation of financial instruments improved by €44 million to a net loss of €87 million (first half of 2017: net loss of €131 million) as a result of market conditions.

Loss allowances were calculated in accordance with IFRS 9 in the reporting period and decreased by €426 million to €20 million (first half of 2017: €446 million).

Administrative expenses amounted to €97 million (first half of 2017: €103 million). Within this total, staff expenses fell by €2 million to €54 million as a result of the reduction in headcount (first half of 2017: €56 million), while other administrative expenses decreased by €4 million to €43 million especially because of lower consulting costs (first half of 2017: €47 million).

The €12 million reduction in **other net operating income** to €4 million (first half of 2017: €16 million) was primarily because the figure for the prior-year period had included income of €7 million from the sale of receivables.

The **loss before taxes** for the half-year under review amounted to €71 million. The improvement of €461 million compared with the loss of €532 million reported for the first six months of 2017 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 2017: greater than 100.0 percent).

Regulatory RORAC was minus 34.1 percent (first half of 2017: greater than 100.0 percent).

3.2.4 DZ HYP

The merger of DG HYP and WL BANK to form DZ HYP was completed on July 27, 2018 when the necessary entries were made in the commercial register. DZ HYP is included in the interim consolidated financial statements for the period ended June 30, 2018 as a separate operating segment entity. Instead of the income statement line items of the two operating segment entities DG HYP and WL BANK, which were previously reported separately, the line items of DZ HYP are presented for the first half of 2018.

At €282 million, the **net interest income** of DZ HYP was at the same level as in the first half of 2017 (€282 million).

The main influence on net interest income in the reporting period was a sharp rise in the volume of business. However, the income generated as a result of this growth was offset by a decrease in the contribution from early redemption fees received (first half of 2018: €23 million; first half of 2017: €32 million).

The commercial real estate finance business of the former DG HYP, the real estate lending business of the former WL BANK (retail customers, institutional housing sector, and funds and investors), and the local authority loans business of DZ HYP all performed well. Effects from subsequent measurement in connection with the purchase price allocation (PPA) for the merger of the two former central institutions also had a positive impact on net interest income in the reporting period.

Demand from both German and international investors was again high in the German investment market for commercial real estate in the first half of 2018. However, commercial properties are in increasingly short supply. Against this background, the volume of transactions involving commercial real estate (excluding commercial investment in housing) came to €25.6 billion in the first six months of 2018 (first half of 2017: €25.8 billion). The volume of transactions in the market for commercial investments in housing amounted to €11.3 billion (first half of 2017: €6.2 billion).

These impressive transaction volumes are predominantly attributable to the stable economic environment and the persistently favorable funding conditions resulting from the ECB's expansionary monetary policy with a monthly bond-buying volume of €30 billion and a key interest rate of 0.00 percent. Moreover, only limited alternative investments with adequate returns are available. In respect of residential property, this market situation is compounded both by the high demand for housing created by more and more people moving to urban areas and by the smaller number of people per household resulting from demographic change.

For some years, competition has been increasing in the German real estate market as a result of these macroeconomic conditions. In the first half of 2018, this led to further price rises along with a fall in yields compared with the prior-year period. However, yields in all of Germany's seven prime locations were only slightly lower in the second quarter of 2018 than in the preceding quarter. In these locations, the focus is increasingly on the performance of investment properties, including the potential for rent increases in view of the positive economic conditions.

Investors' preferred diversification strategy of investing in real estate outside the major cities underlines the importance of the long-established close collaboration between DZ HYP's predecessor institutions and around 80 percent of the local cooperative banks in Germany.

The local cooperative banks' extensive market knowledge and proximity to their customers are the ideal complement to the specific real estate expertise of DZ HYP, its nationwide networks, market comparisons between competitors, and individual risk assessments. Supported by its regional centers in six major cities and a further eight regional offices, DZ HYP is also a reliable partner to the cooperative banks in the regions. Its decentralized market presence 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.

Maintaining the conservative, selective approach to the granting of commercial real estate loans, particularly in view of the persistently challenging market and competitive environment, DZ HYP generated a new business volume of €2.6 billion in the former DG HYP's commercial real estate finance business during the first six months of 2018 (first half of 2017: €2.7 billion). Of this total, €2.5 billion (first half of 2017: €2.6 billion) was accounted for by the German market.

Continued intensification of the collaboration and joint marketing activities with the local cooperative banks in the former DG HYP's commercial real estate finance business enabled DZ HYP to further expand jointly generated new lending business, the volume in the reporting period amounting to €1.6 billion (first half of 2017: €1.5 billion).

The former WL BANK's real estate finance business with retail customers, funds and investors, and housing associations saw demand fall slightly due to rising interest rates, although it remained at a high level. Competition continues to intensify due to the arrival of new market players, in particular insurance companies, that are looking for investment options.

With the same cautious risk policy as before, the volume of real estate lending business of the former WL BANK with retail customers, the institutional housing sector, and funds and investors increased to €2.1 billion in the first half of 2018 (first half of 2017: €1.8 billion).

During the reporting period, the real estate lending business of the former WL BANK was again influenced by investors' desire to lock in interest rates for long periods. While many local cooperative banks offer their own loan products with fixed interest rates of up to 10 years, agency and brokerage business with DZ HYP continues to gain ground owing to the better funding possibilities with long-term fixed interest rates of 15 to 30 years.

Within the DZ BANK Group, DZ HYP also operates as the center of excellence for business involving public-sector customers. This primarily consists of business with local authorities in Germany, and with their legally dependent enterprises. These relationships are managed nationwide with the close involvement of the local cooperative banks. In the period under review, DZ HYP extended new local authority loans with a total volume of €0.4 billion to around 7,000 customers (first half of 2017: €0.4 billion).

Other gains and losses on valuation of financial instruments amounted to a net gain of €30 million in the six months under review (first half of 2017: net gain of €161 million). This was the result of changed credit spreads for bonds from the eurozone's periphery and, in addition, net gains on third-party securities, local authority loans, and own issues that are measured at fair value.

Loss allowances were calculated in accordance with IFRS 9 in the reporting period and amounted to a net reversal totaling €4 million (first half of 2017: net reversal of €7 million), including a net reversal of €2 million of loss allowances for loans and advances to customers, a net reversal of €3 million of loss allowances for investments, and a net addition of €1 million to loss allowances for other loans and advances.

Administrative expenses increased by €36 million to €162 million (first half of 2017: €126 million). This included a €3 million rise in staff expenses to €49 million (first half of 2017: €46 million). Other administrative expenses went up by €33 million to €113 million (first half of 2017: €80 million), one of the main factors being the €25 million increase in expenses for consulting services to €47 million (first half of 2017: €22 million). The consulting expenses included an amount of €33.7 million (first half of 2017: €7.0 million) relating to the following two projects: the 'Commercial real estate finance portfolio integration' project, which involved expenses in connection with the transfer of the commercial real estate portfolio from the former WGZ BANK to the former DG HYP; and the 'Real estate business reorganization' project, which included the necessary consulting and other services in connection with the merger between the former DG HYP and the former WL BANK.

Profit before taxes declined by €172 million to €164 million in the half-year under review (first half of 2017: €336 million). The primary reason behind this decrease was the negative change in other gains and losses on valuation of financial instruments as a consequence of the factors described above.

The **cost/income ratio** came to 50.3 percent in the first half of this year (first half of 2017: 27.7 percent).

Regulatory RORAC was 22.8 percent (first half of 2017: 45.3 percent).

3.2.5 DZ PRIVATBANK

Net interest income at DZ PRIVATBANK contracted by 45.0 percent year on year to €33 million (first half of 2017: €60 million).

The decrease in net interest income was almost entirely due to the fact that the figure for the reporting period contained the sales commission on interest-bearing transactions for the first time (first half of 2018: expense of €26.5 million; first half of 2017: expense of €29.3 million). This commission had been included in net fee and commission income in the prior-year period. Net interest income in the first half of 2018 was also squeezed by the persistently low level of interest rates, the ongoing implementation 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. The average volume of guaranteed LuxCredit loans was €4.4 billion during the reporting period, which was marginally lower than in the first half of 2017 (€4.8 billion).

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

Net fee and commission income rose by 51.6 percent to €94 million (first half of 2017: €62 million).

The increase in net fee and commission income is largely due to the fact that, as referred to above, sales commission on interest-bearing transactions was recognized for the first time under net interest income in the reporting period (first half of 2018: expense of €26.5 million; first half of 2017: expense of €29.3 million). Moreover, fee and commission income increased both from the fund services business and from private banking.

As at June 30, 2018, the value of funds under management amounted to €108.5 billion (December 31, 2017: €108.8 billion). The number of fund-related mandates as at June 30, 2018 was 583 (December 31, 2017: 579).

At the end of the first half of 2018, the funds managed on behalf of high-net-worth individuals was slightly higher than at the end of 2017 at €17.5 billion (December 31, 2017: €17.3 billion). The funds under management comprise the volume of securities, derivatives, and deposits of customers in the private banking business.

Other gains and losses on valuation of financial instruments deteriorated by €7 million to a net loss of €2 million (first half of 2017: net gain of €5 million) as a result of market conditions.

The fall in **administrative expenses** of €1 million to €115 million (first half of 2017: €116 million) was a consequence of the small €1 million reduction in staff expenses to €64 million. General and administrative expenses fell slightly to reach €46 million (first half of 2017: €47 million) despite higher regulatory charges and IT costs than in the first half of last year. Depreciation and amortization expense was up by €1 million to €5 million (first half of 2017: €4 million).

Other net operating income amounted to a net expense of €7 million (first half of 2017: net expense of €6 million) and mainly consisted of an amortization expense of €8 million in respect of acquired customer relationships (first half of 2017: €8 million).

In view of the effects from the factors described above, **profit before taxes** declined by €4 million to €8 million (first half of 2017: €12 million).

The **cost/income ratio** for DZ PRIVATBANK in the period under review came to 93.5 percent (first half of 2017: 90.6 percent).

Regulatory RORAC was 4.6 percent (first half of 2017: 8.4 percent).

3.2.6 R+V

Premiums earned rose by 9.6 percent to €8,115 million (first half of 2017: €7,403 million), exceeding the impressive level of premiums earned in the first half of 2017.

Premium income in the life insurance and health insurance business of R+V increased by 12.3 percent to €4,059 million.

In the life insurance business, premium income rose by 12.8 percent to €3,765 million. This growth was predominantly attributable to one-off premiums, particularly in the Performance Rente and bAV product lines, whereas premiums from products in the classic and unit-linked businesses declined.

At R+V Krankenversicherung AG, Wiesbaden, premium income increased by 6.1 percent to €294 million. The year-on-year growth in the full health insurance and occupational health insurance lines was particularly encouraging.

In the non-life insurance business, premium income advanced by 4.5 percent to €2,918 million. This growth was predominantly generated from vehicle insurance and from corporate liability insurance.

Premiums earned from inward reinsurance rose by 14.3 percent to €1,138 million year on year, driven mainly by the vehicle insurance sectors and the loan/deposit sector.

Gains and losses on investments held by insurance companies and other insurance company gains and losses declined by 32.6 percent to a net gain of €1,269 million (first half of 2017: net gain of €1,883 million).

Long-term interest rates went up from the beginning of 2018 although, by the end of the reporting period, they had only returned to the level seen at the end of June 2017. Equities markets relevant to R+V did worse during the first six months of 2018 than they had in the first half of last year. On the whole, the euro performed much more favorably against a variety of currencies in the first half of 2018 than it had in the first six months of 2017.

Overall, these trends in the reporting period essentially resulted in a €414 million deterioration in unrealized gains and losses to a net loss of €196 million (first half of 2017: net gain of €218 million) and a €622 million reduction in the contribution to earnings from disposals of investments to €89 million (first half of 2017: €711 million). Moreover, current income fell by €62 million to €1,192 million (first half of 2017: €1,254 million). These negative effects were offset by a €40 million reduction in impairment losses to €23 million (first half of 2017: €63 million) and a significant improvement in foreign exchange gains and losses, which advanced by €506 million to a net gain of €122 million (first half of 2017: net loss of €384 million).

Owing to the countervailing effects from the recognition of provisions for premium refunds (particularly in the life insurance and health insurance business) and claims by policyholders in the unit-linked life insurance business in the 'insurance benefit payments' line item presented below, however, the change in the level of gains on investments held by insurance companies only partially affected the level of net income from insurance business before taxes in the half-year period.

Insurance benefit payments increased by 2.2 percent from €7,543 million in the first half of 2017 to €7,709 million in the first six months of 2018.

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, higher additions were made to insurance liabilities at companies offering personal insurance. Furthermore, an amount of €534 million was added to the supplementary change-in-discount-rate reserve (first half of 2017: €341 million).

The non-life insurance business had to absorb expenses arising from storms Friederike and Burglind of around €100 million and from storms Wilma and Yvonne of around €40 million during the reporting period.

Inward reinsurance business in Europe performed well on the whole, with particularly strong growth in the United Kingdom. Business was also encouraging in Asia, whereas other regions registered a decrease in income.

Insurance business operating expenses went up by 4.1 percent to €1,406 million (first half of 2017: €1,350 million) in the course of ordinary business activities in all divisions, with a particularly sharp rise in the non-life segment.

Given the factors described above, **profit before taxes** for the reporting period declined by €115 million to €274 million (first half of 2017: €389 million).

3.2.7 TeamBank

Net interest income at TeamBank amounted to €221 million, a rise of 4.7 percent compared with the figure of €211 million in the first six months of 2017. This increase was the consequence of a greater portfolio of existing contracts in the easyCredit business.

TeamBank is the consumer finance specialist in the cooperative financial network and, in the period under review, benefited from buoyant consumer demand fueled by the continued stability of the German economy along with low interest rates and rising real wages.

TeamBank continued to focus on the ongoing digital revolution and the associated technological challenges in the first half of 2018. In this environment, consumer finance was a favored area of business for new providers – particularly online portals – to target. Consequently, competition in the market intensified noticeably yet again.

Despite these challenging conditions, TeamBank succeeded in increasing loans and advances to customers by a substantial 3.2 percent to €8,217 million as at June 30, 2018 (December 31, 2017: €7,966 million). The number of customers rose again, by 31,000, to reach 864,000.

This encouraging performance is rooted in the steadfast focus of business activities on TeamBank's unique selling proposition derived from its positioning as an all-round fair lender, reflecting the cooperative values also embodied by the local cooperative banks. The success of the business model, which is based on trust-based partnership, is demonstrated by the fact that TeamBank works in collaboration with 809 of Germany's 912 cooperative banks and with 105 partner banks in Austria.

In the reporting half-year, TeamBank focused on aligning its business activities with market requirements in respect of digitalization and systematically ensuring that all changes are conceived from the customer perspective. The integration of all customer touchpoints – mobile, online, and offline – in a digital ecosystem for liquidity management gives customers easy access to liquidity and services wherever and whenever they want. The digital ecosystem implemented by TeamBank is helping to strengthen the customer relationships already in place, utilize the potential offered by existing customers, and win new customers for the cooperative financial network.

Having introduced the seamless cross-media payment process 'ratenkauf by easyCredit', TeamBank is so far the only provider, both in e-commerce and at the point of sale, to offer a simple and uniformly designed installment purchase function. Moreover, an app called 'fymio', an innovative, proactive personal finance management facility, gives customers a projection of their future liquidity based on intelligent analysis of the transactions across all of their accounts.

Another milestone in creating a fully digitalized customer process was TeamBank's launch in February 2018 of a pilot program that enables loans of up to €3,000 to be sold based on account transaction data. Customers benefit from having to record much less information themselves, which also saves them time.

In the first half of 2018, TeamBank continued to strengthen the market presence of its product variants, which have been successfully established as part of its customer business. In addition to Finanzreserve with a credit card, customers have also been able to benefit from easyCredit-Finanzreserve without a card since October 2016, providing them, free of charge, with a cash reserve incorporating a simple drawdown function. As at June 30, 2018, around 191,000 customers had either signed up for easyCredit-Finanzreserve or were already using this fair and flexible means of borrowing. As a result, some 12 percent of new business was already being generated through easyCredit-Finanzreserve.

The innovative advisory concept known as easyCredit-Liquiditätsberater is helping the cooperative idea to gain more prominence. Approximately 60,000 members benefited from advice in the first half of 2018, of whom around 9,000 were new to the cooperative financial network.

Net fee and commission income declined by €8 million to a net loss of €5 million (first half of 2017: net income of €3 million).

This change was primarily due to the lower level of new business and the related fall in fee and commission income from loan protection insurance agreements.

Loss allowances, which were calculated in accordance with IFRS 9 in the half-year under review, decreased by €2 million to €32 million, compared with €34 million in the corresponding period last year. This was largely because the easyCredit portfolio expanded at a slower rate than in the first half of 2017.

As budgeted, **administrative expenses** rose by €7 million to €112 million (first half of 2017: €105 million), including an increase in staff expenses of €3 million to €45 million (first half of 2017: €42 million) and an increase in other administrative expenses of €4 million to €67 million (first half of 2017: €63 million). The rise in other administrative expenses was predominantly due to higher IT, auditing, and consulting expenses as well as increased expenses for third-party services.

Profit before taxes for the first half of 2018 amounted to €76 million. This small decrease of €2 million compared with the figure of €78 million reported for the first half of 2017 was mainly a consequence of the factors described above.

TeamBank's **cost/income ratio** in the period under review came to 50.9 percent (first half of 2017: 48.4 percent).

Regulatory RORAC was 34.2 percent (first half of 2017: 36.8 percent).

3.2.8 UMH

Net fee and commission income at UMH fell by 6.0 percent to €705 million (first half of 2017: €750 million).

The change in net fee and commission income was predominantly due to the factors described below. Due to the rise in the average assets under management of the Union Investment Group, which climbed by €26.7 billion to €328.9 billion (first half of 2017: €302.2 billion), the volume-related contribution to net fee and commission income rose significantly compared with the prior-year period. It accounted for 89.5 percent of net fee and commission income in the first six months of 2018.

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 reporting half-year, income from performance-related management fees was significantly lower than in the corresponding prior-year period. Income from real estate fund transaction fees decreased compared with the first half of 2017.

In the first half of 2018, global capital markets were significantly more volatile than in the second half of 2017. The main influences included escalating international trade disputes, political issues such as the formation of a government in Italy and the US withdrawal from the Iran nuclear deal, and emerging signs of a shift in the direction of the ECB's monetary policy. Given these conditions, the growth prospects for the eurozone and Germany have been diminishing slightly since the start of the year.

Amid this growing uncertainty, Union Investment's investment solutions attracted increased demand as a sought-after instrument for long-term investing. In particular, retail clients took a keener interest in investment funds from Union Investment as a way of gradually supplementing interest-focused investments with material and intangible assets, thereby reflecting the evolution of saving.

This trend was impressively highlighted by the buoyant growth of new business with retail clients in the half-year under review. Building on the high level of €4.1 billion registered in the first six months of last year, Union Investment generated net inflows of €4.7 billion in the reporting period. This success was predominantly the result of long-standing and trust-based partnership with the local cooperative banks, whose expertise and strong dependability again proved to be an anchor of stability for the multitude of customer relationships.

The six variants in the innovative PrivatFonds product range, which are focused on customers' need for security, again attracted a great deal of attention from customers in the first half of 2018. The multi-asset solutions from Union Investment have proven to be a popular investment instrument during the phase of persistently low interest rates, notching up net inflows of €2.2 billion in the period under review. As a result, the portfolio had grown by €1.6 billion to €22.5 billion as at June 30, 2018 (December 31, 2017: €20.9 billion).

The Union Investment Group's open-ended real estate funds, which invest in tangible assets, are also a popular option for investment diversification. The three open-ended real estate mutual funds and the UniImmo:Wohnen ZBI fund, which was issued in July 2017 to add residential real estate to the range of investment funds, generated net new business of €0.5 billion with retail clients.

At a time of low interest rates, Union Investment's fund-linked savings plans represent an extremely rewarding type of investment for long-term accumulation of wealth and give customers the opportunity to achieve adequate returns over the maturity period on the basis of a balanced and broadly diversified investment. The number of traditional fund-linked savings plans had risen to 2.1 million contracts by the end of the period under review, with an increase in the 12-month savings volume to €3.9 billion (June 30, 2017: €3.3 billion).

Furthermore, the fund-based Riester pension products (UniProfiRente and UniProfiRente Select) of the Union Investment Group, which is the market leader in this area, made a significant contribution to total net inflows in the retail business, generating net inflows of €0.6 billion in the six months under review. The total assets in the portfolio of Riester pension solutions swelled by €0.7 billion in the first half of 2018 to reach €17.2 billion (December 31, 2017: €16.5 billion).

In its institutional business, the Union Investment Group generated net inflows amounting to €6.6 billion (first half of 2017: €9.9 billion). A total of 22 new institutional clients were acquired in the first half of 2018.

In an age of persistently low interest rates and increasing complexity in the stock markets, institutional client portfolios are becoming significantly more diversified. On the whole, customers' securities accounts encompass a higher number of asset classes and a broader country allocation. Products with higher risk premiums were particularly popular in the first six months of 2018. Funds with a focus on structured credits saw especially strong demand. Convertible bond funds also attracted healthy interest. Real estate fund products remained high on the wish list of many institutional investors, but limited availability of properties with a suitable risk/return profile put the brakes on investment activity. In addition to these long-term strategies, many institutional clients used money-market and money-market-linked funds to manage their liquid assets.

Institutional clients again showed increased interest in sustainability-related solutions. Unlike in the early years of sustainable investments, investors are now taking a keen interest in economic aspects and not just in ethical, social, and environmental factors. For this reason, Union Investment now systematically incorporates sustainability criteria into the investment process and even integrates its expertise in this area into classic portfolio strategies. At the end of the reporting period, a total of €42.1 billion was invested with Union Investment, one of Germany's leading asset managers, in accordance with sustainability criteria (December 31, 2017: €33.5 billion). This equates to an increase of 25.7 percent.

Moreover, the Union Investment Group's outstanding reputation as a professional risk and portfolio manager was particularly reflected in the popularity of capital preservation strategies, which had attracted a volume of investment of €26.5 billion by the end of the first half of 2018 (December 31, 2017: €25.4 billion).

The €24 million decline in **other gains and losses on valuation of financial instruments** to a net loss of €22 million (first half of 2017: net gain of €2 million) can be explained primarily by the negative contribution from the valuation of own-account investments. At the same time, expenses in relation to the valuation of guarantee commitments increased year on year.

Administrative expenses rose by €32 million to €425 million (first half of 2017: €393 million). This included an increase in staff expenses of €11 million to €198 million, which mainly resulted from average salary increases and appointments to new and vacant posts. The rise in other administrative expenses of €21 million to €227 million was mostly accounted for by higher expenses for research (external research studies) and office expenses.

Other net operating income improved by €16 million to €16 million. The main item in the corresponding figure of €0 million for the first half of 2017 was expenses in connection with the Next Generation Sourcing reconciliation of interests.

Profit before taxes went down by €89 million to €273 million (first half of 2017: €362 million), primarily due to the changes described above.

The **cost/income ratio** came to 60.9 percent in the first half of this year (first half of 2017: 52.0 percent).

Regulatory RORAC was greater than 100.0 percent (first half of 2017: greater than 100.0 percent).

3.2.9 VR LEASING

Net interest income at VR LEASING climbed by 8.6 percent year on year to €76 million (first half of 2017: €70 million).

The growth of net interest income was almost entirely attributable to the increase in the core business, in particular as a result of the sharp rise in the volume of the digital product 'VR Smart flexibel' (until July 2018: VR Leasing flexibel). This offset the slight drop in net interest income from non-core business, which is being scaled back in accordance with the strategy and constitutes real estate leasing, automotive trade and vehicle fleet business, centralized settlement, BFL Leasing, hire purchase and leasing business with a value of more than €750,000, and VR LEASING's factoring and international business.

In the reporting half-year, VR LEASING's market strategy centered on the company's transformation into a digital provider of finance for the self-employed and small businesses. VR LEASING's business activities are geared to providing decentralized support for the cooperative banking sector with an innovative range of products offering simple, rapid, and tailored financing solutions for Germany's small and medium-sized enterprises, which have strong regional ties. The products cater to market requirements in a digital age and are aimed at both small-scale and large-volume business. The product range encompasses leasing, hire purchase, and loans, as well as digital services that help small-business and self-employed customers to manage their day-to-day finances.

The various digitalized solutions are designed to support the banks in the cooperative financial network in making even better use of the income potential offered by their small-business and self-employed customers. For example, the digital platform VR LeasyOnline incorporates integrated, automated decision-making, enabling cooperative banks to make decisions on financing up to an amount of €250,000 within minutes, particularly for small-business customers and the self-employed.

Through VR LeasyOnline, customers can also access the 'VR Smart express' asset finance solution (until July 2018: VR Leasing express) and the 'VR Smart flexibel' business lending product (until July 2018: VR Leasing flexibel), providing particularly flexible and rapid instant financing up to a sum of €60,000. In July 2018, the maximum financing limit for 'VR Smart express' was raised to €250,000.

The growing importance of internet financing solutions was underlined by the year-on-year rise of 9.9 percent (first half of 2017: 43.2 percent) in the volume of online business (leasing and lending) transacted with the cooperative banks in the first half of 2018. The proportion of total new business (leasing and lending) accounted for by contracts concluded online increased from 83.4 percent in the first half of 2017 to 85.2 percent in the reporting period. Digitalization does not prevent a personal customer relationship, however. Rather, the new digital channels strengthen the regional primary banks' customer focus in line with the cooperative principle.

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 LEASING's innovative online order channel is gaining significance: Small-business customers of the cooperative banks can now use an entirely online process to enter into a borrowing agreement at any time on the website of their local cooperative bank.

In August 2017, VR LEASING launched a new application known as SmartBuchhalter (smart bookkeeper) that is designed to give self-employed people and small businesses a simple overview of their financial situation. This new product is to be combined with DZ BANK's VR-FinanzGuide, which is also a digital application for simple accounting and financial planning, so as to be able to offer an even more effective alternative product to the corporate customers of the cooperative banks.

Net fee and commission income declined by €3 million to €5 million (first half of 2017: €8 million).

The main reason for this change was the level of trailer fees to be paid to the local cooperative banks, which climbed by €5 million to €11 million in line with the volume of business.

Gains and losses on investments amounted to a net gain of €7 million (first half of 2017: net gain of €6 million). The figure for the first half of 2018 included a reversal of the impairment loss, in an amount of €7 million, on VR-LEASING AG's 50 percent long-term equity investment in VB-Leasing International Holding GmbH, Vienna, (VBLI), which is accounted for using the equity method, following its measurement at fair value.

Expenses for **loss allowances**, which amounted to €2 million (first half of 2017: €6 million), included a net addition of €2 million for loans and advances to customers.

Administrative expenses rose slightly, by €1 million, to €70 million (first half of 2017: €69 million). Within this total, staff expenses fell by €6 million to €38 million (first half of 2017: €44 million), mainly due to the reduction in the number of full-time equivalents. Furthermore, other administrative expenses increased by €7 million to €32 million (first half of 2017: €25 million), in particular because of higher consulting expenses in connection with VR LEASING's transformation into a digital provider of finance for the self-employed and small businesses.

Other net operating income amounted to a net expense of €15 million (first half of 2017: net income of €4 million). The main reason for this year-on-year decline of €19 million was that the figure for the first half of 2018 included restructuring expenses of €12 million relating to the company's transformation into a digital provider of finance for the self-employed and small businesses.

VR LEASING's **profit before taxes** amounted to €1 million (first half of 2017: €13 million), largely as a consequence of the factors described above.

The **cost/income ratio** in the six months under review came to 95.9 percent (first half of 2017: 78.4 percent).

Regulatory RORAC was 0.6 percent (first half of 2017: 8.1 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 the BSH subgroup with the R+V subgroup.

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

4 Net assets

As at June 30, 2018, the DZ BANK Group's **total assets** had increased by €32.6 billion, or 6.5 percent, to €538.2 billion (December 31, 2017: €505.6 billion). The total assets of DZ BANK and R+V grew by €24.0 billion and €4.8 billion respectively, while those of BSH and DZ PRIVATBANK rose by €2.1 billion and €1.4 billion respectively. By contrast, DVB's total assets fell by €1.9 billion.

