LBEBW

Breaking new ground

Half-yearly financial report 2019



Key figures of the LBBW Group

Income Statement (EUR million)	1 Jan. 2019 - 30 June 2019	1 Jan. 2018 - 30 June 2018	
Net interest income	811	796	
Net fee and commission income	279	262	
Net gains/losses on remeasurement and disposal	144	135	
of which allowances for losses on loans and securities	- 63	- 33	
Other operating income/expenses	52	58	
Total operating income/expenses	1,286	1,250	
Administrative expenses	- 864	- 878	
Expenses for bank levy and deposit guarantee system	- 102	- 89	
Consolidated profit/loss before tax	319	282	
Income taxes	- 100	- 77	
Net consolidated profit/loss	219	206	
Key figures in %	1 Jan. 2019 - 30 June 2019	1 Jan. 2018 - 30 June 2018	
Return on equity (RoE)	5.0	4.4	
Cost/income ratio (CIR)	71.7	75.4	
Balance sheet figures (EUR billion)	30 June 2019	31 Dec. 2018	
Total assets	265.1	241.2	
Equity	13.0	13.2	
Ratios in accordance with CRR/CRD IV (after full implementation)	30 June 2019	31 Dec. 2018	
Risk-weighted assets (EUR billion)	82.2	80.3	
Common equity tier 1 (CET 1) capital ratio (in %)	14.6	15.1	
Total capital ratio (in %)	21.9	21.9	
Employees	30 June 2019	31 Dec. 2018	
Group	9,908	10,017	

Rating (01 August 2019)

Rating	Moody's Investors Service	Rating	Fitch Ratings
Long-term Issuer Rating	Aa3, stable	Long-term Issuer Default Rating	A-, stable
Long-term Bank Deposits	Aa3, stable	Long-term Deposit Rating	A-
Senior Unsecured Bank Debt	Aa3, stable	Long-term Senior Preferred Debt Rating	A-
Junior Senior Unsecured Bank Debt	A2	Long-term Senior Non-Preferred Debt Rating	A-
Short-term Ratings	P-1	Short-term Issuer Default Rating	F1
Baseline credit assessment (financial strength)	baa2	Viability rating (financial strength)	bbb +
Public-sector covered bonds	Aaa	Public-sector covered bonds	-
Mortgage-backed covered bonds	Aaa	Mortgage-backed covered bonds	-

Differences are due to rounding effects

Key figures of the LBBW Group

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Foreword by the Board of Managing Directors

Dear Readers,

In the first half of 2019, we continued to successfully press ahead with the refinement of our customer business along our four strategic cornerstones of business focus, digitalization, sustainability and agility.

We recorded profitable growth in our business with corporate and real estate customers and significantly expanded our financing volume. Our capital markets business achieved solid performance in difficult conditions. In particular, we again demonstrated our product expertise and placement ability in primary market business. In retail banking, we built on the positive development recorded in the previous year with growth in the financing and deposit volume alike.

At the same time, we made perceptible progress with regard to some of our key performance indicators. As of the end of June, our profit before tax was up around 13% on the previous year. Our cost/income ratio improved from 75.4% in the previous year to 71.7%. Our administrative expenses also declined. At 14.6%, we have a good common equity Tier 1 capital ratio. And we can be satisfied with return on equity of 5% in light of the challenging market environment and in a peer group comparison.

We are making progress in the strategically important area of sustainability. We supported additional green finance transactions for corporate customers in the first half of the year, including a positive incentive loan and a positive incentive Schuldschein. We also issued two large-volume green bonds of our own. In addition, we have significantly expanded the range of sustainable investment products for our private customers. Last but not least, we are pleased that our sustainability strategy has also been received positively by independent third parties in the form of extremely good placements in various ratings.

We are also pressing ahead with our digitalization initiatives. We successfully realized blockchain transactions on digital platforms for foreign trade (»Marco Polo« network) and commercial paper (»Weinberg« platform). Our digital Schuldschein platform "DEBTVISION" now has over 200 registered investors. We are also working hard to make additional central processes more efficient through digitalization and to optimize our customer interfaces.