The **volume of business** amounted to €934.5 billion (December 31, 2017: €871.1 billion). This figure comprised the total assets, the assets under management at UMH as at June 30, 2018 amounting to €332.7 billion (December 31, 2017: €323.9 billion), the financial guarantee contracts and loan commitments amounting to €62.6 billion (December 31, 2017: €40.5 billion), and the volume of trust activities amounting to €1.0 billion (December 31, 2017: €1.1 billion).

The DZ BANK Group's **loans and advances to banks** rose to €92.8 billion, an increase of €3.4 billion or 3.8 percent. Loans and advances to banks in Germany went up by €2.5 billion to €86.2 billion, and loans and advances to foreign banks increased by €0.9 billion to €6.6 billion. The amounts as at December 31, 2017 have been restated (see note 2 in the notes to the interim consolidated financial statements).

The DZ BANK Group's **loans and advances to customers** increased by €3.2 billion, or 1.8 percent, to €177.6 billion. Loans and advances to customers grew by €2.0 billion at BSH, by €1.1 billion at DZ BANK, by €0.4 billion at DZ HYP, and by €0.3 billion at TeamBank. However, loans and advances to customers at DVB decreased by €1.1 billion.

As at June 30, 2018, **financial assets held for trading** amounted to €40.9 billion, an advance of €2.2 billion or 5.7 percent on the figure as at December 31, 2017. In particular, bonds and other fixed-income securities rose by €2.4 billion, while derivatives (positive fair values) declined by €0.4 billion.

Investments were down by €7.7 billion, or 13.3 percent, to €49.8 billion. The main reason for this change was the €7.4 billion contraction in holdings of bonds and other fixed-income securities.

Investments held by insurance companies rose by €4.7 billion, or 4.9 percent, to €101.1 billion (December 31, 2017: €96.4 billion), above all due to a €3.1 billion increase in fixed-income securities to €48.0 billion and a €1.0 billion increase in registered bonds to €10.1 billion.

The DZ BANK Group's **deposits from banks** as at June 30, 2018 amounted to €144.3 billion, which was €8.2 billion, or 6.0 percent, higher than the figure reported as at December 31, 2017. Deposits from domestic banks were up by €1.7 billion to €126.4 billion, while deposits from foreign banks increased by €6.5 billion to €17.9 billion.

Deposits from customers grew by €11.3 billion, or 8.9 percent, to €137.6 billion. There were increases in deposits from customers at DZ BANK of €8.6 billion, at BSH of €1.7 billion, and at DZ PRIVATBANK of €1.4 billion, whereas deposits from customers went down by €0.5 billion at DZ HYP and by €0.3 billion at DVB.

FIG. 3 – TOTAL ASSETS

At the end of the reporting period, the carrying amount of **debt certificates issued including bonds** in the DZ BANK Group was €69.9 billion (December 31, 2017: €67.3 billion). Within this total, other debt certificates issued grew by €2.8 billion and bonds issued contracted by €0.2 billion.

Financial liabilities held for trading were up by €6.5 billion, or 14.6 percent, to €50.8 billion, predominantly due to the €3.9 billion rise in money market deposits and the €1.7 billion rise in bonds issued.

Insurance liabilities increased by €4.5 billion, or 5.0 percent, to €93.8 billion (December 31, 2017: €89.3 billion). This was largely attributable to rises of €2.3 billion in the benefit reserve, €0.6 billion in the provision for premium refunds, €0.5 billion in the provision for claims outstanding, and €0.8 billion in the provision for unearned premiums.

As at June 30, 2018, the **equity** reported by the DZ BANK Group was €23.8 billion (December 31, 2017: €23.5 billion). The increase of €0.3 billion can essentially be explained by the change in unappropriated earnings (June 30, 2018: €0.6 billion; December 31, 2017: €0.3 billion). Furthermore, the first-time adoption of IFRS 9 had two effects: Retained earnings as at June 30, 2018 were €0.5 billion higher than at the end of 2017 and there was a corresponding decrease of €0.5 billion in the reserve from other comprehensive income.

The **DZ BANK Group's capital and solvency situation** is described in this interim group management report in chapter V (Opportunity and risk report), section 4.2 (Regulatory capital adequacy).

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 1 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 3.1 (Economic liquidity adequacy). 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 these interim consolidated financial statements.

III Events after the balance sheet date

Details of events of particular importance after the end of the first half of 2018 can be found in note 54 of the notes to the interim consolidated financial statements.

IV. Outlook

1. Economic conditions

1.1 Global economic trends
In mid-2018, the global economy remains in a phase of expansion. However, political tensions have led to a general increase in uncertainty. Issues such as the unresolved conflict in Syria, the US withdrawal from the Iran nuclear deal, the trade dispute between the United States and China, and the imposition of US protectionist tariffs on steel and aluminum imports are likely to continue depressing sentiment in the global economy. If the United States were to ramp up its protectionist action and Europe and China were to initially respond, as has already happened, with retaliatory measures, thereby escalating the trade dispute, the consequence could be a trade war that would have a negative impact on global trade as a whole. Above all, this would affect growth in particularly open economies that are strongly interlinked with those of other countries.

In this environment, global economic growth in 2018 is likely to be 3.6 percent, which is the same rate as in 2017. This rate is also currently predicted for 2019.

The price of crude oil has recently risen sharply on the global markets. It is predicted to remain at its current level of around US$ 75 for an extended period, falling only gradually between now and the end of 2019.

The forecast for inflation has been raised accordingly. Inflation is expected to be around 2.0 percent in industrialized countries and approximately 3.8 percent worldwide in 2018.

1.2 Trends in the USA
The economic outlook for the United States continues to be positive. The US economy appears to be increasingly diverging from the economy in Europe. Recent data shows that consumer spending in the United States has picked up significantly again. Once again, consumers' propensity to spend seems to have injected momentum into the country's economy.

With consumer sentiment remaining very high, personal spending continues to be the driver of growth in the US economy. The services sector is also providing particular growth stimulus. Industrial output is showing signs of a stronger recovery, too.

The steady rise in employment is now underpinned by an uptrend in the manufacturing sector. However, the services sector continues to be the main source of jobs. The number of people employed in the services sector has risen by three-quarters of a million since the start of the year. In 2019, the rise in employment is likely to be sustained, with the rate of unemployment possibly falling to around 3.8 percent.

In these conditions, the US growth rate is forecast to be approximately 2.9 percent in 2018 and around 2.5 percent in 2019.

The robust state of the economy continues to be accompanied by only muted domestic pressure on prices. Although services are steadily becoming more expensive and energy prices have recently risen sharply, there has only been a weak increase in prices for food and used vehicles. An average inflation rate of around 2.6 percent is projected for both 2018 and 2019.

1.3 Trends in the eurozone
In contrast to the US Federal Reserve's policy of gradually raising the key interest rate, the European Central Bank is retaining its extremely expansionary monetary policy for the time being and has delayed possible interest-rate hikes. However, the ECB has decided that it will incrementally reduce the purchase volume under its bond-buying program from October 2018.

Various sentiment indicators for the eurozone and its member countries have been deteriorating since the start of this year. This is not simply a correction to compensate for the growth forecasts that were previously almost too exuberant. Rather, sentiment is being depressed by the deteriorating situation on the global political stage over the course of 2018.

Against this backdrop, growth in the euro area has already slowed markedly since the start of the year. Following a growth rate at the end of 2017 of 0.7 percent compared with the previous quarter, the growth achieved at the beginning of 2018 was just 0.4 percent. In particular, the two big eurozone countries of Germany and France saw their growth rates slow down significantly. The Italian economy maintained its moderate pace of growth. There is unlikely to have been an improvement in the second quarter. Indicators such as industrial output and the level of orders in industry are not currently pointing to any real turnaround.

Consequently, a stronger recovery is not anticipated in the second half of 2018. The euro area's economy is forecast to expand by 1.9 percent in 2018 and by 1.5 percent in 2019.

The recent sharp rise in the price of crude oil on the global markets has also left its mark on consumer prices in the eurozone. Inflation climbed to 2.0 percent in June 2018, its highest rate in 15 months. Besides the substantial increase in energy prices, there was also a slightly stronger rise in food prices compared with the prior-year period.

Consequently, the average inflation rate for 2018 is expected to be in the region of 1.6 percent. Current forecasts for 2019 are predicting an inflation rate in the vicinity of 1.7 percent.

1.4 Trends in Germany

The potential escalation of the trade dispute between the US and China along with the threat of US punitive tariffs on German car exports are likely to have been the main negative factors for corporate sentiment. Sentiment indicators such as the ifo Business Climate Index, the ZEW index, purchasing managers' indices, and economic confidence show that uncertainty has also increased significantly. This is particularly clear to see in the ZEW survey, which revealed a huge discrepancy – the widest in a long time – between the assessment of the current situation and the evaluation of economic expectations for Germany. Companies' capital spending and export activities are expected to be particularly adversely affected by this uncertainty.

The economy is likely to expand by around 1.7 percent in 2018. GDP is predicted to rise by just 1.4 percent in 2019.

Against this backdrop, Germany's unemployment rate for 2018 is predicted to fall to around 5.2 percent. A rate of approximately 5.0 percent is forecast for 2019.

According to preliminary calculations, Germany's inflation rate in June stood at 2.1 percent and at 2.2 percent in the previous month. However, energy and food saw much higher inflation rates of 6.4 percent and 3.4 percent respectively. The projected average rate of inflation for 2018 as a whole is around 1.8 percent. Pressure on prices is expected to change very little in the coming 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 (see also the opportunity and risk report, section 1.2.1) 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, new competitors with approaches based on the use of data and technology are presenting the financial sector with the challenge of scrutinizing its existing business models, adapting them as required, and substantially improving its efficiency by digitalizing business and IT processes. The corresponding capital investment is initially likely to push up costs in the industry before the anticipated profitability gains can be realized.

As before, efforts to address the challenges described above are being made more difficult by the persistently low nominal interest rates in the eurozone, which are still accompanied by a relatively flat yield curve and are likely to prevent any significant increase in margins in interest-related business. This assessment is based on the ECB's continuing expansionary monetary policy.

The expected growth in large swathes of the global economy is also forecast to provide a boost for the financial position and financial performance of the European financial sector.

However, the potential implications from uncertain political and economic trends for the economic position of banks and insurance companies should not be ignored. Information on the relevant macroeconomic risk factors can be found in section 1.2.1 of the opportunity and risk report.

2. Financial performance

Based on a current assessment, **profit before taxes** will be at the lower 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 DZ BANK, BSH, R+V, and UMH operating segments is expected to be above the budgeted figures, the DVB operating segment will, from the current perspective, report a loss. However, this loss will be significantly smaller than in 2017.

In 2019, profit before taxes is expected to be on a par with the level in 2018.

The future financial performance of the DZ BANK Group could be subject to risks arising from the general economic environment and, in particular, from monetary policy, above all in the US, the eurozone, and Germany.

Net interest income including net income from long-term equity investments is predicted to be lower in 2018 than in 2017.

In 2019, net interest income is expected to go up in nearly all management units, assuming that interest rates rise moderately.

The possible slowdown of economic growth in the euro area, coupled with a yield curve that continues to hold steady at a low level, may lead to falls in income, especially in relation to the interest-rate-sensitive business models within the DZ BANK Group.

Expenses for **loss allowances** in 2018 are currently anticipated to decrease substantially compared with 2017, above all because the loss allowances required in the DVB operating segment are returning to normal levels.

In 2019 too, expenses for loss allowances are likely to change in line with the lending portfolio, the targeted volume of new business, and the long-term costs for covering expected losses arising from the lending business.

Loss allowances could increase if the markets relevant to the DZ BANK Group's earnings deteriorated significantly or if there was an adverse impact from political risk combined with rising government debt in Europe.

Net fee and commission income is predicted to rise in 2018 from an already high base level in 2017. This assessment is based, in particular, on the anticipated significant contribution to earnings from the UMH operating segment.

In 2019, net fee and commission income is likely to continue rising on the back of business growth, especially in the UMH and DZ PRIVATBANK operating segments.

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

In all probability, **gains and losses on trading activities** in 2018 will be at a similar level to those in 2017.

According to the planning for 2019, gains and losses on trading activities will be slightly better than in 2018. Impetus is particularly likely to come from customer-driven capital markets business in the DZ BANK operating segment.

The factors enabling a steady level of net gains under gains and losses on trading activities will be the continuation of the stable capital markets environment and the successful positioning of DZ BANK so that it can unlock market potential.

Gains and losses on investments will be boosted by sales of securities in 2018, with a significantly higher net gain than in 2017 expected.

From the current perspective, gains and losses on investments are forecast to deteriorate significantly in 2019 because no substantial non-recurring items are anticipated.

In 2018, **other gains and losses on valuation of financial instruments** are likely to decline 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 continue to have a negative impact on the forecast gains and losses.

Net income from insurance business is currently expected to be at a high level in 2018, albeit far lower than in 2017. The growth-related increases in premiums earned will be accompanied by a year-on-year decline in gains and losses on investments held by insurance companies and a rise in claims expenses for natural disasters.

In 2019, net income from insurance business is expected to be a lot higher than in 2018 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.

As budgeted, **administrative expenses** are set to rise slightly this year.

The major areas of spending are the high level of expenses for regulatory and strategic projects, especially in connection with the merger of DG HYP and WL BANK to form the DZ HYP operating segment, the restructuring of the DVB operating segment, and the transformation of the VR LEASING operating segment into a digital provider of finance for the self-employed and small businesses.

Given the higher expenses coupled with lower income forecasts, the **cost/income ratio** for the DZ BANK Group is likely to go up in 2018.
In view of rising expenses, one of the main strategic aims is to bring the cost/income ratio back down by rigorously managing costs and ensuring long-term synergy management in the DZ BANK operating segment on the one hand and by accelerating growth in the operating business of all segments on the other.

As expected, **regulatory RORAC**, the risk-adjusted performance measure based on regulatory risk capital, will decrease in 2018 because of the forecast of lower earnings.

3. Liquidity and capital adequacy

The DZ BANK Group is assuming that it can continue to maintain a sufficient level of liquidity in 2018 and 2019 in terms of both economic and regulatory **liquidity adequacy** requirements. Further information on liquidity adequacy can be found in section 3 of the opportunity and risk report.

As matters currently stand, the DZ BANK Group's **capital adequacy** is assured for 2018 and 2019 from both economic and regulatory perspectives; that is to say, it will continue to have at its disposal the available internal capital necessary to cover the risks associated with the finance business and other risks arising from the group's business operations. Further information on capital adequacy can be found in section 4 of the opportunity and risk report.

V Opportunity and risk report

DZ BANK Group

1 Summary

1.1 Opportunity and risk management system

The DZ BANK Group's opportunity and risk management system was described in detail in the opportunity and risk report ('2017 opportunity and risk report') in the 2017 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.

1.1.1 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 enables 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 DZ BANK Group has a comprehensive **risk management system** that generally meets its own business management needs and the statutory requirements.

The risk management system is based on **risk strategies** that are consistent with the business strategies and have been approved by the Board of Managing Directors. In particular, risk policy guidelines on risk appetite have been drawn up in the form of the **risk appetite statement**, which forms an integral part of the risk strategies.

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

DZ BANK and its subsidiaries have organizational arrangements, methods, and IT systems in place that enable them to identify material opportunities and risks at an early stage and initiate appropriate control measures, both at group level and at the level of the individual management units. This applies in particular to the **early detection and management of risks that could affect the group's survival as a going concern**.

The tools used for the purposes of risk management also 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. A risk limit system based on risk-bearing capacity, stress testing encompassing all material risk types, and a flexible internal reporting system ensure that management is in a position to initiate targeted corrective action if required.

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.

1.1.2 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 **minimum liquidity surplus**, which reflects economic liquidity adequacy, and **economic capital adequacy** are the key figures used in the DZ BANK Group. Disclosures relating to how these key figures are calculated and how they link to the balance sheet are included in the 2017 opportunity and risk report. The calculation method is explained in sections 6.2.4 and 7.2.2 of the 2017 opportunity and risk report. Details of the link to the balance sheet can be found in sections 6.2.6 and 7.2.2 of this report.

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.

1.1.3 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. Each management unit forms a separate operating segment, and they are assigned to the sectors as follows:

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

Insurance sector:
- R+V

DZ HYP applies the **waiver** pursuant to section 2a (1), (2), and (5) of the German Banking Act (KWG) in conjunction with article 6 (1) and (5) and article 7 of the Capital Requirements Regulation (CRR). This means that DZ HYP as an individual institution is no longer required to apply the provisions of Parts 2 to 5 and Parts 7 and 8 CRR and is instead covered at DZ BANK banking group level. This also applies to the predecessor institutions, DG HYP and WL BANK.

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.

1.1.4 Material changes

Merger of DG HYP and WL BANK

At present, the merger of DG HYP and WL BANK to form DZ HYP is not expected to result in material changes to the opportunity and risk management system of the DZ BANK Group.

EU General Data Protection Regulation

The entities in the DZ BANK Group have initiated appropriate steps to implement the EU General Data Protection Regulation (GDPR), which came into force on May 25, 2018. During the first half of 2018, most of the GDPR requirements were put into practice.

IFRS 9

As a result of the changes to the external financial reporting of financial instruments that have been in force since January 1, 2018 under IFRS 9, internal economic credit risk management is indirectly connected to the procedures to be used for the recognition of loss allowances for loans and advances. In particular, the parameters used to calculate the expected loss have been adjusted in order to fully comply with the impairment rules of IFRS 9. The process is as follows:

- The multiple-year default probabilities calculated for economic management are based on long-term average migration behavior. They are modified for the purposes of external financial reporting, in particular so as to take account of the latest available macroeconomic forecasts.

- The recovery rates calculated in the context of internal management in order to estimate the expected loss on lending transactions in the event of default (loss given default) and the ratios for proceeds from the recovery of collateral are adjusted in order to meet the IFRS 9 requirements regarding the parameter-based calculation of loss allowances for loans and advances.

The consequence of this is that, from 2018, loss allowances for loans and advances will no longer be disclosed in the opportunity and risk report within the interim and annual group management reports. The same applies to the lending volume, which has to be disclosed in connection with loss allowances for loans and advances according to IFRS 9 and must be based on carrying amounts reported on the balance sheet. This information will now be reported solely in the interim and annual consolidated financial statements. The management-relevant lending volume will still be disclosed in the opportunity and risk report.

1.2 Risk factors, risks, and opportunities

1.2.1 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 the European sovereign debt crisis, the persistently tough market conditions for the shipping and offshore finance business, the threat of a global trade war, and the ongoing phase of low interest rates. 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 and counterparty default risk in the Insurance sector. The protracted period of low interest rates will 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.

Risk factors specific to each type of risk also determine the extent of risk exposure in the DZ BANK Group.

The aforementioned risk factors are explained in the 2017 opportunity and risk report. Apart from the changes listed below, 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 2018.

The macroeconomic risk factors have changed as follows:

- **Italy** has been governed by a coalition made up of the right-wing populist Lega Nord and left-wing populist Five Star Movement since June 2018. Both of these parties are seeking radical political and economic change and, more significantly, are intent on confrontation with the EU. If the government implements the plans for fiscal policy that it has announced, public-sector finances will be weakened for a long period and the sustainability of public-sector debt will be at risk. In view of the doubts about the viability of its future economic and financial policy, Italy is likely to suffer a long-term loss of trust among international politicians and investors. This would have a severe adverse impact on the country's ability to obtain funding via the international capital markets. If Italy were then no longer able to fund itself on affordable terms, solvency problems would be inevitable. This would, in all probability, become a significant test of the EU's resilience.

- As a result of these economic developments, the funding of **Italian banks** via the capital markets is becoming increasingly difficult. Consequently, Italian banks' only remaining funding option is to borrow from the European Central Bank. Moreover, their financial performance is hampered by continued high additions to loan provisions and by losses relating to the elimination of non-performing loans. This may mean that high-risk loans can only be sold with a significant markdown.

- If the United States were to further ramp up its protectionist action and Europe and China were to respond with retaliatory measures, the consequence could be escalation of the **trade disputes** that would have a huge negative impact on global trade as a whole. This would adversely affect the global economy and hit the heavily export-dependent German economy particularly hard.

- High levels of uncertainty are taking their toll on the current political and economic situation in **Turkey**. The increasing political risk factors, growing current account deficit, and high rate of inflation have progressively eaten away at the international capital markets' confidence in Turkey. Coupled with the interest-rate rises in the United States, these have put substantial downward pressure on the Turkish lira. Any continued depreciation of the currency would have significant negative macroeconomic effects. Increases in the cost of funding denominated in foreign currencies could be detrimental to the corporate and banking sectors' operating capabilities. Obtaining funding in the international capital markets would also become more expensive for Turkey. Investors' confidence in the Turkish economy could decrease further, and the country could see an outflow of short-term foreign capital.

- The forces striving for **Catalonia's** independence from Spain saw their influence fade during the first half of 2018, so the latent risk for Spain's overall economic performance has receded again.

1.2.2 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 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 at all times in the first 6 months of 2018.

The **solvency** of the DZ BANK Group was never in jeopardy at any point during the reporting period. By holding ample liquidity reserves, the group ensures that it is able to protect its liquidity against any potential crisis-related threats. It also complied with regulatory requirements for liquidity adequacy at all times. The DZ BANK Group remained within its economic **risk-bearing capacity** in the first half of 2018 and also complied with regulatory requirements for capital adequacy at all times. There are no indications that the **continued existence** of the DZ BANK Group or individual management units, including DZ BANK, as going concerns 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, 2018	Dec. 31, 2017	2018	2017	2018	2017
LIQUIDITY ADEQUACY						
DZ BANK Group						
Economic liquidity adequacy (€ billion)[2]	7.4	16.1	4.0	4.0	0.0	0.0
DZ BANK banking group						
Liquidity coverage ratio (%)	143.8	161.7	110.0	90.0	100.0	80.0
CAPITAL ADEQUACY						
DZ BANK Group						
Economic capital adequacy (%)[3]	171.5	169.8	120.0	120.0	100.0	100.0
DZ BANK financial conglomerate						
Coverage ratio for the financial conglomerate (%)[4]		189.3	120.0		100.0	100.0
DZ BANK banking group						
Common equity Tier 1 capital ratio (%)[5 6]	13.7	14.0	11.0	11.0	8.8	7.9
Tier 1 capital ratio (%)[5 6]	15.0	15.3	12.5	12.5	10.3	9.4
Total capital ratio (%)[5 6]	16.8	17.4	14.5	14.5	12.3	11.4
Leverage ratio (%)[5]	4.4	4.6	3.5	3.5		

1 As specified by the Board of Managing Directors.
2 Economic liquidity adequacy is expressed through the minimum liquidity surplus KPI. 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. The value originally measured as at December 31, 2017 was 170.5 percent and has been adjusted due to the scheduled recalculation of the overall solvency requirement for the Insurance sector.
4 Value measured as at December 31, 2017: final coverage ratio.
5 Measured values and internal minimum targets in accordance with the CRR transitional guidance.
6 The external minimum targets are the binding regulatory minimum capital requirements. Details on the minimum capital requirements can be found in section 4.2.2.

Not available

2 Potential opportunities

The potential opportunities described in the 2017 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 2018. 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.

In August 2018, Moody's lowered the long-term rating for unsecured, 'non-preferred' bonds by one notch to A1 following adoption of Directive 2014/59/EU (Bank Recovery and Resolution Directive, BRRD) into German law. The rating was changed because government support is no longer possible under the amended legislation. At the same time, Moody's raised the issuer rating to the level of the long-term rating for unsecured, 'preferred' bonds (Aa1).

As at June 30, 2018, 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, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Issuer rating	AA-	AA-	Aa3	Aa3	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+	Aa3	Aa3	AA-	AA-
Short-term rating	A-1+	A-1+	P-1	P-1	F1+	F1+

3 Liquidity adequacy

3.1 Economic liquidity adequacy

3.1.1 Quantitative variables

The available liquid securities and the unsecured short-term and medium-term funding are the main factors determining the minimum liquidity surplus. These factors are presented below.

Liquid securities

Liquid securities, together with balances on nostro accounts and non-collateralized funding capacity, form part of the **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, 2018 amounted to €39.9 billion (December 31, 2017: €45.9 billion). The significant decline in the volume of liquid securities as at June 30, 2018 compared with the end of 2017 was attributable to the sale of securities, mainly at DZ BANK. Consequently, liquid securities represent the largest proportion of the counterbalancing capacity for the DZ BANK Group and make a major contribution to ensuring that it remains solvent 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, 2018	Dec. 31, 2017
Liquid securities eligible for GC Pooling (ECB Basket)[1]	**23.1**	**28.1**
Securities in own portfolio	24.0	28.1
Securities received as collateral	11.9	10.6
Securities provided as collateral	-12.9	-10.6
Liquid securities eligible as collateral for central bank loans	**11.9**	**12.2**
Securities in own portfolio	12.9	12.1
Securities received as collateral	3.5	2.6
Securities provided as collateral	-4.6	-2.5
Other liquid securities	**5.0**	**5.6**
Securities in own portfolio	4.5	5.5
Securities received as collateral	0.6	0.1
Securities provided as collateral	-0.1	-
Total	**39.9**	**45.9**
Securities in own portfolio	41.5	45.7
Securities received as collateral	16.0	13.3
Securities provided as collateral	-17.5	-13.2

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

Funding and liquidity maturities

The short-term and medium-term funding structure determines the level of liquidity risk. The main sources of funding on the unsecured money markets are shown in Fig. 7. The change in the composition of the main sources of funding compared with December 31, 2017 was attributable to a change in the behavior of customers and investors resulting from money market policy implemented by the ECB.

FIG. 7 – UNSECURED SHORT-TERM AND MEDIUM-TERM FUNDING

%	Jun. 30, 2018	Dec. 31, 2017
Local cooperative banks	45	54
Other banks, central banks	17	12
Corporate customers, institutional customers	18	13
Commercial paper (institutional investors)	20	21

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

3.1.2 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 €7.4 billion (December 31, 2017: €16.1 billion). During the period under review, liquidity did not, in any of the stress scenarios with defined limits, fall below the observation threshold of €4.0 billion set by the Board of Managing Directors as the internal minimum target for 2018. Furthermore, it did not fall below the limit of €1.0 billion or the external minimum target of €0.0 billion at any time in the reporting period. The observation threshold, limit, and external minimum target remained unchanged year on year.

The results demonstrate that economic liquidity adequacy was maintained at all times in the reporting year. The minimum liquidity surplus as at June 30, 2018 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.

3.2 Regulatory liquidity adequacy

The **liquidity coverage ratio** (LCR) for the DZ BANK banking group calculated in accordance with Commission Delegated Regulation (EU) 2015/61 as at June 30, 2018 is shown in Fig. 9. The decrease in the LCR compared with December 31, 2017 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 for the LCR of 110 percent (2017: 90 percent) and the regulatory minimum requirement of 100 percent (2017: 80 percent) were significantly exceeded on every reporting date.

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, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Downgrading	-40.0	-44.7	60.0	77.2	20.0	32.5
Corporate crisis	-38.8	-47.2	47.5	63.3	8.7	16.1
Market crisis	-43.9	-51.5	56.0	76.3	12.1	24.8
Combination crisis	-44.3	-23.4	51.7	42.6	7.4	19.2

FIG. 9 – LIQUIDITY COVERAGE RATIO AND ITS DETERMINING FACTORS

	Jun. 30, 2018	Dec. 31, 2017
Total liquidity buffer (€ billion)	95.6	77.5
Total net liquidity outflows (€ billion)	66.5	47.9
Liquidity coverage ratio (%)	143.8	161.7

4 Capital adequacy

4.1 Economic capital adequacy

It was necessary to **recalculate the overall solvency requirement** as at December 31, 2017 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 2018 for the Insurance sector on the basis of R+V's 2017 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, 2017 given in this opportunity and risk report have been restated accordingly and are not directly comparable with the figures in the 2017 opportunity and risk report.

The DZ BANK Group's **available internal capital** as at June 30, 2018 stood at €28,640 million. The comparable figure as at December 31, 2017 was measured at €27,831 million. The figure originally measured as at December 31, 2017 and disclosed in the 2017 opportunity and risk report came to €28,049 million. The increase in available internal capital arose mainly because of the positive financial performance and the rise in hidden reserves.

The **upper loss limit** derived from the available internal capital amounted to €24,276 million as at June 30, 2018 (December 31, 2017: €23,575 million). The rise in the upper loss limit was largely due to the growth of business in line with the planning.
As at June 30, 2018, **aggregate risk** was calculated at €16,695 million. The comparable figure as at December 31, 2017 was €16,392 million. The increase in risk, which was mainly attributable to the Insurance sector, was due to portfolio growth and the level of interest rates.

As at June 30, 2018, the economic capital adequacy ratio for the DZ BANK Group was calculated at 171.5 percent. The comparable figure as at December 31, 2017 was 169.8 percent. The figure originally measured as at December 31, 2017 and disclosed in the 2017 opportunity and risk report was 170.5 percent. During the first half of 2018, the economic capital adequacy ratio was higher than the internal and external minimum targets of 120 percent and 100 percent respectively at all times. Fig. 10 provides an overview of the DZ BANK Group's economic capital adequacy.

The upper loss 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. 12 sets out the upper loss limits and overall solvency requirements for the **Insurance sector**, broken down by risk type, and includes policyholder participation. The definition of the upper loss 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 upper loss limits 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 risk types in the first half of the year. This stood at €348 million as at March 31, 2018 and at €316 million as at June 30, 2018. The corresponding upper loss limit was €380 million.

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

	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017
Available internal capital (€ million)	28,640	28,052	27,831
Upper loss limit (€ million)	24,276	24,276	23,575
Aggregate risk (€ million)	16,695	16,592	16,392
Economic capital adequacy (%)	**171.5**	**169.1**	**169.8**

FIG. 11 – UPPER LOSS LIMITS AND RISK CAPITAL REQUIREMENT INCLUDING CAPITAL BUFFER IN THE BANK SECTOR

	Upper loss limits			Risk capital requirement including the decentralized capital buffer requirement		
€ million	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017
Credit risk	8,238	8,248	7,628	6,038	5,893	5,772
Equity investment risk	1,341	1,341	1,422	1,098	1,127	1,093
Market risk[1]	6,768	6,756	6,863	3,725	3,903	4,097
Technical risk of a home savings and loan company[2]	667	667	558	553	553	558
Business risk[3]	1,065	1,065	1,040	888	887	781
Operational risk	1,030	1,030	1,147	821	816	821
Total (after diversification)	**18,196**	**18,196**	**17,805**	**11,881**	**11,895**	**11,861**

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.

FIG. 12 – UPPER LOSS LIMITS AND OVERALL SOLVENCY REQUIREMENT IN THE INSURANCE SECTOR

	Upper loss limits			Overall solvency requirement		
€ million	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017
Life actuarial risk	1,100	1,100	1,200	924	913	868
Health actuarial risk	240	240	370	203	201	219
Non-life actuarial risk	3,600	3,600	3,580	3,160	3,030	3,001
Market risk	3,690	3,690	3,800	3,521	3,308	3,240
Counterparty default risk	130	130	130	53	79	57
Operational risk	640	640	650	570	569	528
Non-controlling interests in insurance companies and entities in other financial sectors	160	160	140	128	127	127
Total (after diversification)	**5,700**	**5,700**	**5,420**	**4,498**	**4,350**	**4,199**

4.2 Regulatory capital adequacy

4.2.1 DZ BANK financial conglomerate

As financial conglomerate solvency is reported to the supervisory authority annually, solvency ratios for the DZ BANK financial conglomerate as at June 30, 2018 have not been disclosed.

The solvency ratios as at December 31, 2017 were finalized in the first half of this year. The DZ BANK financial conglomerate's eligible **own funds** as at December 31, 2017 amounted to €26,811 million (provisional figure given in the 2017 opportunity and risk report: €27,458 million). On the other side of the ratio, the **solvency requirement** was €14,661 million (provisional figure given in the 2017 opportunity and risk report: €14,506 million). This gives a **coverage ratio** of 182.9 percent (provisional figure given in the 2017 opportunity and risk report: 189.3 percent), which is significantly in excess of the regulatory minimum requirement and the internal minimum target (both 100 percent).

4.2.2 DZ BANK banking group

Regulatory minimum capital requirements

The minimum capital requirements that the DZ BANK banking group has to comply with in 2018 comprise those components of Pillar 1 laid down as mandatory by law and those individually specified by the banking supervisor. Institution-specific requirements under the additional capital requirements in Pillar 2, determined in the outcome of the Supervisory Review and Evaluation Process (SREP) conducted for the DZ BANK banking group in 2017, also have to be satisfied.

Since 2017, the ECB has used a modified approach for determining the additional capital requirements under Pillar 2. In the new approach, the supervisor specifies a mandatory add-on (Pillar 2 requirement) that is factored into the basis of calculation for the maximum distributable amount (MDA). The add-on is determined from the findings of the SREP.

In addition to this mandatory component, there is a recommended own funds amount under Pillar 2 (Pillar 2 guidance), which likewise is determined from the SREP, but unlike the mandatory component relates only to common equity Tier 1 capital. Failure to comply with the own funds guidance under Pillar 2 does not constitute a breach of regulatory capital requirements. Nevertheless, this figure is relevant as an early warning indicator for capital planning.

The mandatory minimum capital requirements and their components applicable to 2018 and 2017 are shown in Fig. 13.

The mandatory and the recommended minimum capital requirements were complied with throughout the first half of 2018. This applies to both the minimum capital requirements under the currently applicable solvency regime (CRR transitional guidance) and the regime in force from 2019 (full application of the CRR). According to current projections, the requirements will also be satisfied in 2018. The internal minimum targets for the common equity Tier 1 capital ratio, the Tier 1 capital ratio, and the total capital ratio were satisfied at all times during the reporting period. The internal minimum targets are shown in Fig 4.

In 2017, the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) [German Federal Financial Supervisory Authority] issued a decision that DZ BANK would continue to be classified as an other systemically important institution (O-SII). The DZ BANK banking group has to comply with an **O-SII capital buffer** (comprising common equity Tier 1 capital) as defined in section 10g (1) KWG at a level of 0.66 percent in 2018. This figure will increase to 1.0 percent from 2019.

Regulatory capital ratios in accordance with CRR transitional guidance

The regulatory **own funds** of the DZ BANK banking group as at June 30, 2018 determined in accordance with the currently applicable CRR transitional guidance amounted to a total of €22,786 million (December 31, 2017: €22,728 million).

Own funds increased marginally, by €58 million, compared with December 31, 2017. **Common equity Tier 1 capital** rose by a total of €322 million. Although partly offset by various other capital changes, this growth was primarily due to the profit before taxes for the six-month period of €437 million, which was eligible for retention.

FIG. 13 – REGULATORY MINIMUM CAPITAL REQUIREMENTS

%	2018	2017
Minimum requirement for common equity Tier 1 capital	4.50	4.50
Additional Pillar 2 capital requirement	1.75	1.75
Capital conservation buffer	1.88	1.25
Countercyclical capital buffer		0.02
O-SII capital buffer	0.66	0.33
Mandatory minimum requirement for common equity Tier 1 capital	**8.79**	**7.85**
Minimum requirement for additional Tier 1 capital[1]	1.50	1.50
Mandatory minimum requirement for Tier 1 capital	**10.29**	**9.35**
Minimum requirement for Tier 2 capital[2]	2.00	2.00
Mandatory minimum requirement for total capital	**12.29**	**11.35**

1 The minimum requirement can also be satisfied with common equity Tier 1 capital.
2 The minimum requirement can also be satisfied with common equity Tier 1 or additional Tier 1 capital.

The countercyclical capital buffer for 2018 is not yet known because its level depends on the risk-weighted assets reported as at December 31, 2018.

Tier 2 capital declined from €2,687 million at the end of 2017 to €2,520 million as at June 30, 2018, a decrease of €167 million. This 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.

As at June 30, 2018, **risk-weighted assets** were calculated at €135,524 million (December 31, 2017: €130,805 million). The increase was predominantly attributable to the expiry of the grandfathering rules pursuant to article 495 (1) CRR. Consequently, every entity in the DZ BANK banking group that uses internal ratings-based (IRB) approaches to calculate risk-weighted assets, but has until now calculated the risk-weighted assets of its long-term equity investments under the Standardized Approach to credit risk, must now use the IRB approaches for its long-term equity investments as well. The increase in risk-weighted assets is also due to adjustments to the method for calculating the capital requirement for securitization exposures in the banking book in the internal assessment approach.

The DZ BANK banking group's **common equity Tier 1 capital ratio** was 13.7 percent as at June 30, 2018 and thus lower than the ratio of 14.0 percent as at the end of 2017. As at June 30, 2018, the **Tier 1 capital ratio** was 15.0 percent, and thus also down on the ratio of 15.3 percent as at December 31, 2017. The **total capital ratio**, too, declined from 17.4 percent as at December 31, 2017 to 16.8 percent as at the balance sheet date.

The fall in the capital ratios was due both to the increased capital requirements and to the fall in own funds.

The ratios were well above the regulatory minimum CRR capital ratios at all times during the first half of the year.

Fig. 14 provides an overview of the DZ BANK banking group's regulatory capital ratios in accordance with the CRR.

Regulatory capital ratios with full application of the CRR

The capital ratios for the DZ BANK banking group based on full application of the CRR are shown in Fig. 15.

At all times in the first half of the year, the ratios were in excess of the minimum values planned for the future and the present ECB requirement specified in the SREP.

Leverage ratio

The leverage ratio shows the ratio of Tier 1 capital to the total exposure. In contrast to risk-based capital requirements for which the assumptions are derived from models, the individual line items in the calculation of the leverage ratio are not given a credit-rating-related risk weighting but are generally included in the total exposure without any weighting at all.

The leverage ratios for the DZ BANK banking group – in accordance with the currently applicable CRR transitional guidance and assuming full application of the CRR – are presented in Fig. 16.

The decrease in the leverage ratio as at June 30, 2018 calculated in accordance with the CRR transitional guidance mainly arose because of an increase of €28.8 billion in the total exposure, which in turn was attributable to growth of on-balance-sheet business at DZ BANK.

The internal minimum target for the leverage ratio of 3.5 percent was met at all times in the first half of 2018.

FIG. 14 – REGULATORY CAPITAL RATIOS IN ACCORDANCE WITH CRR

	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017
Capital			
Common equity Tier 1 capital (€ million)	18,573	17,679	18,251
Additional Tier 1 capital (€ million)	1,693	1,693	1,790
Tier 1 capital	**20,266**	**19,372**	**20,041**
Total Tier 2 capital (€ million)	2,520	2,766	2,687
Total capital	**22,786**	**22,138**	**22,728**
Risk-weighted assets			
Credit risk including long-term equity investments (€ million)	117,763	114,907	113,743
Market risk (€ million)	7,138	7,877	6,778
Operational risk (€ million)	10,623	10,623	10,284
Total	**135,524**	**133,407**	**130,805**
Capital ratios			
Common equity Tier 1 capital ratio (%)	13.7	13.3	14.0
Tier 1 capital ratio (%)	15.0	14.5	15.3
Total capital ratio (%)	16.8	16.6	17.4

FIG. 15– REGULATORY CAPITAL RATIOS WITH FULL APPLICATION OF THE CRR

%	Jun. 30, 2018	Dec. 31, 2017
Common equity Tier 1 capital ratio	13.7	13.9
Tier 1 capital ratio	14.2	14.4
Total capital ratio	16.8	17.4

FIG. 16 – LEVERAGE RATIOS

%	Jun. 30, 2018	Dec. 31, 2017
Leverage ratio according to CRR transitional guidance	4.4	4.6
Leverage ratio applying the CRR in full	4.2	4.4

4.2.3 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, 2018.

In view of the ongoing challenging situation in the financial markets, forecasts about changes in the solvency capital requirement and own funds are subject to significant uncertainty. However, R+V will take suitable measures to ensure it maintains its risk-bearing capacity.

Bank sector

5 Credit risk

5.1 Lending volume

5.1.1 Change in lending volume

The **total lending volume** increased by 2 percent overall in the first half of the year, from €375.2 billion as at December 31, 2017 to €380.8 billion as at June 30, 2018. This was mainly because of a rise of 3 percent in the lending volume in the **traditional lending business**, from €279.8 billion as at December 31, 2017 to €288.2 billion as at June 30, 2018. This rise primarily related to the volume of lending disbursed by DZ BANK to local cooperative banks. The lending volume in the **derivatives and money market business** was also up, by 15 percent, from €14.2 billion as at December 31, 2017 to €16.4 billion as at June 30, 2018. This increase was also largely attributable to DZ BANK. By contrast, the volume in the **securities business** contracted by 6 percent, from €81.1 billion as at December 31, 2017 to €76.2 billion as at June 30, 2018. This was mainly due to the reduction in the volume of public-sector bonds held by DZ BANK.

5.1.2 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, 2018, a significant proportion (36 percent) of the lending volume continued to be concentrated in the financial sector (December 31, 2017: 35 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 a 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 with corporate customers in Germany and abroad, the retail real-estate business under the umbrella of BSH, TeamBank's consumer finance business, and DZ HYP's real-estate lending and local authority loans businesses determine the sectoral breakdown of the remainder of the portfolio.

5.1.3 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, 2018, 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 2017.

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

	Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Financial sector	99.7	94.5	26.0	26.1	12.2	10.9	137.9	131.6
Public sector	10.3	10.4	38.3	43.2	0.5	0.5	49.1	54.2
Corporates	104.1	104.5	8.0	7.7	3.3	2.3	115.4	114.4
Retail	66.2	62.9	2.2	2.4	-	-	68.5	65.3
Industry conglomerates	7.2	7.0	1.7	1.6	0.5	0.5	9.4	9.2
Other	0.6	0.5	-	-	-	-	0.6	0.5
Total	**288.2**	**279.8**	**76.2**	**81.1**	**16.4**	**14.2**	**380.8**	**375.2**

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

	Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Germany	252.1	243.6	45.6	50.6	10.0	8.9	307.7	303.1
Other industrialized countries	25.1	25.2	26.8	27.2	5.8	4.7	57.8	57.2
Advanced economies	2.8	2.9	0.8	0.6	0.1	0.1	3.7	3.6
Emerging markets	8.1	8.1	0.9	0.9	0.2	0.2	9.2	9.1
Supranational institutions	-	-	2.2	1.9	0.3	0.3	2.4	2.2
Total	**288.2**	**279.8**	**76.2**	**81.1**	**16.4**	**14.2**	**380.8**	**375.2**

5.1.4 Residual maturity structure of the credit portfolio

The breakdown of the credit portfolio by residual maturity presented in Fig. 19 as at June 30, 2018 shows that the lending volume had increased by €6.7 billion in the short-term maturity band compared with December 31, 2017. This was mainly attributable to DZ BANK. The decrease in the medium-term maturity band amounted to €1.7 billion and was mainly accounted for by DZ BANK. By contrast, the lending volume in the longer-term maturity band went up by a total of €0.7 billion, primarily attributable to BSH.

5.1.5 Rating structure of the credit portfolio

Rating structure of the total lending volume

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, 2017 and June 30, 2018. 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 2017. Defaults, represented by rating classes 5A to 5E, accounted for 1.5 percent of the total lending volume as at June 30, 2018 (December 31, 2017: 1.7 percent).

Single borrower concentrations

As at June 30, 2018, the 10 counterparties associated with the largest lending volumes accounted for 7 percent of total lending (December 31, 2017: 8 percent). These counterparties largely comprised financial-sector and public-sector borrowers domiciled in Germany with an investment-grade rating.

5.1.6 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 net.

As at June 30, 2018, the collateralized lending volume had risen to €118.9 billion from €116.1 billion as at December 31, 2017. The increase was mainly attributable to the expansion of the real estate finance business. The collateralization rate was 31.2 percent at the reporting date (December 31, 2017: 30.9 percent).

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

	Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
≤ 1 year	54.4	49.4	13.7	13.6	11.5	9.8	79.6	72.8
> 1 year to ≤ 5 years	52.6	53.1	27.9	29.1	1.7	1.8	82.2	84.0
> 5 years	181.2	177.3	34.6	38.4	3.3	2.7	219.0	218.4
Total	**288.2**	**279.8**	**76.2**	**81.1**	**16.4**	**14.2**	**380.8**	**375.2**

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

		Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion		Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Investment grade	1A	6.3	6.3	32.6	30.1	0.9	1.0	39.7	37.4
	1B	2.0	2.0	3.0	8.1	1.8	1.6	6.8	11.8
	1C	93.0	87.7	8.2	8.6	3.4	3.6	104.7	99.9
	1D	5.1	5.1	2.3	2.2	0.4	0.2	7.8	7.5
	1E	9.5	7.9	2.4	1.9	2.2	1.8	14.0	11.5
	2A	11.5	12.3	3.2	3.2	1.4	0.9	16.0	16.5
	2B	11.0	11.4	8.6	10.1	2.4	1.7	22.0	23.2
	2C	14.5	14.3	2.5	2.5	1.2	0.6	18.2	17.4
	2D	15.8	15.0	3.3	3.4	0.5	0.5	19.7	19.0
	2E	18.8	18.7	5.3	5.1	0.9	0.9	25.0	24.8
	3A	21.2	20.1	1.2	1.8	0.5	0.6	22.9	22.5
Non-investment grade	3B	22.8	19.9	1.4	1.4	0.3	0.2	24.5	21.5
	3C	15.9	17.8	0.3	0.3	0.1	0.1	16.3	18.2
	3D	14.5	13.9	0.4	0.5	0.1	0.1	15.0	14.5
	3E	5.1	4.5	0.6	0.6	-	-	5.7	5.2
	4A	2.2	2.5	-	-	-	-	2.3	2.6
	4B	5.3	5.3	-	-	-	-	5.3	5.3
	4C	2.8	3.5	-	0.1	-	-	2.8	3.5
	4D	0.6	0.7	-	-	-	-	0.6	0.7
	4E	2.7	3.0	0.1	0.1	-	-	2.8	3.1
Default		5.5	6.0	0.2	0.2	-	-	5.6	6.2
Not rated		2.2	2.0	0.8	0.8	0.3	0.3	3.2	3.1
Total		**288.2**	**279.8**	**76.2**	**81.1**	**16.4**	**14.2**	**380.8**	**375.2**

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

	Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Guarantees, indemnities, risk subparticipation	6.6	6.7	-	-	0.2	0.2	6.8	6.9
Credit insurance	3.3	3.1	-	-	-	-	3.3	3.1
Land charges, mortgages, registered ship mortgages	101.0	98.7	-	-	-	-	101.1	98.8
Pledged loans and advances, assignments, other pledged assets	5.7	5.3	-	-	-	-	5.7	5.4
Financial collateral	1.2	1.4	-	-	0.5	0.2	1.7	1.6
Other collateral	0.3	0.3	-	-	-	-	0.3	0.3
Collateralized lending volume	**118.0**	**115.6**	**-**	**-**	**0.8**	**0.5**	**118.9**	**116.1**
Gross lending volume	288.2	279.8	76.2	81.1	16.4	14.2	380.8	375.2
Uncollateralized lending volume	**170.2**	**164.2**	**76.2**	**81.1**	**15.6**	**13.7**	**262.0**	**259.1**
Collateralization rate (%)	**41.0**	**41.3**	**-**	**-**	**5.1**	**3.4**	**31.2**	**30.9**

In the **traditional lending business**, most of the collateralized lending volume – 86 percent as at June 30, 2018 – was accounted for by lending secured by charges over physical assets such as land charges, mortgages, and registered ship mortgages (December 31, 2017: 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.

5.1.7 Volume of non-performing loans

The decrease in the volume of non-performing loans (NPLs) from €6.2 billion to €5.6 billion in conjunction with the moderate increase in the total lending volume from €375.2 billion to €380.8 billion caused the NPL ratio to fall slightly, from 1.7 percent as at December 31, 2017 to 1.5 percent at the end of the reporting period.

Fig. 22 shows key figures relating to the volume of non-performing loans.

5.1.8 Securitizations

The asset-backed securities (ABS) portfolio is predominantly held by DZ BANK and DZ HYP. This portfolio had a fair value of €2,488 million as at the reporting date (December 31, 2017: €2,796 million).

These figures included the ABS wind-down portfolio dating back to the period before the financial crisis, which had a fair value of €1,549 million (December 31, 2017: €1,854 million). The changes in the wind-down portfolio in 2018 have largely been within expectations, both in terms of the contraction of the portfolio as a result of redemptions and in terms of the overall performance of the portfolio.

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.

FIG. 22 – BANK SECTOR: KEY FIGURES FOR THE VOLUME OF NON-PERFORMING LOANS

	Jun. 30, 2018	Dec. 31, 2017
Total lending volume (€ billion)	380.8	375.2
Volume of non-performing loans (€ billion)[1]	5.6	6.2
Balance of loss allowances for loans and advances (€ billion)	2.8	3.1
Loan loss allowance ratio (%)[2]	0.7	0.8
Coverage ratio (%)[3]	50.3	50.1
NPL ratio (%)[4]	1.5	1.7

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

As at June 30, 2018, the fair value of the securitization exposures arising from DZ BANK's activities in which it acts as a sponsor amounted to €970 million (December 31, 2017: €1,022 million). The decrease in the exposures was largely due to fluctuations in the drawdown of liquidity lines.

5.2 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.

5.2.1 European sovereign debt portfolio

As at June 30, 2018, loans and advances to borrowers in the countries directly affected by the **European sovereign debt crisis** amounted to €7,610 million (December 31, 2017: €7,949 million). The reduction was due, in particular, to falls in the market values of Italian bonds in connection with the changes in Italy's political situation.

As loans and advances to counterparties in Greece have been scaled back, the credit exposure for this country is no longer reported separately. Consequently, the total lending volume in respect of the eurozone periphery countries as at December 31, 2017 disclosed in this opportunity and risk report differs from the corresponding amount in the 2017 opportunity and risk report.

Fig. 23 shows the borrower structures of the entities in the Bank sector for the eurozone periphery countries by credit-risk-bearing instrument.

5.2.2 Shipping finance portfolio

As at June 30, 2018, the shipping finance portfolio had a value of €9,609 million (December 31, 2017: €10,180 million). Almost all of the loans and advances reported relate to DVB. DZ BANK plays a far smaller role in the overall shipping finance portfolio of the Bank sector. Besides exchange rate effects, the contraction of this portfolio was due, in particular, to capital repayments combined with early redemptions and a level of new business that was below plan. Another factor was the winding down of the non-performing part of the shipping finance portfolio, which is no longer a strategic priority.

Overcapacity in some shipping sectors is putting sustained pressure on ship asset values and charter rates. Although there have been some signs of stabilization and improvement, the market situation remains challenging. Strategic options for DVB continue to be examined.

The breakdown of the lending volume by country group is set out in Fig. 24.

5.2.3 Offshore finance portfolio

As at June 30, 2018, the Bank sector's lending volume in the offshore finance business, which is attributable exclusively to DVB, amounted to €1,639 million (December 31, 2017: €1,767 million). DVB stopped taking on new business in 2017 and is winding down the existing portfolio, which is part of its non-core portfolio, while preserving as much value as possible. The offshore finance market remains difficult and is not expected to bounce back in the short term.

Fig. 25 shows the breakdown of the offshore finance portfolio by country group.

FIG. 23 – BANK SECTOR: LOANS AND ADVANCES TO BORROWERS IN EUROZONE PERIPHERY COUNTRIES

	Traditional lending business[1]		Securities business		Derivatives and money market business		Total	
€ million	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Portugal	**72**	80	**1,029**	1,035	**-**	-	**1,101**	1,115
of which: public sector	-	-	920	919	-	-	920	919
of which: non-public sector	72	80	109	116	-	-	181	196
of which: financial sector	1	-	-	-	-	-	1	-
Italy	**165**	158	**2,963**	3,158	**76**	19	**3,205**	3,336
of which: public sector	-	-	2,611	2,809	-	-	2,611	2,809
of which: non-public sector	165	158	352	349	76	19	593	526
of which: financial sector	38	32	92	121	76	19	205	172
Spain	**252**	232	**2,990**	3,200	**62**	67	**3,305**	3,499
of which: public sector	13	19	1,968	2,094	-	-	1,982	2,113
of which: non-public sector	239	212	1,022	1,106	62	67	1,323	1,386
of which: financial sector	32	31	372	380	60	65	464	477
Total	**490**	470	**6,982**	7,393	**138**	87	**7,610**	7,949
of which: public sector	13	19	5,499	5,821	-	-	5,513	5,841
of which: non-public sector	477	450	1,483	1,571	138	87	2,097	2,108
of which: financial sector	70	63	464	502	136	84	671	649

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

FIG. 24 – BANK SECTOR: SHIPPING FINANCE LENDING VOLUME, BY COUNTRY GROUP

	Traditional lending business		Securities business		Derivatives business		Total	
€ million	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Germany	1,327	1,421	-	-	2	3	1,329	1,424
Other industrialized countries	5,788	6,122	-	-	-	1	5,789	6,124
Advanced economies	1,289	1,336	-	-	-	-	1,289	1,336
Emerging markets	1,202	1,294	-	-	1	2	1,202	1,296
Total	**9,606**	**10,174**	**-**	**-**	**3**	**6**	**9,609**	**10,180**

FIG. 25 – BANK SECTOR: OFFSHORE FINANCE LENDING VOLUME, BY COUNTRY GROUP

	Traditional lending business		Securities business		Derivatives business		Total	
€ million	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Germany	63	60	-	-	-	-	63	60
Other industrialized countries	940	1,041	-	-	-	-	940	1,041
Advanced economies	93	96	-	-	-	-	93	96
Emerging markets	544	570	-	-	-	-	544	570
Total	**1,639**	**1,766**	**-**	**-**	**-**	**-**	**1,639**	**1,767**

5.3 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, 2018, the risk capital requirement (including capital buffer requirement) amounted to €6,038 million (December 31, 2017: €5,772 million) with an upper loss limit of €8,238 million (December 31, 2017: €7,628 million) that was not exceeded at any time during the first 6 months of this year.

Fig. 26 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.

The risk capital requirement for credit portfolios exposed to increased credit risk is shown in Fig. 27, again without the capital buffer requirement.

FIG. 26 – BANK SECTOR: FACTORS DETERMINING THE CREDIT VALUE-AT-RISK

	Average probability of default		Expected loss (€ million)		Credit value-at-risk[1] (€ million)	
	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Traditional lending business	0.5%	0.6%	425	426	2,535	2,282
Securities business	0.2%	0.2%	60	66	1,634	1,636
Derivatives and money market business	0.1%	0.1%	10	10	425	327
Total			**495**	**501**	**4,595**	**4,245**
Average	**0.4%**	**0.5%**				

1 Excluding capital buffer requirement.

Not relevant

FIG. 27 – BANK SECTOR: CREDIT VALUE-AT-RISK[1] FOR CREDIT PORTFOLIOS WITH INCREASED RISK CONTENT

€ million	Jun. 30, 2018	Dec. 31, 2017
Eurozone periphery countries portfolio	1,067	1,089
Shipping finance portfolio	346	206
Offshore finance portfolio	88	99

1 Excluding capital buffer requirement.

As the credit exposure for Greece is no longer reported separately, the total credit value-at-risk in respect of the eurozone periphery countries as at December 31, 2017 also differs from the corresponding amount in the 2017 opportunity and risk report.

Compared with December 31, 2017, the credit value-at-risk for the Bank sector entities' exposure in the **peripheral countries of the eurozone** decreased marginally.

The credit value-at-risk for **shipping finance and offshore finance** stemmed primarily from DVB. The rise in the credit value-at-risk for the shipping portfolio compared with the end of 2017 was predominantly the result of improved measurement of the recovery risk for lending exposures in default, which is now included in the risk capital for credit risk. The flat-rate markup that was used previously is no longer applied.

6 Market risk

6.1 Risk capital requirement

As at June 30, 2018, the risk capital requirement (including capital buffer requirement) for market risk used to determine the risk-bearing capacity amounted to €3,725 million (December 31, 2017: €4,097 million) with an upper loss limit of €6,768 million (December 31, 2017: €6,863 million). The decrease in the risk was mainly due to lower spread and migration risk arising on bonds from countries affected by the European sovereign debt crisis. This was mainly due to a sharp fall in market values.

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 €42 million as at June 30, 2018 (December 31, 2017: €36 million). The asset-management risk for pension products as at the reporting date amounted to €140 million (December 31, 2017: €34 million). The rise in the asset-management risk for pension products was due to the movement of yields on German government bonds and improvements in the measurement of risk.

The risk capital requirement (including capital buffer requirement) remained below the upper loss limit at all times during the first half of 2018.

6.2 Value-at-risk

Fig. 28 shows the level of value-at-risk in the trading and non-trading portfolios and the level of aggregate risk. Because centralized measurement of market risk extending to the end of the financial year has been introduced for the Bank sector, it is not possible to calculate average, maximum, and minimum values. This has resulted in changes to the table compared with the one presented in the 2017 opportunity and risk report.

In addition, Fig. 29 shows the daily changes in risk and the results of daily backtesting of trading portfolios in the first half of 2018.

As at June 30, 2018, the **aggregate market risk** amounted to €89 million (December 31, 2017: €51 million). This increase was largely explained by higher spread risk resulting from the widening of spreads in the market.

The value-at-risk for the **trading portfolios** as at June 30, 2018 was €4 million (December 31, 2017: €2 million) and thus remained at a low level.

In the first half of 2018, the hypothetical changes in fair value exceeded the forecast risk value on 5 trading days. The overrun predominantly arose from market movements.

As at June 30, 2018, the value-at-risk for the **non-trading portfolios** was calculated at €88 million (December 31, 2017: €49 million). This rise was largely due to increased spread risk on the back of changed market data.

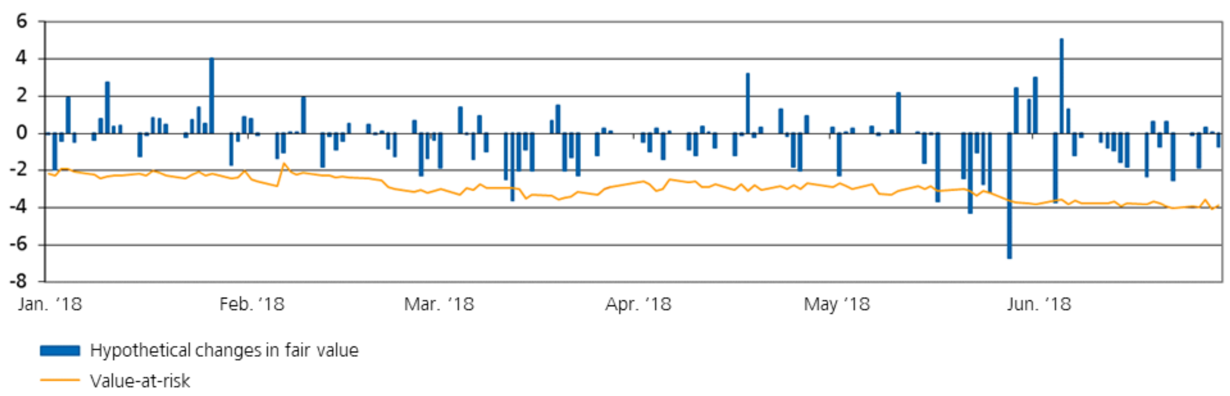
FIG. 28 – BANK SECTOR: VALUE-AT-RISK FOR MARKET RISK IN THE TRADING AND NON-TRADING PORTFOLIOS[1]

	Trading portfolios		Non-trading portfolios		Overall portfolio	
€ million	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Interest-rate risk	2	2	18	22	19	22
Spread risk	3	1	77	42	79	43
Equity risk[2]	1	1	8	5	8	5
Currency risk	-	-	10	4	11	4
Diversification effect[3]	-2	-2	-26	-23	-26	-23
Aggregate risk[4]	**4**	2	**88**	49	**89**	51

1 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 Including funds, if not broken down into constituent parts.
3 Total effects of diversification between the types of market risk for all consolidated management units.
4 Owing to the effects of diversification between trading portfolios and non-trading portfolios, the mathematical total of the risks for these two parts of the overall portfolio are different from the figure for aggregate risk.

FIG. 29 – BANK SECTOR: VALUE-AT-RISK FOR MARKET RISK AND HYPOTHETICAL CHANGES IN FAIR VALUE IN THE TRADING PORTFOLIOS

€ million, value-at-risk with 99.00% confidence level, 1-day holding period, 1-year observation period



7 Operational risk

7.1 Loss events

Losses from operational risk do not follow a consistent pattern. Instead, the overall risk profile can be seen from the total losses incurred over the long term and is shaped by a small number of large losses. Consequently, comparisons between net losses in a reporting period and those in a prior-year period are not meaningful. Figures for the prior-year period 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. 30 shows the losses reported in the past 4 quarters, classified by loss event category.

FIG. 30 – BANK SECTOR: NET LOSSES BY EVENT CATEGORY[1]

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

The 'Clients, products, and business practices' event category accounted for the majority (66 percent) of net losses. The net loss in this event category was largely attributable to 3 loss events, 2 of which resulted from changes arising from court decisions and legal interpretation and 1 related to potential legal disputes.

Losses did not reach a critical level relative to the expected loss from operational risk at any point during the first half of 2018.

7.2 Risk position

Using the internal portfolio model, the **risk capital requirement (including capital buffer requirement)** for operational risk as at June 30, 2018 was calculated at €821 million (unchanged on the value as at December 31, 2017) with an **upper loss limit** of €1,030 million (December 31, 2017: €1,147 million).

The upper loss limit and alert threshold for contributions to operational risk were not exceeded at any time during the first 6 months of the year.

8 Other risks in the Bank sector

8.1 Equity investment risk

The **carrying amounts of long-term equity investments** relevant for the measurement of equity investment risk amounted to €2,781 million as at June 30, 2018 (December 31, 2017: €2,714 million).

The **risk capital requirement (including capital buffer requirement)** for equity investment risk was measured at €1,098 million on the reporting date (December 31, 2017: €1,093 million). The **upper loss limit** was €1,341 million (December 31, 2017: €1,422 million) and was not exceeded at any time during the first 6 months of the year.

8.2 Technical risk of a home savings and loan company

As at June 30, 2018, the **capital requirement** for the technical risk of a home savings and loan company amounted to €553 million (December 31, 2017: €558 million) with an **upper loss limit** of €667 million (December 31, 2017: €558 million). A capital buffer requirement was not calculated for the technical risk of a home savings and loan company as at the reporting date.

The capital requirement for the financial year in respect of the technical risk of a home savings and loan company is calculated on November 30 of the previous year and, due to the nature of building society operations, remains constant throughout the financial year. As a result, it does not fluctuate during the year.

8.3 Business risk and reputational risk

As at June 30, 2018, the **risk capital requirement (including capital buffer requirement)** for business risk (including reputational risk) amounted to €888 million (December 31, 2017: €781 million). This rise was mainly a reflection of costs at DZ BANK. The **upper loss limit** was €1,065 million as at the reporting date (December 31, 2017: €1,040 million) and was not exceeded at any time during the first 6 months of the year.

Insurance sector

9 Actuarial risk

As at June 30, 2018, the **overall solvency requirement** for **life actuarial risk** amounted to €924 million (December 31, 2017: €868 million). The increase was predominantly attributable to the change in interest rates and portfolio growth. The **upper loss limit** was set at €1,100 million as at the balance sheet date (December 31, 2017: €1,200 million) and was not exceeded at any time during the first 6 months of the year.

As at June 30, 2018, the **overall solvency requirement for health actuarial risk** was measured at €203 million (December 31, 2017: €219 million) with an **upper loss limit** of €240 million (December 31, 2017: €370 million). Again, the risk capital requirement was below the upper loss limit at all times during the first 6 months of 2018.

As at June 30, 2018, the **overall solvency requirement** for **non-life actuarial risk** amounted to €3,160 million (December 31, 2017: €3,001 million). The increase was primarily the result of the growth in the volume of business. The **upper loss limit**, which was set at €3,600 million as at the balance sheet date (December 31, 2017: €3,580 million), was not exceeded at any point during the reporting period.

The overall solvency requirement for the various types of non-life actuarial risk is shown in Fig. 31.

In the first 6 months of 2018, the claims rate trend in the **direct non-life insurance** business was slightly higher than anticipated. The items worth highlighting were the low pressure area Friederike, which caused losses of €88 million, and an individual fire event that resulted in €40 million of losses attributable to interruptions to business. Of the total losses, €25 million was covered by reinsurance.

In **inward reinsurance**, there were no exceptional large claims, so financial performance was at the budgeted level during the reporting period.

10 Market risk

10.1 Change in lending volume

As at June 30, 2018, the total lending volume of R+V had advanced by 2 percent to €86.8 billion (December 31, 2017: €84.8 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 €9.8 billion as at June 30, 2018 (December 31, 2017: €9.5 billion). Of this amount, 90 percent was accounted for by loans for less than 60 percent of the value of the property (December 31, 2017: 91 percent). The volume of home finance was broken down by finance type as at the reporting date as follows (figures as at December 31, 2017 shown in parentheses):

- Consumer home finance: €9.1 billion (€9.1 billion)
- Commercial home finance: €0.1 billion (€0.1 billion)
- Commercial finance: €0.5 billion (€0.3 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 71 percent of the total lending volume as at June 30, 2018 (December 31, 2017: 72 percent). This lending mainly comprised loans and advances in the form of German and European Pfandbriefe with collateral backed by statute. Loans and advances to the public sector and consumer home finance (retail) highlight the safety of this investment. Fig. 32 shows the sectoral breakdown of the lending volume in the Insurance sector.

An analysis of the **geographical breakdown** of lending in Fig. 33 reveals that Germany and other industrialized countries continued to account for the lion's share of the lending volume as at June 30, 2018 – as they also did at December 31, 2017 – with a share of 91 percent. European countries dominated within the broadly diversified exposure in industrialized countries.

The high proportion of obligations in connection with the life insurance business requires investments with longer maturities. This is also reflected in the breakdown of **residual maturities** shown in Fig. 34. As at June 30, 2018, 82 percent (December 31, 2017: 81 percent) of the total lending volume had a residual maturity of more than 5 years. The increase in long residual maturities was mainly the result of investments in bonds.

FIG. 31 – INSURANCE SECTOR: OVERALL SOLVENCY REQUIREMENT FOR NON-LIFE ACTUARIAL RISK

€ million	Jun. 30, 2018	Dec. 31, 2017
Premium and reserve risk	1,909	1,778
Non-life catastrophe risk	2,085	2,013
Lapse risk	37	91
Total (after diversification)	**3,160**	**3,001**

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

€ billion	Jun. 30, 2018	Dec. 31, 2017
Financial sector	39.8	39.2
Public sector	21.9	21.9
Corporates	15.5	14.4
Retail	9.1	9.0
Industry conglomerates	0.6	0.4
Other	-	-
Total	**86.8**	**84.8**

FIG. 33 – INSURANCE SECTOR: LENDING VOLUME, BY COUNTRY GROUP

€ billion	Jun. 30, 2018	Dec. 31, 2017
Germany	31.9	32.1
Other industrialized countries	46.9	44.8
Advanced economies	1.1	1.1
Emerging markets	4.0	3.7
Supranational institutions	3.1	3.1
Total	**86.8**	**84.8**

FIG. 34 – INSURANCE SECTOR: LENDING VOLUME, BY RESIDUAL MATURITY

€ billion	Jun. 30, 2018	Dec. 31, 2017
≤ 1 year	2.6	3.0
> 1 year to ≤ 5 years	13.4	13.1
> 5 years	70.8	68.7
Total	**86.8**	**84.8**

By contrast, just 3 percent of the total lending volume was due to mature within 1 year as at June 30, 2018 (December 31, 2017: 4 percent).

The **rating structure** of the lending volume in the Insurance sector is shown in Fig 35. Of the total lending volume as at June 30, 2018, 81 percent was attributable to investment-grade borrowers (December 31, 2017: 80 percent). This reflects the regulatory requirements and the safety-oriented risk strategy of R+V. The lending volume that is not rated, which made up 18 percent of the total lending volume (December 31, 2017: 17 percent), 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 2017 opportunity and risk report.

As at the reporting date, the 10 counterparties associated with the largest lending volumes accounted for 21 percent of R+V's total lending volume (December 31, 2017: 22 percent).

10.2 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 **European periphery countries** totaled €7,032 million as at June 30, 2018 (December 31, 2017: €7,574 million), which constituted a decrease of 7 percent. As the investments in Portugal have been scaled back almost completely, the exposure for this country is no longer reported separately. Consequently, the total lending volume in respect of the eurozone periphery countries as at December 31, 2017 disclosed in this opportunity and risk report differs from the corresponding amount in the 2017 opportunity and risk report. Fig. 36 shows the country breakdown of the exposure.

10.3 Risk position

As at June 30, 2018, the **overall solvency requirement** for market risk amounted to €3,521 million (December 31, 2017: €3,240 million) with an **upper loss limit** of €3,690 million (December 31, 2017: €3,800 million). The changes in market risk resulted first and foremost from the trend in interest rates and business growth. Fig. 37 shows the overall solvency requirement for the various types of market risk.

In addition to the overall solvency requirement, a **capital buffer requirement** is calculated for R+V's market risk. On the one hand, this capital buffer requirement covers the spread and migration risk arising from sub-portfolios of Italian government bonds. Since the recalculation of the overall solvency requirement as at December 31, 2017, it has also taken account of the increase in market risk stemming from a further refinement of the method for measuring interest-rate risk. Working with DZ BANK, R+V is currently examining what further changes need to be made as a result of the review process conducted by the European Insurance and Occupational Pensions Authority (EIOPA) under Delegated Regulation (EU) 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, 2018, the capital buffer requirement for market risk totaled €487 million (December 31, 2017 after recalculation: €457 million).

FIG 35 – INSURANCE SECTOR: LENDING VOLUME, BY RATING CLASS

€ billion		Jun. 30, 2018	Dec. 31, 2017
Investment grade	1A	22.8	22.5
	1B	9.7	8.9
	1C	-	-
	1D	10.4	10.1
	1E	-	-
	2A	6.3	5.7
	2B	6.2	5.1
	2C	5.8	5.4
	2D	6.8	8.3
	2E	-	-
	3A	2.0	2.2
Non-investment grade	3B	0.3	0.6
	3C	0.5	0.3
	3D	-	-
	3E	0.3	0.5
	4A	0.1	0.1
	4B	0.1	0.1
	4C	0.2	0.2
	4D	-	-
	4E	-	-
Default		-	-
Not rated		15.2	14.7
Total		**86.8**	**84.8**

FIG. 36 – INSURANCE SECTOR: EXPOSURE IN EUROZONE PERIPHERY COUNTRIES

€ million	Jun. 30, 2018	Dec. 31, 2017
Italy	**5,004**	**5,569**
of which: public sector	3,747	4,174
of which: non-public sector	1,258	1,395
of which: financial sector	730	896
Spain	**2,028**	**2,005**
of which: public sector	1,368	1,322
of which: non-public sector	660	682
of which: financial sector	400	431
Total	**7,032**	**7,574**
of which: public sector	5,115	5,496
of which: non-public sector	1,918	2,078
of which: financial sector	1,130	1,327

FIG. 37 – INSURANCE SECTOR: OVERALL SOLVENCY REQUIREMENT FOR MARKET RISK

€ million	Jun. 30, 2018	Dec. 31, 2017
Interest-rate risk	1,656	1,475
Spread risk	1,598	1,571
Equity risk	1,673	1,447
Currency risk	179	201
Real-estate risk	327	319
Total (after diversification)	**3,521**	**3,240**

11 Other risks in the Insurance sector

11.1 Counterparty default risk

As at June 30, 2018, the **overall solvency requirement** for counterparty default risk amounted to €53 million (December 31, 2017: €57 million) with an **upper loss limit** of €130 million. The upper loss limit was unchanged compared with the end of 2017 and was not exceeded at any time during the first 6 months of the year.

11.2 Operational risk

As at June 30, 2018, the **overall solvency requirement** for operational risk amounted to €570 million (December 31, 2017: €528 million). The **upper loss limit** applicable at the reporting date was set at €640 million (December 31, 2017: €650 million) and was not exceeded at any time during the first 6 months of this year.

11.3 Risks from non-controlling interests in insurance companies and from entities in other financial sectors

As at June 30, 2018, the **overall solvency requirement** for risks in connection with non-controlling interests in insurance companies and entities in other financial sectors stood at €128 million (December 31, 2017: €127 million) with an **upper loss limit** of €160 million (December 31, 2017: €140 million). This limit was not exceeded at any time in the first half of the year.

Interim consolidated financial statements

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

€ million	(Note)	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Net interest income	(8)	1,422	1,427
Net fee and commission income	(9)	958	977
Gains and losses on trading activities	(10)	206	304
Gains and losses on investments	(11)	98	88
Other gains and losses on valuation of financial instruments	(12)	-48	34
Premiums earned	(13)	8,115	7,403
Gains and losses on investments held by insurance companies and other insurance company gains and losses	(14)	1,215	1,847
Insurance benefit payments	(15)	-7,709	-7,543
Insurance business operating expenses	(16)	-1,322	-1,256
Loss allowances	(17)	44	-396
Administrative expenses	(18)	-2,018	-2,000[1]
Other net operating income	(19)	73	54
Profit before taxes		1,034	939
Income taxes	(20)	-303	-451
Net profit		**731**	**488**
Attributable to:			
Shareholders of DZ BANK		648	430
Non-controlling interests		83	58

1 Amount restated (see note 2).

Statement of comprehensive income for the period January 1 to June 30, 2018

€ million	(Note)	Jan. 1 – Jun. 30, 2018
Net profit		731
Other comprehensive income/loss		-93
Items that may be reclassified to the income statement		**-170**
Gains and losses on debt instruments measured at fair value through other comprehensive income	(21)	-304
Gains and losses on cash flow hedges	(21)	-7
Exchange differences on currency translation of foreign operations	(21)	7
Gains and losses on hedges of net investments in foreign operations	(21)	-3
Income taxes	(22)	137
Items that will not be reclassified to the income statement		**77**
Gains and losses on equity instruments for which the fair value OCI option has been exercised		93
Gains and losses attributable to changes in the own credit risk of financial liabilities for which the fair value option has been exercised		13
Gains and losses arising from remeasurement of defined benefit plans		-4
Income taxes	(22)	-25
Total comprehensive income		**638**
Attributable to:		
Shareholders of DZ BANK		595
Non-controlling interests		43

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

€ million	Jan. 1 – Jun. 30, 2017
Net profit	488
Other comprehensive income/loss	-197
Items that may be reclassified to the income statement	**-199**
Gains and losses on available-for-sale financial assets	-312 [1]
Gains and losses on cash flow hedges	17
Exchange differences on currency translation of foreign operations	-22
Gains and losses on hedges of net investments in foreign operations	12
Share of other comprehensive income/loss of joint ventures and associates accounted for using the equity method	-9
Income taxes	115
Items that will not be reclassified to the income statement	**2**
Gains and losses arising from remeasurement of defined benefit plans	4
Income taxes	-2
Total comprehensive income	**291**
Attributable to:	
Shareholders of DZ BANK	249
Non-controlling interests	42

1 Amount restated (see note 2 in the consolidated financial statements as at December 31, 2017).

Balance sheet as at June 30, 2018

ASSETS

€ million	(Note)	Jun. 30, 2018	Dec. 31, 2017
Cash and cash equivalents	(23)	69,240	43,910[1]
Loans and advances to banks	(24)	92,791	89,414[1]
Loans and advances to customers	(25)	177,601	174,376
Hedging instruments (positive fair values)	(26)	1,131	1,096
Financial assets held for trading	(27)	40,900	38,709
Investments	(28)	49,816	57,486
Investments held by insurance companies	(29)	101,112	96,416
Property, plant and equipment, and investment property	(30)	1,458	1,498
Income tax assets		1,151	1,127
Other assets	(31)	5,074	4,546
Loss allowances	(32)	-2,606	-2,794
Non-current assets and disposal groups classified as held for sale	(33)	120	84
Fair value changes of the hedged items in portfolio hedges of interest-rate risk		446	-274
Total assets		**538,234**	**505,594**

1 Amount restated (see note 2).

EQUITY AND LIABILITIES

€ million	(Note)	Jun. 30, 2018	Dec. 31, 2017
Deposits from banks	(34)	144,346	136,122
Deposits from customers	(35)	137,598	126,319
Debt certificates issued including bonds	(36)	69,881	67,327
Hedging instruments (negative fair values)	(37)	2,987	2,962
Financial liabilities held for trading	(38)	50,750	44,280
Provisions	(39)	3,153	3,372
Insurance liabilities	(40)	93,823	89,324
Income tax liabilities		969	848
Other liabilities	(41)	7,358	7,523
Subordinated capital	(42)	3,420	3,899
Liabilities included in disposal groups classified as held for sale	(33)	7	-
Fair value changes of the hedged items in portfolio hedges of interest-rate risk		117	113
Equity	(43)	23,825	23,505
Shareholders' equity		21,008	20,690
Subscribed capital		4,926	4,926
Capital reserve		5,551	5,551
Retained earnings		8,139	7,597
Reserve from other comprehensive income		899	1,444
Additional equity components		845	848
Unappropriated earnings		648	324
Non-controlling interests		2,817	2,815
Total equity and liabilities		**538,234**	**505,594**

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, 2017	4,657	4,904	8,148	1,460[1]	848	20,017	2,819	22,836
Net profit	-	-	430	-	-	430	58	488
Other comprehensive income/loss	-	-	2	-183[1]	-	-181	-16	-197
Total comprehensive income/loss	**-**	**-**	**432**	**-183**	**-**	**249**	**42**	**291**
Capital increase/capital repaid	269	647	-916	-	-	-	2	2
Changes in scope of consolidation	-	-	14	-14	-	-	-	-
Acquisition/disposal of non-controlling interests	-	-	1	-	-	1	-4	-3
Dividends paid	-	-	-322	-	-	-322	-73	-395
Equity as at Jun. 30, 2017	**4,926**	**5,551**	**7,357**	**1,263**	**848**	**19,945**	**2,786**	**22,731**
Equity as at Jan. 1, 2018	4,926	5,551	7,921	1,444	848	20,690	2,815	23,505
Adjustments due to first-time adoption of IFRS 9	-	-	529	-479	-	50	-5	45
Equity restated 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**

1 Amount restated (see note 2 in the consolidated financial statements as at December 31, 2017).

In the first half of 2018, a dividend of €0.18 per share was paid for the 2017 financial year (first half of 2017: €0.18). The composition of equity is explained in note 43.

Statement of cash flows

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Net profit	**731**	**488**
Non-cash items included in net profit	461	-1,659
Subtotal	1,192	-1,171
Cash changes in assets and liabilities arising from operating activities		
Loans and advances to banks and customers	-7,197	866[1]
Other assets and liabilities from operating activities	1,267	2,305
Hedging instruments (positive and negative fair values)	-1,140	109
Financial assets and financial liabilities held for trading	5,016	8,282
Deposits from banks and customers	19,734	7,604
Debt certificates issued including bonds	2,585	-6,760
Interest payments, dividends, and operating lease payments received (net cash flow)	2,224	1,607
Income taxes paid	-115	-189
Cash flows from operating activities	**23,566**	**12,653**
Cash flows from investing activities	**1,617**	**3,464**
Cash flows from financing activities	**147**	**-350**

1 Amount restated (see note 2).

€ million	2018	2017
Cash and cash equivalents as at January 1	43,910	24,677[1]
Cash flows from operating activities	23,566	12,653[1]
Cash flows from investing activities	1,617	3,464
Cash flows from financing activities	147	-350
Cash and cash equivalents as at June 30	**69,240**	**40,444**[1]

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 and other government institutions, 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.

As had also been the case in the first half of 2017, there was no impact on cash and cash equivalents from the first-time consolidation or deconsolidation of subsidiaries.

Notes

A General disclosures

>> 01 Basis of preparation

Pursuant to section 115 of the German Securities Trading Act (WpHG) in conjunction with section 117 no. 2 WpHG, the interim consolidated financial statements of DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, (DZ BANK) for the first half of the 2018 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 2017 financial year, unless these policies are subject to the amendments described below.

First-time application in 2018 of changes in IFRS

The following new accounting standards, amendments to and clarifications of 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 2018 financial year:

– IFRS 9 *Financial Instruments*,
– IFRS 15 *Revenue from Contracts with Customers*,
– Clarifications to IFRS 15 *Revenue from Contracts with Customers*,
– *Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts* (Amendments to IFRS 4),
– *Classification and Measurement of Share-based Payment Transactions* (Amendments to IFRS 2),
– *Transfers of Investment Property* (Amendments to IAS 40),
– IFRIC 22 *Foreign Currency Transactions and Advance Consideration*,
– *Annual Improvements to IFRSs 2014–2016 Cycle*.

The provisions of IFRS 9 *Financial Instruments* superseded the content of IAS 39 *Financial Instruments: Recognition and Measurement* on January 1, 2018. IFRS 9 includes requirements relating to the following areas, which have been fundamentally revised: classification and measurement of financial instruments, the impairment model for financial assets, and hedge accounting.

As a result of the classification and measurement rules in IFRS 9, financial assets need to be recategorized. In the case of debt instruments, both the business models of the portfolios and the characteristics of the contracted cash flows for the individual financial assets must be taken into account for the purposes of the recategorization. This analysis is carried out by the individual group entities in line with their individual business models and in compliance with group rules laid down centrally. The results of the analysis enable the financial assets to be classified as 'financial assets measured at fair value through profit or loss' (fair value PL), 'financial assets measured at fair value through other comprehensive income' (fair value OCI), or 'financial assets measured at amortized cost' (AC). If individual financial assets are classified as 'financial assets measured at fair value through other comprehensive income' or 'financial assets measured at amortized cost', in case of accounting mismatches the standard also allows the reporting entity the option of classifying the financial assets concerned as 'financial assets designated as at fair value through profit or loss' (fair value option). The DZ BANK Group uses the fair value option. Equity instruments that are held for trading must be assigned to the category 'financial assets measured at fair value through profit or loss'. For equity instruments not held for trading that would normally have been measured at fair value through profit or loss, reporting entities have the option of recognizing the changes in the fair values of these equity instruments irrevocably in other comprehensive income in subsequent measurement (fair value OCI option). The DZ BANK Group uses this option.

Unlike IAS 39, IFRS 9 specifies that any changes in the value of financial liabilities measured at fair value through profit or loss resulting from a change in credit risk must be recognized in other comprehensive income. The other requirements relating to financial liabilities have been carried over from IAS 39 unchanged.

The new impairment model requirements for financial assets measured at amortized cost or at fair value through other comprehensive income have resulted in a fundamental change in the recognition of impairment losses, because losses that are expected to occur now have to be recognized in addition to losses that have actually been incurred. The amount at which expected losses must be recognized depends on whether the credit risk attaching to the financial assets has increased significantly since their initial recognition. If there has been a significant increase, all expected losses over the entire lifetime of the asset concerned must be recognized from this point. Otherwise, the only expected losses that need to be recognized are those that result from possible loss events within the next 12 months. To identify whether there has been a significant increase in credit risk, the current probability of default over the maturity of the instrument (as determined at the reporting date) is generally compared with the probability of default originally expected for the same period. This test can be extended to look at qualitative criteria that increase credit risk. A particular qualitative criterion used to indicate a significant increase in credit risk is if payments are 30 days past due. However, such 30-day payment defaults are generally factored directly into the probability of default by means of a re-rating. In the case of securities, the DZ BANK Group makes use of the exemption provided for in IFRS 9 whereby the requirement to test for a significant increase in credit risk can be disregarded for instruments with low credit risk.

IFRS 9's new hedge accounting model helps to improve presentation of internal risk management and entails numerous disclosure requirements. The changes to hedge accounting in IFRS 9 do not apply to the rules on applying portfolio fair value hedge accounting, which continue to be governed by the provisions of IAS 39. The particular risk management strategy and risk management objectives must be documented at the inception of the hedging relationship, as was previously the case. But under IFRS 9, the ratio between the hedged item and the hedging instrument must now also, as a rule, adhere to the stipulations in the risk management strategy. If this ratio changes during a hedging relationship but the risk management objective remains the same, the quantity of the hedged item and the quantity of the hedging instrument in the hedging relationship must be brought into line without the latter being discontinued. Under IFRS 9, it is not possible to discontinue a hedging relationship if the risk management objective continues to be pursued and all other relevant designation criteria continue to be met. The requirements relating to evidence of hedge effectiveness have also changed. Under IFRS 9, retrospective evidence and the previous effectiveness threshold have been eliminated. Evidence of countervailing changes in fair value owing to the economic relationship between the hedged item and the hedging instrument can, under IFRS 9, also be provided on an entirely qualitative basis in certain circumstances without being bound by quantitative thresholds.

Exercising the option provided for in IFRS 9, the DZ BANK Group did not retrospectively restate the figures for the comparative period of 2017 when it adopted IFRS 9 for the first time on January 1, 2018. Instead, either the retained earnings or the reserve from other comprehensive income have been adjusted on the opening balance sheet as at January 1, 2018 by the difference between the previous carrying amount under IAS 39 and the carrying amount under IFRS 9. Because the amounts for the first half of 2017 have not been restated retrospectively in accordance with the rules of IFRS 9, the rules of IFRS 9 that apply to the 2018 reporting period always take precedence for disclosures in the consolidated financial statements. Where the presentation for the reporting period does not differ from that of the comparative period, the relevant disclosures in accordance with IAS 39 have been made for the comparative period. However, where the presentation for the reporting period differs from that of the comparative period, the relevant disclosures in accordance with IAS 39, if available, have been shown separately under the heading 'Comparative information in accordance with IAS 39'. If no relevant disclosures in accordance with IAS 39 are available for the comparative period of 2017, no such comparative information has been provided. The approach outlined above has not been applied to the following sections and notes in the financial statements. Equity and liabilities and statement of changes in equity: The revaluation reserve, the cash flow hedge reserve, and the currency translation reserve that existed under IAS 39 have been transferred to the 'Reserve from other comprehensive income' under IFRS 9. Statement of comprehensive income: The gains and losses on available-for-sale financial assets recognized under IAS 39 have been transferred to the new line item in the statement of comprehensive income 'Gains and losses on debt instruments measured at fair value through other comprehensive income' under IFRS 9.

The transition to IFRS 9 has resulted in presentation changes at various points in the consolidated financial statements that are also included in the reconciliation tables in the column 'Effect of transition from IAS 39 to IFRS 9'. The main presentation changes are described below in the order in which they appear in the consolidated financial statements.

Under IFRS 9, the carrying amounts of line items on the balance sheet must be shown inclusive of the interest entitlement attributable to the line items (gross interest entitlement). Consequently, the recategorization amounts are shown after the gross interest entitlement in the following reconciliation tables and thus, in some cases, differ by a total of €137 million from the amounts recognized as at December 31, 2017. The restatements are indicated by a footnote.

Contrary to the previous approach under IAS 39, IFRS 9 requires the loss allowances for financial instruments in the category 'financial assets measured at amortized cost' to be presented as a gross amount in all balance sheet line items. As a result, financial instruments within investments and within other assets are presented as gross amounts under IFRS 9. Consequently, the loss allowances for financial assets measured at amortized cost are now presented under the other assets line item on the balance sheet. In the income statement, therefore, loss allowances now come after the insurance business operating expenses line item. Loss allowances for financial instruments in the category 'financial assets measured at fair value through other comprehensive income' are recognized in equity within the change to the reserve from other comprehensive income.

Under IAS 39, impairment losses on financial assets within the investments held by insurance companies and the other assets held by insurance companies line items were immediately netted with the carrying amounts of the corresponding financial assets, both on the balance sheet and in the notes, and were therefore presented as net amounts. According to IFRS 9, only the other assets within the investments held by insurance companies line item and the other assets held by insurance companies can continue to be presented as net amounts. In the disclosures in the notes on investments held by insurance companies (note 29) and in the disclosures on other assets (note 31), the relevant financial assets are presented before deduction of loss allowances (gross presentation) and the level of loss allowances is shown separately.

To reduce the increased complexity of the presentation of the components of the reserve from other comprehensive income that has resulted from the introduction of IFRS 9, these components are aggregated in one column in the statement of changes in equity. The individual components of equity are presented in the disclosures on equity in note 43.

Due to the new presentation rules of IFRS 7.B8E introduced in connection with IFRS 9, the loss allowances recognized for financial guarantee contracts are presented in the 2018 interim consolidated financial statements in note 39 (provisions) as provisions for financial guarantee contracts for the first time, and no longer as liabilities from financial guarantee contracts in note 41 (other liabilities).

As a result of the first-time adoption of the rules of IFRS 9, equity after taxes rose by €45 million. This comprised a €529 million increase attributable to retained earnings, a €479 million decrease attributable to the reserve from other comprehensive income, and a €5 million decrease attributable to non-controlling interests.

In the following tables, the asset line items and the equity and liability line items on the balance sheet, the loss allowances, and the classes pursuant to IFRS 7 have been reconciled from the categories applicable under IAS 39 as at December 31, 2017 – 'financial instruments held for trading' (HfT), 'financial instruments designated as at fair value through profit or loss' (FVO), 'held-to-maturity investments' (HtM), and 'available-for-sale financial assets' (AfS) – to the IFRS 9 categories that have applied since January 1, 2018.

The gross carrying amounts of the asset line items on the balance sheet and their categories pursuant to IFRS 9 are derived from the line items and categories pursuant to IAS 39 reconciled to IFRS 9 in the following table:

€ million	IAS 39 carrying amount as at Dec. 31, 2017	Recategorization amount with IAS 39 carrying amount as at Dec. 31, 2017 after gross interest entitlement	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at Jan. 1, 2018
CASH AND CASH EQUIVALENTS	43,910	43,910	-	43,910
AC		**43,637**	-	**43,637**
from cash and cash equivalents – LaR		43,637	-	43,637
Further cash and cash equivalents		**273**	-	**273**
LOANS AND ADVANCES TO BANKS	89,414	90,017	-437	89,580
Fair value PL		**22**	-	**22**
from loans and advances to banks – LaR		22	-	22
Fair value option		**1,910**	-	**1,910**
from loans and advances to banks – FVO		1,910	-	1,910
Fair value OCI		**386**	**2**	**388**
from loans and advances to banks – LaR		386	2	388
AC		**87,389**	**-424**	**86,965**
from financial assets held for trading – HfT		680	-	680
from loans and advances to banks – LaR		86,709	-424	86,285
AC due to mandatory de-designation FVO		**289**	**-16**	**273**
from loans and advances to banks – FVO		289	-16	273
Further loans and advances to banks		**22**	-	**22**
LOANS AND ADVANCES TO CUSTOMERS	174,376	174,764	327	175,091
Fair value PL		**537**	**-61**	**476**
from loans and advances to customers – FVO		14	-	14
from loans and advances to customers – AfS		22	-	22
from loans and advances to customers – LaR		501	-61	440
Fair value option		**2,056**	**105**	**2,161**
from loans and advances to customers – FVO		1,629	-	1,629
from loans and advances to customers – LaR		427	105	532
Fair value OCI		**3,885**	**-22**	**3,864**
from loans and advances to customers – FVO		1,578	-	1,578
from loans and advances to customers – LaR		2,307	-22	2,285
AC		**164,441**	**293**	**164,734**
from financial assets held for trading – HfT		251	-	251
from loans and advances to customers – LaR		164,190[1]	293	164,484
AC due to voluntary de-designation FVO		**398**	**17**	**415**
from loans and advances to customers – FVO		398	17	415
AC due to mandatory de-designation FVO		**529**	**-15**	**514**
from loans and advances to customers – FVO		529	-15	514
Further loans and advances to customers		**2,918**	**10**	**2,928**

€ million	IAS 39 carrying amount as at Dec. 31, 2017	Recategorization amount with IAS 39 carrying amount as at Dec. 31, 2017 after gross interest entitlement	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at Jan. 1, 2018
LOSS ALLOWANCES	-2,794	-2,931[1]	69	-2,862
HEDGING INSTRUMENTS (POSITIVE FAIR VALUES)	1,096	1,012	66	1,078
Fair value PL		1,012	66	1,078
from hedging instruments (positive fair values) – HfT		1,012	66	1,078
FINANCIAL ASSETS HELD FOR TRADING	38,709	37,802	-77	37,725
Fair value PL		37,802	-77	37,725
from hedging instruments (positive fair values) – HfT		84	-	84
from financial assets held for trading – HfT		37,548	-75	37,473
from investments – AfS		94	-	94
from loans and advances to banks – LaR		76	-2	74
INVESTMENTS	57,486	57,622	-870	56,753
Fair value PL		2,682	31	2,713
from financial assets held for trading – HfT		4	-	4
from investments – FVO		1,992	-	1,992
from investments – AfS		213	-	213
from investments – AfS (AC)		123	11	134
from investments – LaR		351	20	371
Fair value option		6,277	18	6,295
from investments – FVO		5,040	-	5,040
from investments – AfS		673	-	673
from investments – HtM		565	18	583
Fair value OCI		24,548	3	24,551
from financial assets held for trading – HfT		67	-	67
from investments – FVO		2,525	-	2,525
from investments – AfS		20,647	-	20,647
from investments – LaR		767	11	777
from investments – HtM		543	-8	535
Fair value OCI option		485	-	485
from investments – AfS		373	-	373
from investments – AfS (AC)		112	-	112
AC		22,741	-906	21,834
from financial assets held for trading – HfT		160	19	179
from investments – AfS		18,740	-929	17,810
from investments – LaR		3,301	4	3,305
from investments – HtM		540	-	540
AC due to voluntary de-designation FVO		13	-	13
from investments – FVO		13	-	13
AC due to mandatory de-designation FVO		17	-	17
from investments – FVO		17	-	17
Further investments		858	-14	844

€ million	IAS 39 carrying amount as at Dec. 31, 2017	Recategorization amount with IAS 39 carrying amount as at Dec. 31, 2017 after gross interest entitlement	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at Jan. 1, 2018
INVESTMENTS HELD BY INSURANCE COMPANIES	96,416	96,416	2,021	98,437
Fair value PL		**9,768**	**188**	**9,956**
from investments held by insurance companies – HfT		299	-	299
from investments held by insurance companies – FVO		395	-4	392
from investments held by insurance companies – AfS		8,148	-	8,148
from investments held by insurance companies – LaR		879	192	1,071
from investments held by insurance companies – AfS (AC)		48	-	48
Fair value OCI		**52,891**	**1,834**	**54,725**
from investments held by insurance companies – FVO		161	-	161
from investments held by insurance companies – AfS		41,292	-	41,292
from investments held by insurance companies – LaR		11,438	1,834	13,272
Fair value OCI option		**5,067**	**-**	**5,067**
from investments held by insurance companies – AfS		5,051	-	5,051
from investments held by insurance companies – AfS (AC)		17	-	17
AC		**14,349**	**-**	**14,349**
from investments held by insurance companies – LaR		14,349	-	14,349
AC due to mandatory de-designation FVO		**14**	**1**	**15**
from investments held by insurance companies – FVO		14	1	15
Further investments held by insurance companies		**14,327**	**-3**	**14,324**
PROPERTY, PLANT AND EQUIPMENT, AND INVESTMENT PROPERTY	1,498	1,498	-	1,498
INCOME TAX ASSETS	1,127	1,127	31	1,158
OTHER ASSETS	4,546	4,546	-2	4,544
AC		**441**	**-1**	440
from other assets – LaR		441	-1	440
Further other assets		**4,105**	**-1**	**4,104**
NON-CURRENT ASSETS AND DISPOSAL GROUPS CLASSIFIED AS HELD FOR SALE	84	84	-	84
FAIR VALUE CHANGES OF THE HEDGED ITEMS IN PORTFOLIO HEDGES OF INTEREST-RATE RISK	-274	-274	667	393
AC		**-274**	**667**	393
from fair value changes of the hedged items in portfolio hedges of interest-rate risk – LaR		-274	667	393
TOTAL ASSETS	**505,594**	**505,594**	**1,794**	**507,388**

1 Higher values than under IAS 39 due to recognition of gross interest entitlement.

Due to the switch from the categorization rules for financial assets under IAS 39 to those under IFRS 9, the measurement categories changed at the time of first-time adoption for the following reasons:

Due to their assignment to the hold and sell business model and their fulfillment of the cash flow criterion, financial assets were recategorized from the IAS 39 categories 'financial instruments held for trading' and 'financial instruments designated as at fair value through profit or loss' to the IFRS 9 category 'financial assets measured at fair value through other comprehensive income'. The effective interest rate for these recategorizations was between 0.00 percent and 4.75 percent.

Financial assets were recategorized from the IAS 39 categories 'financial instruments held for trading' and 'financial instruments designated as at fair value through profit or loss' to the IFRS 9 category 'financial assets measured at amortized cost' due to the lack of intention to trade them, their assignment to the hold business model, and their fulfillment of the cash flow criterion. The effective interest rate for these recategorizations was between 0.21 percent and 4.10 percent.

Financial assets were recategorized from the IAS 39 category 'available-for-sale financial assets' to the IFRS 9 category 'financial assets measured at fair value through profit or loss' due to their assignment to the miscellaneous business model and their non-fulfillment of the cash flow criterion.

Financial assets – particularly in liquidity portfolios – were recategorized from the IAS 39 category 'available-for-sale financial assets' to the IFRS 9 category 'financial assets measured at amortized cost' due to their assignment to the hold business model and their fulfillment of the cash flow criterion.

As a result of the transition to IFRS 9, financial assets with a fair value of €8,675 million were recategorized to the categories 'financial assets measured at fair value through other comprehensive income' and 'financial assets measured at amortized cost' at the balance sheet date. If this reclassification had not taken place, there would have been a gain on the change in fair value of €287 million.

As a result of the transition to IFRS 9, interest income of €47 million was recognized up to the balance sheet date from the previous IAS 39 categories 'financial instruments held for trading' and 'financial instruments designated as at fair value through profit or loss'.

Promissory notes, in particular, were recategorized from the IAS 39 category 'loans and receivables' to the category 'financial assets measured at fair value through other comprehensive income' on the date of transition to IFRS 9 due to their assignment to the hold and sell business model and their fulfillment of the cash flow criterion.

Promissory notes, in particular, were recategorized from the IAS 39 category 'loans and receivables' to the IFRS 9 category 'financial assets measured at fair value through profit or loss' due to their assignment to the miscellaneous business model and their non-fulfillment of the cash flow criterion, and in order to avoid accounting mismatches.

Financial assets were recategorized from the IAS 39 category 'held-to-maturity investments' to the IFRS 9 category 'financial assets measured at amortized cost' due to their assignment to the hold business model and their fulfillment of the cash flow criterion.

Financial assets were recategorized from the IAS 39 category 'held-to-maturity investments' to the IFRS 9 category 'financial assets measured at fair value through other comprehensive income' due to their assignment to the hold and sell business model and their fulfillment of the cash flow criterion.

Financial assets were recategorized from the IAS 39 category 'held-to-maturity investments' with exercise of the fair value option to the IFRS 9 category 'financial assets measured at fair value through profit or loss' in order to avoid accounting mismatches.

In order to improve presentation following the introduction of IFRS 9, overnight money has been prospectively reclassified from loans and advances to banks – AC to loans and advances to customers – AC. Also in connection with the introduction of IFRS 9, outstanding items under cancelled finance leases have been prospectively reclassified from loans and advances to customers – LaR to further loans and advances to customers, because these will be presented as loans and advances to customers – finance leases. These transition effects did not impact on equity. The €14 million decrease within further financial assets was due to the IFRS 9 transition effect on joint ventures accounted for under the equity method in the consolidated financial statements.

The gross carrying amounts of the equity and liability line items on the balance sheet and their categories pursuant to IFRS 9 are derived from the line items and categories pursuant to IAS 39 reconciled to IFRS 9 in the following table:

€ million	IAS 39 carrying amount as at Dec. 31, 2017	Recategorization amount with IAS 39 carrying amount as at Dec. 31, 2017	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at Jan. 1, 2018
DEPOSITS FROM BANKS	136,122	136,122	-41	136,081
Fair value option		**4,993**	**23**	**5,016**
from deposits from banks – FVO		4,954	23	4,977
from deposits from banks – AC		39	-1	38
AC		**131,129**	**-64**	**131,065**
from deposits from banks – FVO		201	-	201
from deposits from banks – AC		130,907	-63	130,844
from financial liabilities held for trading – HfT		22	-1	21
DEPOSITS FROM CUSTOMERS	126,319	126,221	55	126,277
Fair value option		**11,245**	**61**	**11,305**
from deposits from customers – FVO		10,793	-23	10,770
from deposits from customers – AC		452	84	536
AC		**114,976**	**-5**	**114,971**
from deposits from customers – FVO		333	-58	276
from deposits from customers – AC		114,643	52	114,696
DEBT CERTIFICATES ISSUED INCLUDING BONDS	67,327	67,327	4	67,332
Fair value option		**14,117**	**13**	**14,130**
from debt certificates issued including bonds – FVO		13,864	-6	13,859
from debt certificates issued including bonds – AC		252	19	271
AC		**53,295**	-	**53,295**
from debt certificates issued including bonds – AC		53,295	-	53,295
AC due to mandatory de-designation FVO		**-84**	**-9**	**-93**
from debt certificates issued including bonds – FVO		-84	-9	-93
HEDGING INSTRUMENTS (NEGATIVE FAIR VALUES)	2,962	2,962	275	3,237
Fair value PL		**2,962**	**275**	**3,237**
from hedging instruments (negative fair values) – HfT		2,962	275	3,237

€ million	IAS 39 carrying amount as at Dec. 31, 2017	Recategorization amount with IAS 39 carrying amount as at Dec. 31, 2017	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at Jan. 1, 2018
FINANCIAL LIABILITIES HELD FOR TRADING	44,280	44,378	-270	44,108
Fair value PL		44,378	-270	44,108
from financial liabilities held for trading – HfT		44,259	-270	43,989
from deposits from banks – FVO		22	-	22
from deposits from customers – FVO		97	-	97
PROVISIONS	3,372	3,372	67	3,439
Provisions for financial guarantee contracts and loan commitments		128	67	195
Further provisions		3,244	-	3,244
INSURANCE LIABILITIES	89,324	89,324	1,694	91,018
INCOME TAX LIABILITIES	848	848	70	918
OTHER LIABILITIES	7,523	7,523	-107	7,416
Fair value PL		39	-	39
from other liabilities – HfT		39	-	39
AC		1,408	-1	1,407
from other liabilities – AC		1,408	-1	1,407
Further other liabilities		6,077	-106	5,971
SUBORDINATED CAPITAL	3,899	3,898	2	3,900
Fair value option		642	2	644
from subordinated capital – FVO		601	-	601
from subordinated capital – AC		41	2	43
AC		3,256	-	3,256
from subordinated capital – FVO		2	-	2
from subordinated capital – AC		3,254	-	3,254
FAIR VALUE CHANGES OF THE HEDGED ITEMS IN PORTFOLIO HEDGES OF INTEREST-RATE RISK	113	113	-	113
AC		113	-	113
from fair value changes of the hedged items in portfolio hedges of interest-rate risk – AC		113	-	113
EQUITY	23,505	23,505	45	23,550
TOTAL EQUITY AND LIABILITIES	505,594	505,594	1,794	507,388

Due to the switch from the categorization rules for financial liabilities under IAS 39 to those under IFRS 9, the categories changed at the time of first-time adoption for the following reasons:

Financial liabilities were recategorized from the IAS 39 categories ‘financial instruments held for trading’ and ‘financial instruments designated as at fair value through profit or loss’ to the IFRS 9 category ‘financial liabilities measured at amortized cost’ due to the intention to hold them and due to non-exercise of the fair value option. The fair value of the financial liabilities amounted to €536 million as at June 30, 2018. If this reclassification had not taken place, there would have been a gain recognized in profit or loss of €3 million. The effective interest rate for these reclassifications was between 0.00 percent and 0.67 percent. The total interest expense recognized up to the balance sheet date came to €4 million.

Financial liabilities were recategorized from the IAS 39 category ‘financial liabilities measured at amortized cost’ to the IFRS 9 category ‘financial liabilities measured at fair value through profit or loss’ due to the intention to trade them or due to exercise of the fair value option.

Following the introduction of IFRS 9, the fair value option under IAS 39 is no longer exercised because the accounting mismatches under IAS 39 have ceased to exist under IFRS 9. However, the new fair value option under IFRS 9 is now exercised owing to the emergence of new accounting mismatches for other financial liabilities.

In order to improve presentation following the introduction of IFRS 9, registered securities issued have been prospectively reclassified from deposits from customers – FVO to deposits from banks – FVO. Also to improve presentation, fixed-term deposits have been prospectively reclassified from deposits from banks – AC to deposits from customers – AC. These transition effects did not impact on equity.

The reconciliation of loss allowances, broken down by the asset line items on the balance sheet and their categories pursuant to IFRS 9, is derived from the line items and categories pursuant to IAS 39 shown in the following table:

€ million	Loss allowances under IAS 39 as at Dec. 31, 2017	Recategorization amount with IAS 39 carrying amount as at Dec. 31, 2017 after gross interest entitlement	Effect of transition from IAS 39 to IFRS 9	Loss allowances under IFRS 9 as at Jan. 1, 2018	Loss allowances (FVOCI) under IFRS 9 as at Jan. 1, 2018
LOANS AND ADVANCES TO BANKS	**19**	**20**	**11**	**31**	
AC		**20**	**11**	**31**	
from loans and advances to banks – LaR		20	11	31	
LOANS AND ADVANCES TO CUSTOMERS	**2,775**	**2,911**	**-150**	**2,761**	**4**
Fair value PL		**56**	**-56**	**-**	
from loans and advances to customers – LaR		56	-56	-	
Fair value OCI		**2**	**-2**	**-**	**4**
from loans and advances to customers – LaR		2	-2	-	4
AC		**2,827**	**-99**	**2,727**	
from loans and advances to customers – LaR		2,827[1]	-99	2,727	
Finance lease receivables from customers		**26**	**8**	**34**	
INVESTMENTS			**70**	**70**	**44**
Fair value OCI			**-**	**-**	**44**
from investments – FVO			-	-	3
from investments – AfS			-	-	3
from investments – LaR			-	-	38
AC			**70**	**70**	
from financial assets held for trading – HfT			8	8	
from investments – AfS			38	38	
from investments – LaR			24	24	
INVESTMENTS HELD BY INSURANCE COMPANIES			**3**	**3**	**4**
Fair value OCI			**-**	**-**	**4**
from investments held by insurance companies – AfS			-	-	3
from investments held by insurance companies – LaR			-	-	1
AC			**3**	**3**	
from investments – LaR			3	3	
OTHER ASSETS			**2**	**2**	
AC			**2**	**2**	
from other assets – LaR			2	2	
TOTAL LOSS ALLOWANCES	**2,794**	**2,931**	**-64**	**2,867**	**52**

1 Higher values than under IAS 39 due to recognition of gross interest entitlement.

The introduction of IFRS 9 has not resulted in any changes to the assignment of financial assets or financial liabilities to the IFRS 7 classes of financial instruments. As a result of the recategorization of financial assets and financial liabilities under IFRS 9, the net carrying amounts for the classes of financial assets and financial liabilities changed as shown in the following table:

€ million	**IAS 39 carrying amount as at Dec. 31, 2017**	Recategorization amount with IAS 39 carrying amount as at Dec. 31, 2017 after gross interest entitlement	Effect of transition from IAS 39 to IFRS 9	**IFRS 9 carrying amount as at Jan. 1, 2018**
Classes of financial assets	**483,322**	**483,381**	**1,719**	**485,101**
Financial assets measured at fair value	151,850	149,329	2,087	151,416
Financial assets measured at amortized cost	328,558	331,138	-369	330,769
Finance leases	2,914	2,914	2	2,916
Classes of financial liabilities	**382,702**	**382,702**	**-14**	**382,688**
Financial liabilities measured at fair value	78,064	78,375	103	78,478
Financial liabilities measured at amortized cost	304,404	304,093	-78	304,015
Financial guarantee contracts and loan commitments	234	234	-39	195

As a result of the new IFRS 9 model for recognizing impairment losses on financial assets, the loss allowances recognized for the classes of financial assets changed as shown in the following table:

€ million	**Loss allowances under IAS 39 as at Dec. 31, 2017**	Recategorization amount with IAS 39 carrying amount as at Dec. 31, 2017 after gross interest entitlement	Effect of transition from IAS 39 to IFRS 9	**Loss allowances under IFRS 9 as at Jan. 1, 2018**	**Loss allowances (FVOCI) under IFRS 9 as at Jan. 1, 2018**
Loss allowances	**2,794**	2,931	-64	**2,867**	**52**
Financial assets measured at fair value		58	-58	-	52
Financial assets measured at amortized cost	2,768	2,847[1]	-13	2,833	
Finance leases	26	26	8	34	

1 Higher values than under IAS 39 due to recognition of gross interest entitlement.

The provisions in IFRS 15 *Revenue from Contracts with Customers* supersede the rules in IAS 18 *Revenue* and IAS 11 *Construction Contracts* as well as the related interpretations IFRIC 13 *Customer Loyalty Programmes*, IFRIC 15 *Agreements for the Construction of Real Estate*, IFRIC 18 *Transfers of Assets from Customers*, and SIC-31 *Revenue – Barter Transactions Involving Advertising Services*. Under IFRS 15, revenue from contracts with customers must be recognized when control of the agreed goods or services passes to the customer and the customer can benefit from these goods or services. The principles for the recognition and measurement of revenue from contracts with customers, which have been standardized in IFRS 15, are derived from the 5 steps defined in the standard. The new standard does not distinguish between different types of orders and goods/services but instead provides uniform criteria for determining whether a performance obligation is satisfied at a point in time or over time. Furthermore, IFRS 15 requires additional qualitative and quantitative disclosures regarding the nature, amount, timing, and uncertainty of revenue, and regarding cash flows under contracts with customers. The new provisions under IFRS 15 do not have any impact on the recognition of income reported in connection with financial instruments in accordance with IFRS 9 or of income arising from insurance contracts pursuant to IFRS 4 or leases pursuant to IAS 17.

The implementation of IFRS 15 may give rise to contract assets and contract liabilities. When one of the parties has fulfilled its contractual obligations, a contract asset or contract liability has to be recognized, depending on whether the entity has provided the goods/services or the customer has made the payment. Any unconditional right to receive consideration is recognized as a receivable. Impairment on receivables and contract assets accounted for in accordance with IFRS 15 must be determined in accordance with IFRS 9. In this context, IFRS 15 makes reference to the rules of the simplified approach in IFRS 9, which requires the expected losses over the lifetime to be recognized immediately. The significant increase in credit risk in connection with stage allocation is no longer measured for loss allowances in respect of IFRS 15 line items.

Exercising the option provided for in IFRS 15, the DZ BANK Group did not retrospectively restate the figures for the comparative period of 2017 when it adopted IFRS 15 for the first time on January 1, 2018. Instead, it adopted IFRS 15 using the modified retrospective application method. In this method, IFRS 15 is applied to new contracts and to existing contracts that have not yet been completed on the date of initial application. To ascertain the effect of initial application of IFRS 15, the revenue for each as yet uncompleted contract recognized in accordance with IAS 18 from the start of the contract up to December 31, 2017 has to be compared with the revenue that would have been recognized if IFRS 15 had been applied from the start of the contract. The difference between these two amounts must be recognized as a cumulative adjustment to retained earnings in the opening balance sheet as at January 1, 2018. There were no cumulative adjustments to retained earnings in the DZ BANK Group as a result of the first-time adoption of IFRS 15.

The impact of IFRS 15 was assessed at the end of 2017. The group entities analyzed their contracts from the perspective of the 5 steps defined in IFRS 15. The group entities mainly identified revenue within the scope of IFRS 15 under fee and commission income. In this analysis, the identified items were judged to be either insignificant or unaffected by the new rules. Implementation of the changes therefore has no material impact on the measurement or recognition of revenue from contracts with customers in the consolidated financial statements. The disclosures on revenue from contracts with customers are presented in notes 9 and 52. In individual cases, contract assets and contract liabilities may be recognized under other assets and other liabilities. The DZ BANK Group is using the simplified approach to determine impairment pursuant to IFRS 9 consistently for contract assets and receivables accounted for in accordance with IFRS 15.

The clarifications to IFRS 15 published in April 2016 relate to 3 topics (identification of performance obligations, principal versus agent considerations, and licensing of intellectual property) and provide transitional relief for contracts that have been entered into before the beginning of the earliest presented period or have been amended before this period. The DZ BANK Group is applying the exemptions for the first-time adoption of IFRS 15 to all contractual changes made before January 1, 2018 and will not reassess these contracts or amend their presentation retrospectively.

In September 2016, the IASB published *Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts* (Amendments to IFRS 4). The additions to IFRS 4 in the version in the regulation in which it is endorsed by the EU not only include the overlay approach but also give insurers that are part of a financial conglomerate the option to postpone first-time adoption of IFRS 9 until January 1, 2021. The DZ BANK Group is not postponing first-time adoption of IFRS 9 for its insurance companies, so IFRS 9 has been implemented groupwide with effect from January 1, 2018. The overlay approach is not being used either.

Classification and Measurement of Share-based Payment Transactions (Amendments to IFRS 2) focuses on individual issues in connection with the accounting treatment of share-based payment transactions that are cash-settled. The main change or addition is that IFRS 2 now contains provisions that govern the calculation of the fair value of the obligations resulting from share-based payments. These amendments have no material significance for DZ BANK's consolidated financial statements.

Transfers of Investment Property (Amendments to IAS 40) relates to the accounting treatment of investment property that is under construction or development. Under IAS 40, a property's classification as investment property starts or finishes when there is a change of use. The list in IAS 40.57 sets out evidence of a change of use. As this list was formulated as an exhaustive list, it was uncertain whether a property under construction or development would be covered by this principle. The amendments to IAS 40 clarify that this principle does also apply to unfinished property. The list in IAS 40.57 is now explicitly described as non-exhaustive. There is no material impact on DZ BANK's consolidated financial statements.

IFRIC 22 *Foreign Currency Transactions and Advance Consideration* clarifies which exchange rate to use for the receipt or payment of advance consideration in a foreign currency. The interpretation stipulates that the exchange rate must be based on the time at which the non-monetary asset or non-monetary liability resulting from the advance consideration is initially recognized. If there are multiple payments or receipts of consideration in advance, a transaction date – and thus an exchange rate – is established for each individual payment or receipt. These new stipulations have no material impact on DZ BANK's consolidated financial statements.

The amendments to IAS 28 *Investments in Associates and Joint Ventures* as part of the *Annual Improvements to IFRSs 2014–2016 Cycle* clarify that the option for venture capital organizations, investment funds, and similar entities to measure their investments in associates and joint ventures at fair value through profit or loss may be exercised separately for each individual investment. These amendments have no material significance for DZ BANK's consolidated financial statements.

Changes in IFRS endorsed by the EU but not yet adopted

The DZ BANK Group has decided against voluntary early adoption of the following new financial reporting standards and amendments to IFRS:

- IFRS 16 *Leases*,
- *Prepayment Features with Negative Compensation* (Amendments to IFRS 9).

The provisions of IFRS 16 *Leases* will supersede the content of IAS 17 *Leases*. The main changes introduced by IFRS 16 relate to accounting by lessees. In the future, lessees will have to recognize on the balance sheet right-of-use assets for all leases and corresponding lease liabilities for the contracted payment obligations. Exemptions will be 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 under IFRS 16 will be considerably more extensive than under IAS 17. The new provisions under IFRS 16 will affect the DVB and VR LEASING subgroups as lessors and all group companies that are lessees with leased or rented assets. Based on a preliminary assessment, a substantial proportion of the payment agreements under non-cancellable leases will satisfy the definition of a lease pursuant to IFRS 16. This means that the DZ BANK Group will have to recognize corresponding right-of-use assets and lease liabilities when it applies IFRS 16, unless the exemptions for short-term leases or low-value assets apply in individual cases.

The group companies have started to analyze their contracts from the perspective of IFRS 16. However, it will only be possible to quantify the effects reliably when the detailed analyses have been completed. At present, the implementation of IFRS 16 is not expected to have any material impact on DZ BANK's consolidated financial statements.

The amendments in IFRS 16 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. The DZ BANK Group will adopt IFRS 16 using the modified retrospective application method by recognizing the cumulative effect of initially applying the standard as at January 1, 2019 in retained earnings. In this method, IFRS 16 will be applied to new contracts and to existing contracts that have not yet been completed on the date of initial application.

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 cash flow criterion under IFRS 9 is not breached in the event of reasonable negative compensation for early termination of the contract. The amendments are required to be applied for the first time from January 1, 2019. No impact on DZ BANK's consolidated financial statements is expected.

Changes in presentation

The following presentation changes have been made with effect from 2018 in order to provide reliable and more relevant information:

Net income from the business combination with WGZ BANK, which was recognized in the 2017 interim consolidated financial statements, is no longer shown as a separate line item in the 2018 interim consolidated financial statements. As a result, the administrative expenses recognized for the comparative period in the 2018 interim consolidated financial statements have increased by €58 million to €2,000 million.

The deposit facilities on the balance sheet will no longer be recognized under loans and advances to banks. Instead, they will be reported as balances with central banks within the cash and cash equivalents line item, bringing their recognition into line with industry practice. This presentation change is being carried out retrospectively. Consequently, the comparative disclosures for 2017 have been restated in the interim consolidated financial statements for 2018. The changes have been highlighted with a footnote ('amount restated') on the balance sheet, in the statement of cash flows, and in the relevant notes. There was no impact on the income statement or statement of comprehensive income for the period January 1 to June 30, 2018.

Balance sheet as at December 31, 2017

ASSETS

€ million	Dec. 31, 2017 before restatement	Amount of restatement	Dec. 31, 2017 after restatement
Cash and cash equivalents	12,835	31,075	43,910
Loans and advances to banks	120,489	-31,075	89,414
(...)			
Total assets	**505,594**	-	**505,594**

Balance sheet as at January 1, 2017

ASSETS

€ million	Jan. 1, 2017 before restatement	Amount of restatement	Jan. 1, 2017 after restatement
Cash and cash equivalents	8,515	16,162	24,677
Loans and advances to banks	107,253	-16,162	91,091
(...)			
Total assets	**509,447**	-	**509,447**

Statement of cash flows for the period January 1 to June 30, 2017

€ million	Jan. 1 – Jun. 30, 2017 before restatement	Amount of restatement	Jan. 1 – Jun. 30, 2017 after restatement
(...)			
Loans and advances to banks and customers	-10,713	11,579	866
(...)			
Cash flows from operating activities	**1,074**	**11,579**	**12,653**
Cash flows from investing activities	**3,464**	-	**3,464**
Cash flows from financing activities	**-350**	-	**-350**

€ million	2017 before restatement	Amount of restatement	2017 after restatement
Cash and cash equivalents as at January 1	8,515	16,162	24,677
Cash flows from operating activities	1,074	11,579	12,653
Cash flows from investing activities	3,464	-	3,464
Cash flows from financing activities	-350	-	-350
Cash and cash equivalents as at June 30	**12,703**	**27,741**	**40,444**

In note 23 (cash and cash equivalents), the disclosure 'of which: with Deutsche Bundesbank' will no longer be included, reflecting industry practice. There are other minor changes to the presentation of the balance sheet disclosures in notes 24 (loans and advances to banks), 26 (hedging instruments (positive fair values)), 28 (investments), 35 (deposits from customers), and 37 (hedging instruments (negative fair values)). The presentation of the corresponding comparative disclosures has been changed in the notes.

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 Financial instruments

Categories of financial instruments

Financial assets measured at fair value through profit or loss (fair value PL)

Financial assets that are not measured at amortized cost or at fair value through other comprehensive income are classified as 'financial assets measured at fair value through profit or loss'. This category is broken down into the following subcategories:

Financial assets mandatorily measured at fair value through profit or loss

The subcategory 'financial assets mandatorily measured at fair value through profit or loss' covers financial assets that do not meet the IFRS 9 cash flow criterion or that were acquired for the purpose of selling them in the near term. To this end, these financial assets must be part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking, or that are derivatives, except for derivatives that are designated and effective hedging instruments.

Contingent considerations in a business combination

This subcategory covers contingent considerations that the acquirer has classified as financial assets in the context of a business combination.

Financial assets designated as at fair value through profit or loss (fair value option)

Financial assets may be assigned to the subcategory 'financial assets designated as at fair value through profit or loss' by exercising the fair value option, provided that the application of this option eliminates or significantly reduces measurement or recognition inconsistencies (accounting mismatches). The fair value option is applied to eliminate or significantly reduce accounting mismatches that arise if non-derivative financial instruments and related derivatives used to hedge such instruments are measured differently. Derivatives are measured at fair value through profit or loss, whereas non-derivative financial instruments are measured at amortized cost or changes in fair value may be recognized in other comprehensive income. If no hedge accounting takes place, this gives rise to accounting mismatches that can be significantly reduced by applying the fair value option. The fair value option is used in the context of financial assets to prevent accounting mismatches that could arise in connection with loans and advances to banks and customers and bearer bonds.

Financial assets measured at fair value through other comprehensive income (fair value OCI)

A financial asset is assigned to this category if it is held in accordance with a business model aimed both at collecting contractual cash flows and at selling financial assets. Moreover, the contractual terms of the financial asset must give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Because of the cash flow criterion, these financial assets only comprise debt instruments. They are measured at fair value. Interest income, impairment losses, and currency translation effects must be recognized in profit or loss. Differences between the amortized cost and the fair value are recognized in other comprehensive income. The amounts recognized in other comprehensive income must be recycled to the income statement upon disposal.

There is also an irrevocable option to designate equity instruments as 'financial assets designated as at fair value through other comprehensive income' (fair value OCI option) upon initial recognition. Changes in fair value are recognized in other comprehensive income, except in the case of dividends that do not constitute repayment of capital. The cumulative other comprehensive income is not subsequently recycled to the income statement, e.g. due to disposal of the instrument. After disposal of these equity instruments, the cumulative other comprehensive income is reclassified to retained earnings. The fair value OCI option can generally only be exercised for equity instruments that are not held for trading and do not constitute contingent consideration recognized by the acquirer in a business combination pursuant to IFRS 3.

Financial assets measured at amortized cost (AC)

A financial asset is assigned to this category if it is held in accordance with a business model aimed at holding financial assets for the purpose of collecting contractual cash flows. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding (cash flow criterion).

Because of the cash flow criterion, financial assets in this category only comprise debt instruments. They are measured at amortized cost using the effective interest method. Interest income, impairment losses, and currency translation effects must be recognized in profit or loss.

Financial liabilities measured at fair value through profit or loss (fair value PL)

Financial liabilities that are not measured at amortized cost are classified as 'financial liabilities measured at fair value through profit or loss'. This category is broken down into the following subcategories:

Financial liabilities mandatorily measured at fair value through profit or loss

The subcategory 'financial liabilities mandatorily measured at fair value through profit or loss' covers financial liabilities that are issued with the intention of repaying them in the near term. To this end, these financial liabilities must be part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking, or that are derivatives, except for derivatives that are designated and effective hedging instruments.

Contingent considerations in a business combination

This subcategory covers contingent considerations that the acquirer has classified as financial liabilities in the context of a business combination.

Financial liabilities designated as at fair value through profit or loss (fair value option)

Financial liabilities may be assigned to the ‘financial instruments designated as at fair value through profit or loss’ subcategory by exercising the fair value option, provided that the application of this option eliminates or significantly reduces measurement or recognition inconsistencies (accounting mismatches), the financial liabilities are managed as a portfolio on a fair value basis, or they include one or more embedded derivatives required to be separated from the host contract. In the case of financial liabilities, the fair value option is exercised to eliminate or significantly reduce accounting mismatches for loan liabilities to banks and customers, issued registered or bearer Pfandbriefe, other bonds and commercial paper, and registered or bearer subordinated liabilities. Some of the promissory notes and bonds are structured financial instruments containing derivatives (in the form of caps, floors, collars, or call options) for which bifurcation is not required. The derivative components of these instruments are subject to economic hedging that does not meet the criteria for the application of hedge accounting.

The fair value option is also applied to structured financial liabilities containing embedded derivatives requiring bifurcation, provided that the embedded derivatives cannot be measured separately and the financial liabilities are not designated as held for trading. The issued financial instruments in this case are primarily guarantee certificates, discount certificates, profit-participation certificates, variable-rate bonds, inflation-linked notes, collateralized loan obligations, and credit-linked notes.

As regards financial liabilities designated as at fair value through profit or loss, any gains/losses resulting from a change in the fair value of a financial liability that is attributable to a change in the liability’s credit risk must be recognized in other comprehensive income. The rest of the change in the fair value of this liability is recognized in profit or loss. The amounts recognized in other comprehensive income are not recycled to the income statement upon disposal of the relevant financial liability.

Financial liabilities measured at amortized cost (AC)

For measurement subsequent to initial recognition, financial liabilities are categorized as ‘financial liabilities measured at amortized cost’, except in the following cases: financial liabilities measured at fair value through profit or loss, financial liabilities that arise when a transfer of a financial asset does not satisfy the condition for derecognition or accounting treatment is based on a continuing involvement, financial guarantee contracts, loan commitments with an interest rate below the market interest rate, and contingent consideration recognized by the acquirer in a business combination pursuant to IFRS 3.

In accordance with IAS 32, shares in partnerships are normally categorized as debt instruments. Given their subordinated status compared with the liabilities of the partnerships concerned, non-controlling interests in this case are reported as subordinated capital. Profit attributable to non-controlling interests is recognized under other liabilities, provided that the resulting liability is not of a subordinated nature. Non-controlling interests in partnerships are classified as ‘share capital repayable on demand’ and are assigned to the ‘financial liabilities measured at amortized cost’ category.

This category also includes liabilities under compensation payment obligations owed to non-controlling interests in consolidated subsidiaries. These liabilities arise if DZ BANK or some other entity controlled by DZ BANK has concluded a profit transfer agreement with a subsidiary in accordance with section 291 (1) of the German Stock Corporation Act (AktG) under which there are non-controlling interests. Liabilities under compensation payment obligations are recognized at the amount of the discounted obligation.

In addition, this category includes liabilities from capitalization transactions that are not designated as unit-linked insurance products. There is no significant transfer of insurance risk in these transactions and they do not therefore satisfy the criteria for an insurance contract under IFRS 4. As a consequence, such transactions need to be treated as financial instruments in accordance with IFRS 9.

Other financial instruments

Hedging instruments

The designation of derivative and non-derivative financial assets and liabilities as hedging instruments is governed by IFRS 9. The recognition and measurement of these hedging instruments is described in note 4.

Liabilities from financial guarantee contracts

Liabilities from financial guarantee contracts measured in accordance with IFRS 9 must be recognized as a liability at fair value by the issuer of the guarantee at the date of issue. The fair value is normally equivalent to the present value of the consideration received for issuing the financial guarantee contract. In any subsequent measurement, the obligation must be measured at the higher of the amount determined in accordance with the impairment model and the amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with the principles of IFRS 15. In the presentation of financial guarantee contracts, the guarantee commission receivables due from the beneficiary to the DZ BANK Group as the issuer of the guarantee are offset against guarantee obligations (net method).

Receivables and payables under finance leases

Receivables and payables under finance leases predominantly fall within the scope of IAS 17.

Financial assets and financial liabilities specific to insurance business

In addition to financial instruments that fall within the scope of IFRS 9, financial assets and financial liabilities arising from the insurance business are recognized and measured in accordance with the provisions of the HGB and other German accounting provisions applicable to insurance companies, as required by IFRS 4.25(c).

Deposits with ceding insurers are recognized at their nominal amounts. Receivables arising out of direct insurance operations and receivables arising out of reinsurance operations are recognized at their nominal amounts net of payments made. Impairment losses on receivables arising out of direct insurance operations and on receivables arising out of reinsurance operations are recognized directly in the carrying amounts. Assets related to unit-linked contracts are measured at fair value through profit or loss on the basis of the underlying investments.

Deposits received from reinsurers, payables arising out of direct insurance operations and payables arising out of reinsurance operations are recognized at their nominal amounts.

Deposits with ceding insurers as well as assets related to unit-linked contracts are reported on the balance sheet under investments held by insurance companies. Deposits received from reinsurers, receivables and payables arising out of direct insurance operations, and receivables and payables arising out of reinsurance operations are recognized under other assets or other liabilities.

Initial recognition and derecognition of financial assets and financial liabilities

Derivatives are initially recognized on the trade date. Regular way purchases and sales of non-derivative financial assets are generally recognized and derecognized using settlement date accounting. In the case of consolidated investment funds and the issue of certain securities, the financial instruments are also recognized on the trade date. Changes in fair value between the trade date and settlement date are recognized in accordance with the category of the financial instrument.

All financial instruments are generally measured at fair value on initial recognition. In the case of financial assets or financial liabilities not measured at fair value through profit or loss, transaction costs directly attributable to the acquisition of the financial asset or issue of the financial liability concerned are added or deducted on initial recognition.

Differences between transaction prices and fair values are recognized in profit or loss on initial recognition if the fair values correspond to the price quoted in an active market for an identical asset or identical liability or are based on a valuation technique that only uses data from observable markets. If the fair value is derived from transaction prices at the time of acquisition and this value is then used as a basis for any subsequent measurement, any changes in fair value are only recognized in profit or loss if they can be attributed to a change in observable market data. Any differences not recognized at the time of initial recognition are allocated over the maturity of the financial instruments concerned and recognized in profit or loss accordingly.

Financial assets are derecognized if the contractual rights to the cash flows from the financial assets have expired or these rights have been transferred to third parties, and substantially no risks or rewards of ownership in the financial assets remain. If the criteria for derecognizing financial assets are not satisfied, the transfer to third parties is recognized as a secured loan. Financial liabilities are derecognized when the contractual obligations have been settled, extinguished or have expired.

Impairment losses on financial assets

Under IFRS 9, impairment losses are recognized only on those financial assets that are debt instruments. Equity instruments do not fall within the scope of the IFRS 9 impairment model. Impairment losses are recognized for the following financial assets:

– Financial assets in the IFRS 9 category ‘financial assets measured at amortized cost’,
– Financial assets (only debt instruments) in the IFRS 9 category ‘financial assets measured at fair value through other comprehensive income’,
– Undrawn loan commitments where there is a current legal obligation to grant credit (irrevocable loan commitments), provided they are not measured at fair value through profit or loss,
– Financial guarantee contracts, provided they are not measured at fair value through profit or loss,
– Lease receivables, and
– Trade receivables and contract assets that fall within the scope of IFRS 15.

Upon initial recognition, all financial assets are assigned to stage 1 with the exception of financial assets that are purchased or originated credit-impaired assets (POCI). Loss allowances for assets in stage 1 must, as a minimum, be recognized in an amount equal to the 12-month expected credit loss.

At each balance sheet date, assets are assigned to stage 2 if their credit risk has significantly increased since initial recognition but there is no objective evidence of impairment. For these assets, impairment is measured at the amount of the lifetime expected credit losses.

Put simply, it can be assumed that the credit risk of a financial instrument has not increased significantly since initial recognition if the financial instrument has low credit risk at the balance sheet date (low credit risk exemption).

The DZ BANK Group does not exercise the low credit risk exemption for loans and, consequently, not for promissory notes either.

Financial assets deemed to be impaired on the basis of objective evidence are assigned to stage 3. For these assets, impairment is measured at the amount of the lifetime expected credit losses.

Financial assets subject to the IFRS 9 impairment rules must be reviewed at every balance sheet date to ascertain whether one or more events have occurred with an adverse impact on the estimated future cash flows of these financial assets.

Financial assets that are purchased or originated credit-impaired assets (POCI) are initially recognized at their carrying amount less the lifetime expected credit losses and amortized using a risk-adjusted effective interest rate. At the balance sheet date, only the cumulative changes to the lifetime expected credit losses since initial recognition are recognized as an impairment loss. Stage allocation is not required for these assets.

Embedded derivatives

An embedded derivative is a component of a hybrid contract that also includes a non-derivative financial instrument (host contract), with the effect that some of the cash flows of the combined financial instrument vary in a way similar to those of a standalone derivative. A derivative that is attached to a financial instrument but is contractually transferable independently of that instrument, or has a different counterparty, is not an embedded derivative, but a separate financial instrument.

If a hybrid contract contains a host contract that is a financial asset, the categorization rules for financial assets are applied to the entire hybrid contract.

If a hybrid contract contains a host contract that is a financial liability, an embedded derivative is separated from the host contract and accounted for separately if:
– the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract,
– a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative, and
– the hybrid contract is not measured at fair value through profit or loss.

If the embedded derivative does not meet all of these conditions, it may not be separated from the host contract. When an embedded derivative is separated, the host contract is accounted for in accordance with the pertinent standards.

If a contract includes one or more embedded derivatives and the host contract is not a financial asset, the entire hybrid contract can be categorized as measured at fair value through profit or loss. This is not the case where embedded derivatives only have an insignificant impact on the contractually specified cash flows or, upon initial comparison with similar hybrid instruments, it is evident without – or with only minor – analysis that separation of the embedded derivative is not permitted.

Classes of financial instruments

For the purposes of the disclosures on the importance of financial instruments to the financial position and financial performance of the DZ BANK Group, financial instruments falling within the scope of IFRS 7 are classified using the 7 classes of financial instruments described below. Where applicable, these classes are broken down by IFRS 9 category.

Classes of financial assets

Financial assets measured at fair value

The class of financial assets measured at fair value comprises the following categories defined by IFRS 9:

– 'Financial assets measured at fair value through profit or loss' with the subcategories 'financial assets mandatorily measured at fair value through profit or loss' and 'financial assets designated as at fair value through profit or loss' (fair value option),
– 'Financial assets measured at fair value through other comprehensive income' with the subcategories 'financial assets mandatorily measured at fair value OCI' and 'financial assets designated as at fair value through other comprehensive income (fair value OCI option)'.

Financial assets measured at amortized cost

The 'financial assets measured at amortized cost' class includes, in particular, loans and advances to banks and customers measured at amortized cost and investments measured at amortized cost.

Finance leases

The 'finance leases' class comprises solely finance lease receivables.

Classes of financial liabilities

Financial liabilities measured at fair value

The 'financial liabilities measured at fair value' class comprises financial liabilities in the category 'financial liabilities measured at fair value through profit or loss' with the subcategories 'financial liabilities mandatorily measured at fair value through profit or loss' and 'financial liabilities designated as at fair value through profit or loss' (fair value option).

Financial liabilities measured at amortized cost

The class known as 'financial liabilities measured at amortized cost' is identical to the category of financial liabilities of the same name.

Finance leases

The 'finance leases' class comprises solely finance lease liabilities.

Financial guarantee contracts and loan commitments

Liabilities under financial guarantee contracts and provisions for loan commitments within the scope of IAS 37 are aggregated in the class 'financial guarantee contracts and loan commitments'.

>> 04 Hedge accounting

General information on hedge accounting

As an integral part of its risk management strategy, the DZ BANK Group hedges against risks arising in connection with financial instruments.

If the hedging of risk in connection with financial instruments gives rise to accounting mismatches between the hedged item and the hedging instrument used, the DZ BANK Group designates the hedging transaction as a hedge in accordance with the hedge accounting requirements of IFRS 9 in order to eliminate or reduce such mismatches.

Fair value hedges

A fair value hedge is intended to ensure that changes in the fair value of the hedged item are offset by countervailing changes in the fair value of the hedging instrument. Changes in the fair value of the hedged item attributable to the hedged risk and changes in the fair value of the hedging instrument are recognized in profit or loss. Where equity instruments are hedged whose changes in fair value are recognized in other comprehensive income, the changes in the fair value of the hedging instruments are also recognized in other comprehensive income. Risks may be hedged by designating hedges either on an individual or on a portfolio basis.

The rules of IAS 39 continue to apply unchanged to portfolio fair value hedge accounting.

Hedged items categorized as 'financial assets measured at amortized cost', 'financial liabilities measured at amortized cost', and finance lease receivables are measured in accordance with the general measurement principles for these financial instruments. The values are adjusted for the change in fair value attributable to the hedged risk. Hedged items categorized as 'financial assets measured at fair value through other comprehensive income' are measured at fair value, although only changes not attributable to the hedged changes in fair value are recognized in other comprehensive income. Interest income and interest expense arising from hedged items or hedging instruments are recognized under net interest income.

If the fair value is hedged against interest-rate risks on a portfolio basis, the cumulative changes in fair value attributable to the hedged risk are reported on the balance sheet under fair value changes of the hedged items in portfolio hedges of interest-rate risk, either under assets or liabilities depending on whether the portfolio comprises financial assets or financial liabilities.

In fully effective hedges, the changes in fair value (attributable to the hedged risk) recognized in profit or loss over the lifetime of the hedge completely cancel each other out. Any changes in fair value recognized in the carrying amount of the hedged items are amortized through profit or loss by the time the hedge has been terminated.

Cash flow hedges

The purpose of cash flow hedges is to ensure that changes in uncertain future cash flows from hedged items are offset by changes in cash flows from hedging instruments.

Hedging instruments are measured at fair value. Changes in fair value attributable to the effective portion of the hedge are recognized in other comprehensive income. Changes in fair value attributable to the ineffective portion of the hedge are recognized in profit or loss. Hedged items are recognized and measured in accordance with the general principles for the relevant measurement category. At the end of a hedging relationship, any changes in fair value recognized in other comprehensive income must be reclassified to profit or loss on the date on which the hedged items or transactions are also recognized in profit or loss.

Hedges of net investments in foreign operations

The purpose of hedges of net investments in foreign operations is to offset exchange differences resulting from net investments denominated in foreign currency.

Hedges of net investments in foreign operations are accounted for in the same way as cash flow hedges.

>>05 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, 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.

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.

>> 06 Loss allowances

Loss allowances for cash and cash equivalents, loans and advances to banks and customers, investments, and other assets that are measured at amortized cost or designated as finance leases are reported as a separate line item on the assets side of the balance sheet. Additions to loss allowances for these balance sheet items, and any reversals of such allowances, are recognized under loss allowances in the income statement.

Loss allowances for investments held by insurance companies and other assets held by insurance companies measured at amortized cost are netted with the carrying amounts of these assets. Additions to loss allowances for these balance sheet items, and any reversals of such allowances, are recognized under gains and losses on investments held by insurance companies and other insurance company gains and losses in the income statement.

Loss allowances for loans and advances to banks and customers, for investments, and for investments held by insurance companies that are measured at fair value through other comprehensive income are not reported on the assets side of the balance sheet but instead in the reserve from other comprehensive income. Additions to loss allowances for loans and advances to banks and customers and for investments, and any reversals of such allowances, are recognized under loss allowances in the income statement. Additions to loss allowances for investments held by insurance companies, and any reversals of such allowances, are recognized under gains and losses on investments held by insurance companies and other insurance company gains and losses in the income statement.

The recognition of loss allowances also covers changes in the provisions for loan commitments and financial guarantee contracts and other provisions for loans and advances. Any additions to, or reversals of, provisions for loan commitments and financial guarantee contracts and other provisions for loans and advances are also recognized in profit or loss under loss allowances.

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

>> 07 Segment information

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

€ million	DZ BANK	BSH	DVB
Net interest income	591	387	80
Net fee and commission income	185	-12	42
Gains and losses on trading activities	195	-	-4
Gains and losses on investments	74	11	11
Other gains and losses on valuation of financial instruments	19	3	-87
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	-	-	-
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 Jun. 30, 2018	289,868	70,480	21,562

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2017

€ million	DZ BANK	BSH	DVB
Net interest income	533	423	103
Net fee and commission income	183	-22	52
Gains and losses on trading activities	298	-	-19
Gains and losses on investments	67	15	-4
Other gains and losses on valuation of financial instruments	15	-1	-131
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	-	-	-
Loss allowances	90	-2	-446
Administrative expenses [1]	-803	-233	-103
Other net operating income	22	23	16
Profit/loss before taxes	**405**	**203**	**-532**
Cost/income ratio (%)	71.8	53.2	>100.0
Regulatory RORAC (%)	11.0	39.5	>100.0
Average own funds/solvency requirement	5,403	1,026	581
Total assets/total equity and liabilities as at Dec. 31, 2017	265,843	68,337	23,414

1 Amount restated (see note 2).

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR LEASING	Other/ Consolidation	Total
	282	33	-	221	6	76	-254	1,422
	1	94	-	-5	705	5	-57	958
	-	5	-	-	-	-	10	206
	4	-	-	-	-7	7	-2	98
	30	-2	-	-	-22	-	11	-48
	-	-	8,115	-	-	-	-	8,115
	-	-	1,269	-	-	-	-54	1,215
	-	-	-7,709	-	-	-	-	-7,709
	-	-	-1,406	-	-	-	84	-1,322
	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	-	34.2	>100.0	0.6	-	-
	1,444	349	-	444	351	333	-	-
	85,026	18,200	108,179	8,641	2,048	4,770	-70,540	538,234

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR LEASING	Other/ Consolidation	Total
	282	60	-	211	4	70	-259	1,427
	-	62	-	3	750	8	-59	977
	7	7	-	-	-	-	11	304
	3	-	-	-	-	6	1	88
	161	5	-	-	2	-	-17	34
	-	-	7,403	-	-	-	-	7,403
	-	-	1,883	-	-	-	-36	1,847
	-	-	-7,543	-	-	-	-	-7,543
	-	-	-1,350	-	-	-	94	-1,256
	7	-	-	-34	-1	-6	-4	-396
	-126	-116	-	-105	-393	-69	-52	-2,000
	2	-6	-4	3	-	4	-6	54
	336	**12**	**389**	**78**	**362**	**13**	**-327**	**939**
	27.7	90.6	-	48.4	52.0	78.4	-	60.0
	45.3	8.4	11.3	36.8	>100.0	8.1	-	11.2
	1,489	295	6,862	425	351	314	-	16,746
	85,855	16,802	103,419	8,009	2,445	4,749	-73,279	505,594

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, and the management units are shown separately. They consist of DZ BANK, DZ HYP AG, Hamburg, (DZ HYP), TeamBank AG Nürnberg, Nuremberg, (TeamBank), DZ PRIVATBANK, and the BSH, DVB, R+V, UMH, and VR LEASING subgroups. The DG HYP and WL BANK operating segments were aggregated to form the DZ HYP operating segment. The figures for the prior-year period have been restated accordingly. All other companies in the DZ BANK Group, which are not required to provide regular quantitative reports to the chief operating decision-makers, and the consolidations are reported on an aggregated basis under Other/Consolidation.

Presentation of operating segments

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

Measurement

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

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

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

Operating income includes 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, net income from insurance business, and other net operating income.

Regulatory RORAC is a risk-adjusted performance measure. It reflects the relationship between profit before taxes and regulatory risk capital (own funds/solvency requirement). It therefore shows the return on the regulatory risk capital employed. Regulatory RORAC for the R+V management unit and for the DZ BANK Group is not shown in respect of the reporting period because it was not available at the time of preparation of the review report.

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.

>> 08 Net interest income

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
INTEREST INCOME AND CURRENT INCOME AND EXPENSE	**3,177**	**3,663**
Interest income from	**3,134**	**3,649**
Lending and money market business	3,260	3,498
Bonds and other fixed-income securities	274	392
Portfolio hedges of interest-rate risk	-275	-160
Financial assets with a negative effective interest rate	-125	-81
Current income and expense from	**11**	-
Shares and other variable-yield securities from investments	13	10
of which: income from other shareholdings	12	8
Investments in subsidiaries	2	2
Investments in associates	-	2
Operating leases	-4	-14
Income from using the equity method for	**32**	**13**
Investments in joint ventures	28	23
Investments in associates	4	-10
Income from profit-pooling, profit-transfer and partial profit-transfer agreements	-	1
INTEREST EXPENSE ON	**-1,755**	**-2,236**
Deposits from banks and customers	-1,683	-1,993
Debt certificates issued including bonds	-214	-242
Subordinated capital	-63	-80
Portfolio hedges of interest-rate risk	95	-4
Financial liabilities with a positive effective interest rate	114	85
Provisions and other liabilities	-4	-2
Total	**1,422**	**1,427**

Of the total interest income of €3,134 million, a sum of €2,526 million was calculated using the effective interest method.

>>09 Net fee and commission income

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Fee and commission income	**1,802**	**1,803**
Securities business	1,341	1,360
Asset management	114	110
Payments processing including card processing	125	104
Lending business and trust activities	72	91
Financial guarantee contracts and loan commitments	27	26
International business	5	7
Building society operations	15	11
Other	103	94
Fee and commission expenses	**-844**	**-826**
Securities business	-518	-493
Asset management	-74	-75
Payments processing including card processing	-64	-42
Lending business	-42	-61
Financial guarantee contracts and loan commitments	-4	-4
Building society operations	-36	-45
Other	-106	-106
Total	**958**	**977**

In the reporting period, fee and commission income included revenue from contracts with customers pursuant to IFRS 15 in an amount of €1,766 million.

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

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	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 under IFRS 15 (R+V operating segment)	-	-	-
Total	**356**	**40**	**48**
Main geographical markets			
Germany	356	39	18
Rest of Europe	-	1	24
Rest of World	-	-	6
Total	**356**	**40**	**48**
Type of revenue recognition			
At a point in time	128	39	16
Over a period of time	228	1	32
Total	**356**	**40**	**48**

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR LEASING	Other/ Consolidation	**Total**
	-	57	-	-	1,164	-	-62	1,316
	-	113	-	-	8	-	-7	114
	-	-	-	-	-	-	14	124
	3	-	-	-	-	-	-	70
	3	-	-	-	-	-	-1	27
	-	-	-	-	-	-	-	5
	-	-	-	-	-	-	-	11
	-	5	-	77	-	18	-70	99
	-	-	53	-	-	-	-	53
	6	**175**	**53**	**77**	**1,172**	**18**	**-126**	**1,819**
	6	45	53	77	807	18	-120	1,299
	-	129	-	-	365	-	-6	513
	-	1	-	-	-	-	-	7
	6	**175**	**53**	**77**	**1,172**	**18**	**-126**	**1,819**
	6	23	3	77	8	18	-60	258
	-	152	50	-	1,164	-	-66	1,561
	6	**175**	**53**	**77**	**1,172**	**18**	**-126**	**1,819**

>> 10 Gains and losses on trading activities

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Gains and losses on non-derivative financial instruments and embedded derivatives	90	-61
Gains and losses on derivatives	67	224
Gains and losses on exchange differences	49	141
Total	**206**	**304**

>> 11 Gains and losses on investments

€ million	Jan. 1 – Jun. 30, 2018
Gains and losses on the disposal of bonds and other fixed-income securities	**87**
Gains and losses on the disposal of shares and other variable-yield securities	**-6**
Gains and losses on investments in joint ventures	**14**
Disposals	6
Reversals of impairment losses	8
Gains and losses on investments in associates	**3**
Disposals	8
Impairment losses	-5
Total	**98**

Gains and losses on the disposal of bonds and other fixed-income securities included gains of €14 million and losses of €1 million on the disposal of financial instruments measured at cost.

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

€ million	Jan. 1 – Jun. 30, 2017
Gains and losses on bonds and other fixed-income securities	85
Disposals	83
Impairment losses	-3
Reversals of impairment losses	5
Gains and losses on shares and other variable-yield securities	1
Disposals	1
Gains and losses on investments in joint ventures	5
Impairment losses	-1
Reversals of impairment losses	6
Gains and losses on investments in associates	-3
Disposals	1
Impairment losses	-4
Total	88

>> 12 Other gains and losses on valuation of financial instruments

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Gains and losses from hedge accounting	**-11**	-12
Gains and losses on derivatives used for purposes other than trading	**-46**	-46
Gains and losses on financial assets designated as at fair value through profit or loss	**-18**	92
Gains and losses on non-derivative financial instruments and embedded derivatives	-91	100
Gains and losses on derivatives	73	-8
Gains and losses on financial assets mandatorily measured at fair value through profit or loss	**27**	
Total	**-48**	34

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

>> 13 Premiums earned

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Net premiums written	**8,926**	8,243
Gross premiums written	8,961	8,296
Reinsurance premiums ceded	-35	-53
Change in provision for unearned premiums	**-811**	-840
Gross premiums	-816	-849
Reinsurers' share	5	9
Total	**8,115**	7,403

>> 14 Gains and losses on investments held by insurance companies and other insurance company gains and losses

€ million	Jan. 1 – Jun. 30, 2018
Income from investments held by insurance companies	**2,788**
Interest income and current income	1,215
Income from reversals of impairment losses and reversals of loss allowances, and unrealized gains	346
Gains on valuation through profit or loss of investments held by insurance companies	724
Gains on disposals	503
Expenses in connection with investments held by insurance companies	**-1,657**
Administrative expenses	-69
Directly recognized depreciation/amortization expense, additions to loss allowances, and impairment losses and unrealized losses	-247
Losses on valuation through profit or loss of investments held by insurance companies	-924
Losses on disposals	-417
Other gains and losses of insurance companies	**84**
Other insurance gains and losses	122
Other non-insurance gains and losses	-38
Total	**1,215**

Income from and expenses in connection with investments held by insurance companies included gains of €2 million and losses of €6 million on the disposal of financial instruments measured at cost.

Gains and losses on investments held by insurance companies and other insurance company gains and losses included additions to loss allowances of €3 million and reversals in the same amount.

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

€ million	Jan. 1 – Jun. 30, 2017
Income from investments held by insurance companies	**2,654**
Interest income and current income	1,291
Income from reversals of impairment losses and unrealized gains	22
Gains on valuation through profit or loss of investments held by insurance companies	559
Gains on disposals	782
Expenses in connection with investments held by insurance companies	**-955**
Administrative expenses	-74
Depreciation/amortization expense, impairment losses, and unrealized losses	-446
Losses on valuation through profit or loss of investments held by insurance companies	-349
Losses on disposals	-86
Other gains and losses of insurance companies	**148**
Other insurance gains and losses	159
Other non-insurance gains and losses	-11
Total	**1,847**

>> 15 Insurance benefit payments

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Expenses for claims	**-5,006**	**-4,686**
Gross expenses for claims	-5,040	-4,700
Reinsurers' share	34	14
Changes in the benefit reserve and in other insurance liabilities	**-2,712**	**-2,443**
Gross changes in provisions	-2,684	-2,441
Reinsurers' share	-28	-2
Expenses for premium refunds	**9**	**-414**
Gross expenses for premium refunds	-17	-210
Expenses for deferred premium refunds	26	-204
Total	**-7,709**	**-7,543**

>> 16 Insurance business operating expenses

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Gross expenses	-1,332	-1,264
Reinsurers' share	10	8
Total	**-1,322**	**-1,256**

>> 17 Loss allowances

€ million	Jan. 1 – Jun. 30, 2018
Loss allowances for loans and advances to banks	**21**
Additions	-6
Reversals	27
Loss allowances for loans and advances to customers	**-26**
Additions	-829
Reversals	777
Directly recognized impairment losses	-13
Recoveries on loans and advances to customers previously impaired	31
Other	8
Loss allowances for investments	**4**
Additions	-16
Reversals	20
Other loss allowances for loans and advances	**45**
Change in provisions for loan commitments	24
Change in provisions for financial guarantee contracts	21
Total	**44**

The 'Other' line item contains the net gain from POCI.

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

€ million	Jan. 1 – Jun. 30, 2017
Allowances for losses on loans and advances to banks	**18**
Additions	-1
Reversals	13
Recoveries on loans and advances previously impaired	6
Allowances for losses on loans and advances to customers	**-441**
Additions	-763
Reversals	298
Directly recognized impairment losses	-17
Recoveries on loans and advances previously impaired	41
Other allowances for losses on loans and advances	**27**
Change in provisions for loan commitments	16
Change in other provisions for loans and advances	2
Change in liabilities from financial guarantee contracts	9
Total	**-396**

>> 18 Administrative expenses

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Staff expenses	-906	-904
General and administrative expenses	-1,025	-1,009 [1]
Depreciation and amortization	-87	-87
Total	**-2,018**	**-2,000**

1 Amount restated (see note 2).

>> 19 Other net operating income

€ million	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Income from the reversal of provisions and accruals	59	41
Restructuring expenses	-12	-5
Expenses for other taxes	-11	-8
Gains and losses on non-current assets and disposal groups classified as held for sale	7	-
Residual other net operating income	30	26
Total	**73**	**54**

>> 20 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.

>> 21 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, 2018
Gains and losses on debt instruments measured at fair value through other comprehensive income	**-304**
Gains (+)/losses (-) arising during the reporting period	-158
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-146
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	**7**
Gains (+)/losses (-) arising during the reporting period	8
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-1
Gains and losses on hedges of net investments in foreign operations	**-3**
Gains (+)/losses (-) arising during the reporting period	-10
Gains (-)/losses (+) reclassified to the income statement during the reporting period	7

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

€ million	Jan. 1 – Jun. 30, 2017
Gains and losses on available-for-sale financial assets	**-312**
Gains (+)/losses (-) arising during the reporting period	-76[1]
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-236
Gains and losses on cash flow hedges	**17**
Gains (+)/losses (-) arising during the reporting period	10
Gains (-)/losses (+) reclassified to the income statement during the reporting period	7
Exchange differences on currency translation of foreign operations	**-22**
Gains (+)/losses (-) arising during the reporting period	-22
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-
Gains and losses on hedges of net investments in foreign operations	**12**
Gains (+)/losses (-) arising during the reporting period	16
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-4

1 Amount restated (see note 2 in the consolidated financial statements as at December 31, 2017).

>> 22 Income taxes relating to components of other comprehensive income

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

€ million	Jan. 1 – Jun. 30, 2018 Amount before taxes	Income taxes	Amount after taxes
Items that may be reclassified to the income statement	**-307**	**137**	**-170**
Gains and losses on debt instruments measured at fair value through other comprehensive income	-304	131	-173
Gains and losses on cash flow hedges	-7	-	-7
Exchange differences on currency translation of foreign operations	7	-1	6
Gains and losses on hedges of net investments in foreign operations	-3	7	4
Items that will not be reclassified to the income statement	**102**	**-25**	**77**
Gains and losses on equity instruments for which the fair value OCI option has been exercised	93	-23	70
Gains and losses attributable to changes in the own credit risk of financial liabilities for which the fair value option has been exercised	13	-4	9
Gains and losses arising from remeasurement of defined benefit plans	-4	2	-2
Total	**-205**	**112**	**-93**

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

€ million	Jan. 1 – Jun. 30, 2017 Amount before taxes	Income taxes	Amount after taxes
Items that may be reclassified to the income statement	**-314**	**115**	**-199**
Gains and losses on available-for-sale financial assets	-312[1]	130	-182
Gains and losses on cash flow hedges	17	-5	12
Exchange differences on currency translation of foreign operations	-22	2	-20
Gains and losses on hedges of net investments in foreign operations	12	-12	-
Share of other comprehensive income/loss of joint ventures and associates accounted for using the equity method	-9	-	-9
Items that will not be reclassified to the income statement	**4**	**-2**	**2**
Gains and losses arising from remeasurement of defined benefit plans	4	-2	2
Total	**-310**	**113**	**-197**

1 Amount restated (see note 2 in the consolidated financial statements as at December 31, 2017).

C Balance sheet disclosures

>> 23 Cash and cash equivalents

€ million	Jun. 30, 2018	Dec. 31, 2017
Cash on hand	228	273
Balances with central banks	69,012	43,637[1]
Total	**69,240**	**43,910**

1 Amount restated (see note 2).

>> 24 Loans and advances to banks

	Repayable on demand		Other loans and advances		Total	
€ million	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Domestic banks	**6,501**	**6,385**	**79,691**	**77,370**	**86,192**	**83,755**
Affiliated banks	2,192	2,994	71,075	69,257	73,267	72,251
Other banks	4,309	3,391[1]	8,616	8,113	12,925	11,504
Foreign banks	**4,471**	**4,187[1]**	**2,128**	**1,472**	**6,599**	**5,659**
Total	**10,972**	**10,572**	**81,819**	**78,842**	**92,791**	**89,414**

1 Amount restated (see note 2).

>> 25 Loans and advances to customers

€ million	Jun. 30, 2018	Dec. 31, 2017
Loans and advances to domestic customers	143,712	140,018
Loans and advances to foreign customers	33,889	34,358
Total	**177,601**	**174,376**

>> 26 Hedging instruments (positive fair values)

€ million	Jun. 30, 2018	Dec. 31, 2017
Derivatives used as fair value hedges	1,130	1,086
Derivatives used as cash flow hedges	1	8
Derivatives used for hedges of net investments in foreign operations	-	2
Total	**1,131**	**1,096**

>> 27 Financial assets held for trading

€ million	Jun. 30, 2018	Dec. 31, 2017
DERIVATIVES (POSITIVE FAIR VALUES)	**16,656**	**17,100**
Interest-linked contracts	14,018	14,747
Currency-linked contracts	1,772	813
Share-/index-linked contracts	282	257
Other contracts	307	916
Credit derivatives	277	367
BONDS AND OTHER FIXED-INCOME SECURITIES	**11,536**	**9,094**
Money market instruments	347	244
Bonds	11,189	8,850
SHARES AND OTHER VARIABLE-YIELD SECURITIES	**1,096**	**1,408**
Shares	1,071	1,397
Investment fund units	24	6
Other variable-yield securities	1	5
RECEIVABLES	**11,612**	**11,107**
of which: from affiliated banks	641	666
from other banks	8,227	7,969
Receivables resulting from unplaced receivables from syndication business	**16**	**7**
from customers	16	7
Money market placements	**10,870**	**10,258**
with banks	8,478	8,128
with customers	2,392	2,130
Promissory notes and registered bonds	**726**	**842**
with banks	390	507
with customers	336	335
Total	**40,900**	**38,709**

>> 28 Investments

€ million	Jun. 30, 2018	Dec. 31, 2017
Bonds and other fixed-income securities	**47,100**	**54,504**
Money market instruments	517	410
Bonds	46,583	54,094
Shares and other variable-yield securities	**1,545**	**1,808**
Shares and other shareholdings	522	380
Investment fund units	1,018	1,422
Other variable-yield securities	5	6
Investments in subsidiaries	**354**	**311**
Investments in joint ventures	**498**	**545**
Investments in associates	**319**	**318**
Total	**49,816**	**57,486**

The carrying amount of investments in joint ventures accounted for using the equity method totaled €495 million (December 31, 2017: €542 million). €318 million of the investments in associates has been accounted for using the equity method (December 31, 2017: €315 million).

>> 29 Investments held by insurance companies

€ million	Jun. 30, 2018	Dec. 31, 2017
Investment property	2,571	2,539
Investments in subsidiaries	745	698
Investments in joint ventures	15	15
Investments in associates	4	2
Mortgage loans	9,251	9,142
Promissory notes and loans	7,909	7,764
Registered bonds	10,108	9,114
Other loans	541	871
Variable-yield securities	9,471	9,276
Fixed-income securities	47,993	44,907
Derivatives (positive fair values)	165	299
Loss allowances	-3	
Deposits with ceding insurers and other investments	366	240
Assets related to unit-linked contracts	11,976	11,549
Total	**101,112**	**96,416**

As at December 31, 2017, any impairment losses related to financial assets reported under investments held by insurance companies were applied directly to the carrying amount.

>> 30 Property, plant and equipment, and investment property

€ million	Jun. 30, 2018	Dec. 31, 2017
Land and buildings	919	928
Office furniture and equipment	164	178
Assets subject to operating leases	117	138
Investment property	258	254
Total	**1,458**	**1,498**

>> 31 Other assets

€ million	Jun. 30, 2018	Dec. 31, 2017
Other assets held by insurance companies	3,643	3,090
Goodwill	169	169
Other intangible assets	455	466
of which: software	354	357
acquired customer relationships	54	62
Other loans and advances	312	251
Residual other assets	495	570
Total	**5,074**	**4,546**

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

€ million	Jun. 30, 2018	Dec. 31, 2017
Intangible assets	142	151
Reinsurance assets	162	168
Receivables	647	679
Credit balances with banks, checks, and cash on hand	511	110
Residual other assets	2,183	1,982
Loss allowances	-2	
Total	**3,643**	**3,090**

As at December 31, 2017, any impairment losses related to financial assets reported under other assets held by insurance companies were applied directly to the carrying amount.

>> 32 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:

	Loss allowances for loans and advances to banks			Loss allowances for loans and advances to customers			
€ million	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	POCI
Balance as at Jan. 1, 2018	9	-	22	217	185	2,348	11
Additions	5	1	-	119	185	520	5
Utilizations	-	-	-	-	-1	-326	-
Reversals	-6	-1	-20	-208	-94	-466	-8
Other changes	-	-	-	93	-111	56	-
Balance as at Jun. 30, 2018	**8**	**-**	**2**	**221**	**164**	**2,132**	**8**

	Loss allowances for investments			Total
€ million	Stage 1	Stage 2	Stage 3	
Balance as at Jan. 1, 2018	10	36	24	2,862
Additions	3	12	1	851
Utilizations	-	-	-	-327
Reversals	-4	-6	-6	-819
Other changes	-2	2	1	39
Balance as at Jun. 30, 2018	**7**	**44**	**20**	**2,606**

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

	Allowances for losses on loans and advances to banks		Allowances for losses on loans and advances to customers		Total
€ million	Specific loan loss allowances	Portfolio loan loss allowances	Specific loan loss allowances	Portfolio loan loss allowances	
Balance as at Jan. 1, 2017	7	29	1,829	529	2,394
Additions	-	1	616	147	764
Utilizations	-	-	-125	-	-125
Reversals	-5	-8	-161	-137	-311
Interest income	-	-	-20	-	-20
Other changes	-	-	-51	-	-51
Balance as at Jun. 30, 2017	**2**	**22**	**2,088**	**539**	**2,651**

The interest income arose from unwinding the discount on impaired loans and advances as specified in IAS 39.AG93.

>> 33 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.

The individual non-current assets classified as held for sale comprise an associate, long-term equity investments, and items of property, plant and equipment. The non-current assets and liabilities from disposal groups not qualifying as discontinued operations are a consolidated subsidiary and investment fund units in various funds.

>> 34 Deposits from banks

	Repayable on demand		With agreed maturity or notice period		Total	
€ million	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Domestic banks	**43,538**	**42,325**	**82,881**	**82,352**	**126,419**	**124,677**
Affiliated banks	36,015	37,716	21,687	21,523	57,702	59,239
Other banks	7,523	4,609	61,194	60,829	68,717	65,438
Foreign banks	**6,658**	**2,853**	**11,269**	**8,592**	**17,927**	**11,445**
Total	**50,196**	**45,178**	**94,150**	**90,944**	**144,346**	**136,122**

>> 35 Deposits from customers

	Repayable on demand		With agreed maturity or notice period		Total	
€ million	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Domestic customers	19,072	16,965	97,651	95,017	116,723	111,982
Foreign customers	15,105	8,913	5,770	5,424	20,875	14,337
Total	**34,177**	**25,878**	**103,421**	**100,441**	**137,598**	**126,319**

>> 36 Debt certificates issued including bonds

€ million	Jun. 30, 2018	Dec. 31, 2017
Bonds issued	**50,418**	**50,609**
Mortgage Pfandbriefe	19,023	17,798
Public-sector Pfandbriefe	2,549	2,520
Other bonds	28,846	30,291
Other debt certificates issued	**19,463**	**16,718**
Total	**69,881**	**67,327**

All other debt certificates issued are commercial paper.

>> 37 Hedging instruments (negative fair values)

€ million	Jun. 30, 2018	Dec. 31, 2017
Derivatives used as fair value hedges	2,985	2,959
Derivatives used as cash flow hedges	2	3
Total	**2,987**	**2,962**

>> 38 Financial liabilities held for trading

€ million	Jun. 30, 2018	Dec. 31, 2017
DERIVATIVES (NEGATIVE FAIR VALUES)	**16,341**	**16,813**
Interest-linked contracts	12,585	13,848
Currency-linked contracts	2,270	871
Share-/index-linked contracts	1,023	742
Other contracts	402	1,275
Credit derivatives	61	77
SHORT POSITIONS	**1,780**	**617**
BONDS ISSUED	**20,459**	**18,734**
DEPOSITS	**12,170**	**8,116**
of which: from affiliated banks	2,381	1,820
from other banks	7,478	5,529
Money market deposits	**11,915**	**7,980**
from banks	9,718	7,233
from customers	2,197	747
Promissory notes and registered bonds issued	**255**	**136**
to banks	141	116
to customers	114	20
Total	**50,750**	**44,280**

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

>>39 Provisions

€ million	Jun. 30, 2018	Dec. 31, 2017
Provisions for employee benefits	**1,453**	**1,673**
Provisions for defined benefit plans	1,075	1,266
Provisions for other long-term employee benefits	139	148
of which: for semi-retirement schemes	21	21
Provisions for termination benefits	214	235
of which: for early retirement schemes	9	11
for restructuring	174	195
Provisions for short-term employee benefits	25	24
Provisions for share-based payment transactions	**32**	**44**
Other provisions	**1,668**	**1,655**
Provisions for onerous contracts	12	12
Provisions for restructuring	26	29
Provisions for loan commitments	53	128
Provisions for financial guarantee contracts	99	
Other provisions for loans and advances	86	87
Provisions relating to building society operations	1,023	983
Residual provisions	369	416
Total	**3,153**	**3,372**

>>40 Insurance liabilities

€ million	Jun. 30, 2018	Dec. 31, 2017
Provision for unearned premiums	1,982	1,169
Benefit reserve	60,940	58,670
Provision for claims outstanding	11,568	11,064
Provision for premium refunds	9,008	8,446
Other insurance liabilities	59	68
Reserve for unit-linked insurance contracts	10,266	9,907
Total	**93,823**	**89,324**

>>41 Other liabilities

€ million	Jun. 30, 2018	Dec. 31, 2017
Other liabilities of insurance companies	5,693	5,464
Liabilities from financial guarantee contracts		106
Accruals	812	1,156
Other payables	211	177
Residual other liabilities	642	620
Total	**7,358**	**7,523**

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

€ million	Jun. 30, 2018	Dec. 31, 2017
Other provisions	360	354
Payables and residual other liabilities	5,333	5,110
Total	**5,693**	**5,464**

>>42 Subordinated capital

€ million	Jun. 30, 2018	Dec. 31, 2017
Subordinated liabilities	3,103	3,573
Profit-sharing rights	283	292
Other hybrid capital	13	13
Share capital repayable on demand	21	21
Total	**3,420**	**3,899**

>> 43 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 changes in the own credit risk of financial liabilities for which the fair value option has been exercised	Reserve from debt instruments measured at fair value through other comprehensive income	Revaluation reserve	Cash flow hedge reserve	Currency translation reserve
Equity as at Jan. 1, 2017				1,401[1]	-11	70
Other comprehensive income/loss				-173[1]	12	-22
Total comprehensive income/loss				**-173**	**12**	**-22**
Changes in scope of consolidation				-14	-	-
Equity as at Jun. 30, 2017				**1,214**	**1**	**48**
Equity as at Jan. 1, 2018				1,396	5	43
Adjustments due to first-time adoption of IFRS 9	380		537	-1,396	-	-
Equity restated 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**

1 Amount restated (see note 2 in the consolidated financial statements as at December 31, 2017).

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**

€ 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**

D Financial instruments and fair value disclosures

>> 44 Classes, categories, and fair values of financial instruments

The following tables show the breakdown of 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, 2018 Carrying amount	Fair value
FINANCIAL ASSETS MEASURED AT FAIR VALUE	**151,987**	**151,987**
Financial assets measured at fair value through profit or loss	**65,214**	**65,214**
Financial assets mandatorily measured at fair value through profit or loss	***54,936***	***54,936***
Loans and advances to banks	17	17
Loans and advances to customers	457	457
Hedging instruments (positive fair values)	1,131	1,131
Financial assets held for trading	40,900	40,900
Investments	2,220	2,220
Investments held by insurance companies	10,211	10,211
Financial assets designated as at fair value through profit or loss	***10,278***	***10,278***
Loans and advances to banks	1,887	1,887
Loans and advances to customers	1,962	1,962
Investments	6,429	6,429
Financial assets measured at fair value through other comprehensive income	**86,773**	**86,773**
Financial assets mandatorily measured at fair value through other comprehensive income	***80,985***	***80,985***
Loans and advances to banks	236	236
Loans and advances to customers	3,750	3,750
Investments	20,341	20,341
Investments held by insurance companies	56,658	56,658
Financial assets designated as at fair value through other comprehensive income	***5,788***	***5,788***
Investments	639	639
Investments held by insurance companies	5,149	5,149
FINANCIAL ASSETS MEASURED AT AMORTIZED COST	**360,580**	**366,027**
Cash and cash equivalents	69,012	69,012
Loans and advances to banks	90,616	92,168
Loans and advances to customers	166,104	168,080
Investments	19,303	20,291
Investments held by insurance companies	14,181	15,557
Other assets	918	919
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	446	
FINANCE LEASES	**2,828**	**2,882**
Loans and advances to banks	25	25
Loans and advances to customers	2,803	2,857

€ million	Jun. 30, 2018 Carrying amount	Fair value
FINANCIAL LIABILITIES MEASURED AT FAIR VALUE	**86,072**	**86,072**
Financial liabilities mandatorily measured at fair value through profit or loss	**53,786**	**53,786**
Hedging instruments (negative fair values)	2,987	2,987
Financial liabilities held for trading	50,750	50,750
Other liabilities	49	49
Financial liabilities designated as at fair value through profit or loss	**32,286**	**32,286**
Deposits from banks	5,624	5,624
Deposits from customers	11,045	11,045
Debt certificates issued including bonds	15,168	15,168
Subordinated capital	449	449
FINANCIAL LIABILITIES MEASURED AT AMORTIZED COST	**324,467**	**327,511**
Deposits from banks	138,722	140,412
Deposits from customers	126,553	127,781
Debt certificates issued including bonds	54,713	54,818
Other liabilities	1,391	1,392
Subordinated capital	2,971	3,108
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	117	
FINANCIAL GUARANTEE CONTRACTS AND LOAN COMMITMENTS	**152**	**152**
Financial guarantee contracts	**99**	**99**
Provisions	99	99
Loan commitments	**53**	**53**
Provisions	53	53

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 €14,725 million (December 31, 2017: €27,516 million).

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

€ million	Dec. 31, 2017 Carrying amount	Fair value
FINANCIAL ASSETS MEASURED AT FAIR VALUE	**151,850**	**151,850**
Financial instruments held for trading	**39,008**	**39,008**
Financial assets held for trading	38,709	38,709
Investments held by insurance companies	299	299
Fair value option	**16,494**	**16,494**
Loans and advances to banks	2,199	2,199
Loans and advances to customers	4,138	4,138
Investments	9,587	9,587
Investments held by insurance companies	570	570
Derivatives used for hedging	**1,096**	**1,096**
Derivatives used for hedging (positive fair values)	1,096	1,096
Available-for-sale financial assets	**95,252**	**95,252**
Loans and advances to customers	22	22
Investments	40,741	40,741
Investments held by insurance companies	54,489	54,489
FINANCIAL ASSETS MEASURED AT AMORTIZED COST	**328,558**	**335,806**
Held-to-maturity investments	**1,648**	**1,658**
Investments	1,648	1,658
Loans and receivables	**326,612**	**333,850**
Cash and cash equivalents	43,637 [1]	43,637 [1]
Loans and advances to banks	87,174 [1]	88,443 [1]
Loans and advances to customers	164,549	166,378
Investments	4,419	4,584
Investments held by insurance companies	26,666	30,367
Other assets	441	441
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	-274	
Available-for-sale financial assets	**298**	**298**
Investments	234	234
Investments held by insurance companies	64	64
FINANCE LEASES	**2,914**	**2,977**
Loans and advances to banks	22	3
Loans and advances to customers	2,892	2,974

1 Amount restated (see note 2).

€ million	Dec. 31, 2017 Carrying amount	Fair value
FINANCIAL LIABILITIES MEASURED AT FAIR VALUE	**78,064**	**78,064**
Financial instruments held for trading	**44,319**	**44,319**
Financial liabilities held for trading	44,280	44,280
Other liabilities	39	39
Fair value option	**30,783**	**30,783**
Deposits from banks	5,176	5,176
Deposits from customers	11,224	11,224
Debt certificates issued including bonds	13,780	13,780
Subordinated capital	603	603
Derivatives used for hedging	**2,962**	**2,962**
Derivatives used for hedging (negative fair values)	2,962	2,962
FINANCIAL LIABILITIES MEASURED AT AMORTIZED COST	**304,404**	**307,178**
Deposits from banks	130,946	132,383
Deposits from customers	115,095	116,322
Debt certificates issued including bonds	53,547	53,589
Other liabilities	1,407	1,409
Subordinated capital	3,296	3,475
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	113	
FINANCIAL GUARANTEE CONTRACTS AND LOAN COMMITMENTS	**234**	**234**
Financial guarantee contracts	**106**	**106**
Other liabilities	106	106
Loan commitments	**128**	**128**
Provisions	128	128

>>45 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:

€ million	Level 1		Level 2		Level 3	
	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017	Jun. 30, 2018	Dec. 31, 2017
Assets	**70,225**	**67,674**	**85,416**	**88,969**	**8,408**	**6,833**
Loans and advances to banks	-	-	2,140	1,970	-	229
Loans and advances to customers	-	-	4,772	3,002	1,397	1,158
Hedging instruments (positive fair values)	-	-	1,131	1,096	-	-
Financial assets held for trading	1,290	1,488	39,064	36,513	546	708
Investments	14,686	13,801	12,580	35,116	2,363	1,411
Investments held by insurance companies	54,249	52,385	25,704	11,245	4,041	3,277
Non-current assets and disposal groups classified as held for sale	-	-	25	27	61	50
Liabilities	**2,339**	**1,096**	**94,112**	**86,562**	**1,498**	**1,854**
Deposits from banks	-	-	5,624	5,176	-	-
Deposits from customers	-	-	11,045	11,224	-	-
Debt certificates issued including bonds	1,477	473	13,156	12,764	535	543
Hedging instruments (negative fair values)	-	-	2,987	2,962	-	-
Financial liabilities held for trading	856	612	48,994	42,590	900	1,078
Financial liabilities arising from unit-linked insurance products	-	-	11,877	11,448	-	-
Other liabilities	6	11	40	13	3	15
Subordinated capital	-	-	389	385	60	218

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:

€ million	Transfers from Level 1 to Level 2 Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017	Transfers from Level 2 to Level 1 Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Financial assets measured at fair value	**87**	121	**1,594**	211
Financial assets held for trading	2	34	64	3
Investments	-	17	1,210	4
Investments held by insurance companies	85	70	320	204
Financial liabilities measured at fair value	**2**	3	**4**	-
Financial liabilities held for trading	2	3	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. 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, DZ BANK 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 mitigate counterparty credit risk and debt valuation adjustments (DVAs) are recognized to mitigate 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 the balance sheet date.

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Loans and advances to customers	Loans	679	DCF method	BVAL price adjustment	-1.2 to 2.4
		513	DCF method	Credit spread	0.0 to 8.3
	Profit-participation certificates	63	DCF method	Internal credit ratings	5.3 to 16.2
	Shareholders' loans	85	DCF method	Internal credit ratings	5.3 to 16.2
	Receivables arising from silent partnerships	57	DCF method	Internal credit ratings	5.3 to 16.2
Financial assets held for trading	ABSs	4	DCF method	Credit spread	0.4 to 5.0
	Equity/commodity basket products	9	Local volatility model	Correlation of the risk factors considered	9.9 to 91.6
	Loans and advances to issuers in default	5	DCF method	Recovery rate	-
	Collateralized loan obligations	97	Gaussian copula model	Liquidity spread	1 to 2
	Bearer securities	261	DCF method	BVAL price adjustment	-0.4 to 0.7
	Registered securities	117	DCF method	BVAL price adjustment	-1.2 to 2.4
	Option in connection with acquisition of long-term equity investments	37	Black-Scholes model	Earnings indicator	-
	Syndicated loans	16	DCF method	Credit spread	0.0 to 8.3
Investments	ABSs	82	DCF method	Credit spread	0.4 to 5.0
	Other variable-yield securities	5	DCF method	Assumptions for measurement of risk parameters	9.7 to 13.3
	Investments in subsidiaries	60	DCF method	Assumptions for measurement of risk parameters	9.7 to 13.3
		134	Income capitalization approach	Future income	-
		1	Liquidation value	-	-
	Collateralized loan obligations	10	Gaussian copula model	Liquidity spread	1 to 2
	Bearer securities	347	DCF method	BVAL price adjustment	-0.4 to 110.2
	Investment fund units	24	Net asset value	-	-
	Mortgage-backed securities	442	DCF method	Duration	-
		38	DCF method	Recovery rate	15.8 to 87.0
	Other shareholdings	57	DCF method	Capitalization rate, growth factor	0.0 to 11.2
		13	DCF method	Assumptions for measurement of risk parameters	9.7 to 13.3
		27	Income capitalization approach	Future income	-
		586	Income capitalization approach, net asset value method	Future income	-
	VR Circle	537	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	552	Third-party pricing information	-	-
	Investments in subsidiaries, associates, and joint ventures, real estate funds, profit-participation certificates, and other long-term equity investments	1,960	Net asset value	-	-
	Investments in subsidiaries and associates, other long-term equity investments, and shares in cooperative banks	314	Income capitalization approach	Future income	6.6 to 8.0
	Fixed-income securities, convertible bonds, shares, and shares in cooperative banks	788	Third-party pricing information	-	-
	Profit-participation certificates and promissory notes	405	DCF method	Credit spread	0.6 to 0.8
	Financial instruments (positive fair values)	5	Third-party pricing information	-	-
	Other shareholdings	17	Approximation	-	-
Non-current assets and disposal groups classified as held for sale	Other shareholdings	61	Income capitalization approach	Future income	11.7
Debt certificates issued including bonds	VR Circle	535	DCF method	Multiple-year default probabilities	0 to 100
Financial liabilities held for trading	Equity/commodity basket products	861	Local volatility model	Correlation of the risk factors considered	9.9 to 91.6
	Option in connection with acquisition of long-term equity investments	5	Black-Scholes model	Earnings indicators	-
	Products with commodity volatility derived from comparable instruments	34	Local volatility model	Earnings indicators	7.0 to 63.7
Other liabilities	Financial instruments (negative fair values)	3	Third-party pricing information	-	-
Subordinated capital	Loans	60	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, 2017.

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Loans and advances to banks	Loans	229	DCF method	Credit spread	0.3 to 3.6
Loans and advances to customers	Loans	370	DCF method	Credit spread	0.0 to 8.3
		8	DCF method	Internal spread	1.5 to 5.0
		758	DCF method	BVAL price adjustment	-1.9 to 27.4
	Receivables arising from silent partnerships	22	DCF method	Internal credit ratings	6.7
Financial assets held for trading	ABSs	52	DCF method	Credit spread	0.3 to 5.0
	Bearer securities	305	DCF method	BVAL price adjustment	-0.3 to 0.6
	Equity/commodity basket products	15	Local volatility model	Correlation of the risk factors considered	9.9 to 91.6
	Collateralized loan obligations	129	Gaussian copula model	Liquidity spread	0.3 to 2.0
	Syndicated loans	7	DCF method	Credit spread	0.0 to 8.3
	Loans and advances to issuers in default	5	DCF method	Recovery rate	-
	Registered securities	158	DCF method	BVAL price adjustment	-1.9 to 27.4
	Option in connection with acquisition of long-term equity investments	37	Black-Scholes model	Earnings indicators	-
Investments	Bearer securities	289	DCF method	BVAL price adjustment	-0.3 to 132.3
	VR Circle	543	DCF method	Multiple-year default probabilities	0 to 100
	Investments in subsidiaries	29	Income capitalization approach	Future income	-
		38	DCF method	Assumptions for measurement of risk parameters	4.8 to 10.5
		379	Income capitalization approach, net asset value method	Future income	-
	Other shareholdings	15	DCF method	Assumptions for measurement of risk parameters	4.8 to 10.5
	Investment fund units	31	Net asset value	-	-
	ABSs	64	DCF method	Credit spread	0.3 to 5.0
	Collateralized loan obligations	23	Gaussian copula model	Liquidity spread	0.3 to 2.0

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Investments held by insurance companies	Investments in subsidiaries, associates, and joint ventures, real estate funds, profit-participation certificates, and other long-term equity investments	1,417	Net asset value	-	-
	Investments in subsidiaries and associates, other long-term equity investments, and shares in cooperative banks	328	Income capitalization approach	Future income	6.5 to 8.9
	ABSs	322	Third-party pricing information	-	-
	Profit-participation certificates, silent partnerships, promissory notes, and loan commitments	409	DCF method	Credit spread	0.5 to 7.8
	Fixed-income securities, shares, and shares in cooperative banks	797	Third-party pricing information	-	-
	Derivatives (positive fair values)	4	Third-party pricing information	-	-
Non-current assets and disposal groups classified as held for sale	Other shareholdings	50	Income capitalization approach	Future income	11.7
Debt certificates issued including bonds	VR Circle	543	DCF method	Multiple-year default probabilities	0 to 100
Financial liabilities held for trading	Equity/commodity basket products	1,073	Local volatility model	Correlation of the risk factors considered	7.0 to 91.6
	Option in connection with acquisition of long-term equity investments	5	Black-Scholes model	Earnings indicators	-
Other liabilities	Derivatives (negative fair values)	4	Third-party pricing information	-	-
		11	DCF method	Correlation of the risk factors considered	47.5
Subordinated capital	Loans	218	DCF method	Credit spread	0.3 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 banks	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, 2017	229	1,079	441	1,892	2,886	136
Additions (purchases)	-	115	33	207	215	-
Transfers	-	-	194	210	27	-
from Level 3 to Levels 1 and 2	-	-	-79	-69	-87	-
from Levels 1 and 2 to Level 3	-	-	273	279	114	-
Disposals (sales)	-	-79	-88	-278	-241	-
Changes resulting from measurement at fair value	1	-6	16	2	-14	-13
through profit or loss	1	-6	16	3	-17	-
through other comprehensive income	-	-	-	-1	3	-13
Other changes	-	-26	-1	-6	13	-
Balance as at Jun. 30, 2017	**230**	**1,083**	**595**	**2,027**	**2,886**	**123**
Balance as at Jan. 1, 2018	229	1,158	708	1,411	3,277	50
Adjustments due to first-time adoption of IFRS 9	-229	364	-48	844	153	-
Balance restated 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**

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

€ million	Deposits from banks	Debt certificates issued including bonds	Financial liabilities held for trading	Other liabilities	Sub-ordinated capital
Balance as at Jan. 1, 2017	1	514	1,510	19	349
Additions (issues)	-	20	25	-	-
Transfers	-1	-	-175	-	-
from Level 3 to Level 2	-1	-	-216	-	-
from Level 2 to Level 3	-	-	41	-	-
Disposals (settlements)	-	-	-	-2	-
Changes resulting from measurement at fair value through profit or loss	-	-	1	-2	-2
Other changes	-	-	-	-	-129
Balance as at Jun. 30, 2017	**-**	**534**	**1,361**	**15**	**218**
Balance as at Jan. 1, 2018	-	543	1,078	15	218
Adjustments due to first-time adoption of IFRS 9	-	-	-	-	36
Balance restated 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**

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 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 €47 million during the reporting period (first half of 2017: gain of €15 million). The gains or losses are mainly included in the line items net interest income, 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 €33 million loss in the income statement (December 31, 2017: loss of €5 million) and a loss of €1 million under other comprehensive income/loss (December 31, 2017: 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 €25 million loss in the income statement (December 31, 2017: loss of €8 million). As at December 31, 2017, a loss of €1 million would have been recognized in other comprehensive income/loss. For the fair values of investments, there would be a €24 million loss under other comprehensive income/loss (December 31, 2017: loss of €8 million) and a €31 million loss in the income statement (December 31, 2017: loss of €17 million). There would be changes within financial assets held for trading giving rise to a loss of €5 million in the income statement (December 31, 2017: loss of €5 million). Within other liabilities, there would have been a loss of €1 million recognized in the income statement as at December 31, 2017.

The fair values of bonds without liquid markets that are reported within financial assets held for trading, investments, and loans and advances to customers are given an individual adjustment spread or are measured using Bloomberg Valuation Service prices, which are observable in the market. All other things being equal, an increase in the pertinent measurement assumptions of 1 percent would lead to the recognition of a €16 million loss in the income statement (December 31, 2017: loss of €43 million) and a loss of €24 million under other comprehensive income/loss (December 31, 2017: gain of €1 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 the income statement (December 31, 2017: increase of €3 million).

An alternative assumption about the credit spreads used could lead to a significant change in the fair values of some of the ABSs reported under financial assets held for trading and under investments. All other things being equal, an increase of 1 percent would lead to the recognition of a €2 million loss in the income statement (December 31, 2017: loss of €3 million) and a loss of €1 million in other comprehensive income/loss (December 31, 2017: loss of €1 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 the income statement (December 31, 2017: 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 and financial liabilities held for trading. All other things being equal, a rise in the liquidity spread assumptions by 1 percent would lead to a €2 million decrease in the fair values of these financial assets that would be recognized in the income statement (December 31, 2017: decrease of €4 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.

>>46 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, 2018	Jan. 1 – Jun. 30, 2017
Gains and losses on fair value hedges	**-4**	-3
Gains and losses on hedging instruments	15	-90
Gains and losses on hedged items	-19	87
Gains and losses on portfolio fair value hedges	**-6**	-9
Gains and losses on hedging instruments	-79	463
Gains and losses on hedged items	73	-472
Gains and losses on cash flow hedges	**-1**	-
Gains and losses on cash flow hedges of existing hedged items	-1	-
Total	**-11**	**-12**

>>47 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 impairment losses are based on the calculation of expected losses in the lending business, on investments, and on other assets. The impairment rules are applied only to those financial assets that are not measured at fair value through profit or loss. These are:

– Financial assets measured at amortized cost and
– Debt instruments held as financial assets measured at fair value through other comprehensive income.

The impairment rules are also applied to:

- Financial guarantee contracts and loan commitments that fall within the scope of IFRS 9 and are not measured 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 into account, to determine the expected losses:

- Stage 1: For financial assets whose credit risk has not increased significantly since initial recognition and that were not impaired upon initial recognition, the 12-month credit loss is taken into consideration. Interest income 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 income 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: Financial assets that are already deemed impaired upon initial recognition are not assigned to the three-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 income 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 for the year as a whole does not produce a significantly different outcome, the change in the 12-month expected loss 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 corresponding 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 impairment losses 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 (e.g. by identifying an insolvency ratio). As a rule, directly recognized impairment losses are recognized after all recovery and enforcement measures have been completed. Directly recognized impairment losses are also recognized for insignificant amounts.

If substantial changes to the contract for a financial asset are made, the asset is derecognized and then recognized as a new asset. The POCI rules apply to impaired assets (stage 3). If contractual changes 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 utilizations	2	11,743	-	-	-	-
Change to financial assets due to transfer between stages	-	22	-	-22	-	-
Transfer from stage 2	-	22	-	-22	-	-
Disposals 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	2	-	-	-
Balance as at Jun. 30, 2018	**8**	**80,601**	**8**	**360**	**33**	**25**

Financial assets measured at amortized cost

€ million	Stage 1		Stage 2		Stage 3		POCI	
	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	316,015	212	12,204	2,377	5,350	10	32
Addition/increase in loan utilizations	66	5,883,690	10	8,274	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	-	-326	-12	-	-1
Disposals and repayments	-46	-5,849,739	-29	-10,385	-287	-1,656	-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								8
Exchange differences and other changes	1	-139	-	-1,335	39	-341	-	1
Balance as at Jun. 30, 2018	**234**	**350,551**	**197**	**7,691**	**2,146**	**4,894**	**8**	**29**

The undiscounted expected credit losses on purchased or originated credit-impaired assets that were recognized for the first time during the reporting period totaled €93 million.

Finance leases

€ million	Stage 1 Loss allowances	Stage 1 Gross carrying amount	Stage 2 Loss allowances	Stage 2 Gross carrying amount	Stage 3 Loss allowances	Stage 3 Gross carrying amount
Balance as at Jan. 1, 2018	6	2,595	10	304	18	51
Addition/increase in loan utilizations	5	586	8	40	15	3
Change to finance leases 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	-
Disposals 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**

Financial guarantee contracts and loan commitments

€ million	Stage 1 Loss allowances	Stage 1 Nominal value	Stage 2 Loss allowances	Stage 2 Nominal value	Stage 3 Loss allowances	Stage 3 Nominal value
Balance as at Jan. 1, 2018	38	55,702	8	627	147	469
Addition/increase in loan utilizations	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
Disposals 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**

>>48 Exposures to countries particularly affected by the sovereign debt crisis

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

	Jun. 30, 2018	
€ million	Carrying amount	Fair value
Portugal	**718**	**731**
Financial assets measured at fair value through profit or loss	341	341
Financial assets measured at fair value through other comprehensive income	328	328
Financial assets measured at amortized cost	49	62
Italy	**5,355**	**5,401**
Financial assets measured at fair value through profit or loss	1,759	1,759
Financial assets measured at fair value through other comprehensive income	3,075	3,075
Financial assets measured at amortized cost	521	567
Spain	**2,045**	**2,066**
Financial assets measured at fair value through profit or loss	1,181	1,181
Financial assets measured at fair value through other comprehensive income	624	624
Financial assets measured at amortized cost	240	261
Total	**8,118**	**8,198**

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

	Dec. 31, 2017	
€ million	Carrying amount	Fair value
Portugal	**671**	**719**
Fair value option	378	378
Held-to-maturity investments	244	280
Loans and receivables	49	61
Italy	**6,054**	**6,025**
Financial instruments held for trading	20	20
Fair value option	1,348	1,348
Available-for-sale financial assets	4,216	4,216
Held-to-maturity investments	470	441
Spain	**2,211**	**2,211**
Financial instruments held for trading	211	211
Fair value option	1,110	1,110
Available-for-sale financial assets	700	700
Held-to-maturity investments	190	190
Total	8,936	8,955

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:

	Jun. 30, 2018		
€ million	Level 1	Level 2	Level 3
Portugal	**669**	**-**	**-**
Financial assets measured at fair value through profit or loss	341	-	-
Financial assets measured at fair value through other comprehensive income	328	-	-
Italy	**4,599**	**213**	**22**
Financial assets measured at fair value through profit or loss	1,739	20	-
Financial assets measured at fair value through other comprehensive income	2,860	193	22
Spain	**1,459**	**290**	**56**
Financial assets measured at fair value through profit or loss	958	167	56
Financial assets measured at fair value through other comprehensive income	501	123	-
Total	**6,727**	**503**	**78**

COMPARATIVE INFORMATION IN ACCORDANCE WITH IAS 39

	Dec. 31, 2017		
€ million	Level 1	Level 2	Level 3
Portugal	**378**	**-**	**-**
Fair value option	378	-	-
Italy	**4,419**	**1,065**	**100**
Financial instruments held for trading	-	20	-
Fair value option	1,208	79	61
Available-for-sale financial assets	3,211	966	39
Spain	**1,322**	**628**	**71**
Financial instruments held for trading	-	211	-
Fair value option	1,016	50	44
Available-for-sale financial assets	306	367	27
Total	**6,119**	**1,693**	**171**

Maturity analysis

AS AT JUNE 30, 2018

€ million	≤ 1 month	> 1 month – 3 months	> 3 months – 1 year	> 1 year – 5 years	> 5 years
Portugal	-	-	25	102	823
Italy	11	62	323	1,714	5,027
Spain	66	2	123	635	2,061
Total	**77**	**64**	**471**	**2,451**	**7,911**

AS AT DECEMBER 31, 2017

€ million	≤ 1 month	> 1 month – 3 months	> 3 months – 1 year	> 1 year – 5 years	> 5 years
Portugal	-	-	25	102	834
Italy	63	69	301	1,755	5,238
Spain	7	1	248	588	1,969
Total	**70**	**70**	**574**	**2,445**	**8,041**

The maturity analysis shows the contractually agreed cash inflows.

E Other disclosures

>> 49 Contingent liabilities

€ million	Jun. 30, 2018	Dec. 31, 2017
Contingent liabilities arising from contributions to the resolution fund for CRR credit institutions	25	11
Contingent liabilities in respect of litigation risk	8	4
Total	**33**	**15**

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 and 2018 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.

>> 50 Financial guarantee contracts and loan commitments

€ million	Jun. 30, 2018	Dec. 31, 2017
Financial guarantee contracts	**7,383**	**6,996**
Loan guarantees	3,775	3,765
Letters of credit	576	553
Other guarantees and warranties	3,032	2,678
Loan commitments	**55,220**	**33,509**
Credit facilities to banks	19,578	5,017
Credit facilities to customers	15,354	14,974
Guarantee credits	419	363
Letters of credit	2	27
Global limits	19,867	13,128
Total	**62,603**	**40,505**

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

>> 51 Trust activities

Trust assets and trust liabilities amounted to €995 million at the balance sheet date (December 31, 2017: €1,096 million).

>> 52 Revenue from contracts with customers

Effects in the income statement

In addition to the items of revenue from contracts with customers within net fee and commission income, presented in note 9, the following items of revenue from contracts with customers are also included in the income statement:

Other net operating income

Gains from contracts with customers amounting to €11 million were recognized within other net operating income during the reporting period. These gains were predominantly attributable to the TeamBank, UMH, and Other/Consolidation operating segments.

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

Gains from contracts with customers amounting to €125 million were recognized within gains and losses on investments held by insurance companies and other insurance company gains and losses during the reporting period. These gains were entirely attributable to the R+V operating segment.

Fee and commission income pursuant to IFRS 15 in line items relating to insurance companies

The fee and commission income pursuant to IFRS 15 included in the line items relating to the insurance companies amounted to €53 million during the reporting period.

>> 53 Employees

Average number of employees by employee group:

	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2017
Female employees	**13,792**	**13,712**
Full-time employees	8,513	8,546
Part-time employees	5,279	5,166
Male employees	**16,578**	**16,572**
Full-time employees	15,599	15,633
Part-time employees	979	939
Total	**30,370**	**30,284**

>> 54 Events after the balance sheet date

The biometric 2005 G mortality tables published by Professor Dr. Klaus Heubeck are used to estimate average life expectancy for the purposes of measuring the defined benefit obligation. New mortality tables (HEUBECK-RICHTTAFELN 2018 G) were published on July 20, 2018. This raises the question of how long measurement based on the previous mortality tables continues to be permitted without additional analysis of the new tables' impact on the level of the provision for defined benefit pensions. Based on a predefined illustrative workforce for commercial-law accounting purposes, HEUBECK AG assumes a general one-off increase in the defined benefit obligation of between 1.5 percent and 2.5 percent. For this reason, the DZ BANK Group is analyzing whether, and to what extent, the updated mortality tables will, for its own workforce structure, lead to a better estimate of the settlement value (December 31, 2017: €3,282 million).

>> 55 Board of Managing Directors

Wolfgang Kirsch
(Chief Executive Officer)
Responsibilities: Cooperative Banks/Verbund; Communication, Marketing, CR; Group Audit; Legal; Research and Economics

Uwe Berghaus
Responsibilities: Corporate Banking Northern and Eastern Germany; Corporate Banking Western Germany; Corporate Banking Central Germany; Corporate Banking Bavaria; Corporate Banking Baden-Württemberg; Investment Promotion; Structured Finance

Dr. Christian Brauckmann
Responsibilities: IT; Organization

Wolfgang Köhler
Responsibilities: Capital Markets Trading; Capital Markets Institutional Clients; Capital Markets Retail Clients; Group Treasury

Dr. Cornelius Riese
Responsibilities: Bank Finance; Group Finance; Group Financial Services; Strategy and Group Development

Michael Speth
Responsibilities: Compliance; Group Risk Controlling; Credit; Credit Special

Thomas Ullrich
Responsibilities: Group Human Resources; Operations; Payments & Accounts; Transaction Management

Stefan Zeidler
(Member of the Board of Managing Directors until March 31, 2018)

>> 56 General Executive Manager

Uwe Fröhlich

>> 57 Supervisory Board

Henning Deneke-Jöhrens
(Chairman of the Supervisory Board since May 30, 2018)
Chief Executive Officer
Volksbank eG Hildesheim-Lehrte-Pattensen

Helmut Gottschalk
(Chairman of the Supervisory Board until May 30, 2018)
Bank director (ret.)

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

Martin Eul
(Deputy Chairman of the Supervisory Board since May 30, 2018)
Chief Executive Officer
Dortmunder Volksbank eG

Werner Böhnke
(Deputy Chairman of the Supervisory Board until May 30, 2018)
Bank director (ret.)

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
(Member of the Supervisory Board since May 30, 2018)
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
Spokesman of the Board of Managing Directors
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
(Member of the Supervisory Board since May 30, 2018)
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 21, 2018

DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

The Board of Managing Directors

Kirsch Berghaus Dr. Brauckmann Köhler

Dr. Riese 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, 2018, 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 21, 2018

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Dr. Freiling	Mai
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	German Public Auditor)

Editorial information

DZ BANK AG
Deutsche Zentral-Genossenschaftsbank,
Frankfurt am Main
Platz der Republik
60325 Frankfurt am Main
Germany

Postal address:
60265 Frankfurt am Main
Germany

Telephone +49 (0)69 7447 01
Fax +49 (0)69 7447 1685
mail@dzbank.de
www.dzbank.com

Board of Managing Directors:
Wolfgang Kirsch (Chief Executive Officer)
Uwe Berghaus
Dr. Christian Brauckmann
Ulrike Brouzi (since September 1, 2018)
Wolfgang Köhler
Dr. Cornelius Riese
Michael Speth
Thomas Ullrich

General Executive Manager:
Uwe Fröhlich

This half-year financial report is available
in electronic form on our website at
www.halfyearreport.dzbank.com.

DZ BANK AG
Deutsche Zentral-Genossenschaftsbank,
Frankfurt am Main
Platz der Republik
60325 Frankfurt am Main
Germany

www.dzbank.com