It is also important for us to enhance our corporate culture in order to meet the changing expectations of our customers and the continuously evolving conditions on the market. To this end, we have adopted agile project methods in many areas of the Bank and are investing in the further training of our employees and managers.

Our Bank's encouraging results for the first half of the year are largely thanks to the outstanding efforts of the employees of the entire LBBW Group. We would like to sincerely thank them for their great commitment and loyalty.

We would also like to thank our customers, business partners and owners for the good cooperation and the trust they have placed in us.

We expect the deteriorating economic environment to also have an adverse effect on our business throughout the rest of the year. However, we are still aiming to achieve a mid-nine-figure profit for 2019 as a whole.

Sincerely,

The Board of Managing Directors

RAINER NESKE

Chairman

KARL MANFRED LOCHNER

THORSTEN SCHÖNENBERGER

Hon

MICHAEL HORN Deputy Chairman

DR. CHRISTIAN RICKEN

VOLKER WIRTH

Interim Group management Report

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Business report for the Group

Germany's economy slackened noticeably towards the end of the first half of 2019. GDP grew by 0.4% q-o-q in the first quarter, partly reflecting non-recurring effects in construction, the automotive industry and foreign trade. GDP growth was – 0.2% and 0.0% q-o-q in the two previous quarters. GDP in the euro area rose by 0.4% quarter-on-quarter in the first quarter, putting it just above GDP growth in the two previous quarters (0.2% in Q3 2018 and 0.3% in Q4 2018). Meanwhile, declining leading indicators suggest that growth momentum has since faded significantly in both Germany and in the eurozone. The ifo business climate fell five times in the period from January to June 2019, dropping to 97.4 in June 2019 – its lowest point since the end of 2014. In June 2019, the Economic Sentiment Index for the eurozone hit its lowest point since August 2016 at 103.3. Together with the factors behind the economic slowdown listed above, the ongoing US-China trade dispute is also weighing heavily on the economic outlook.

Inflation in Germany generally hovered around 1.5% in comparison to the previous year during the reporting period. Only in April was the 2% mark achieved, a result of Easter and the associated surge in prices for package trips and hotel stays. The situation was similar in the eurozone, with inflation peaking at 1.7% in April. Inflation ranged between 1.2% and 1.5% in the remaining months of H1. Price increases therefore slackened in the second half of 2018. From July 2018 to December 2018, inflation in Germany averaged 1.9% and in the eurozone 2.0%.

With annualized GDP growth of 3.1%, economic momentum in the US was largely on par with the previous quarters in Q1. In China, which has already released its figures for the first two quarters, GDP growth also almost kept pace with the second half of the year at 1.4% q-o-q in Q1 and 1.6% in Q2. Nonetheless, leading indicators for the US point to a slowdown in growth. The industrial purchasing managers index has decreased gradually since the beginning of the year, falling from 56.6 in January to 51.7 in June, meaning that it is now only scraping into expansionary territory (i.e. over 50 index points). The US Federal Reserve took into account the economic slowdown and, on 19 June, signaled that it would respond to the emerging downturn appropriately. Markets interpreted this as an indication of approaching interest rate cuts.

Monetary policy at the European Central Bank (ECB) also took on an expansive tone in the first half of the year as a result of growth slowing and pressure on prices easing. While the ECB's Governing Council left key rates unchanged in the reporting period at 0.00% for the main refinancing rate and - 0.40% for the deposit facility rate, on 7 March the Council resolved to continue to bolster the eurozone's economy in the future by providing liquidity in the longer-term. The ECB will thus offer a third series of targeted long-term tenders (TLTRO III) each quarter from September 2019 to March 2021. These operations will have a maturity of two years and, in the best case, will offer the participating commercial banks the opportunity to borrow from the ECB at an interest rate of 10 basis points above the deposit rate in place during the term. From the perspective of commercial banks, these terms are somewhat worse than those under the second series of operations (TLTRO II) that expire from June 2020 and that have a maturity of four years and, in the best case, an interest rate equal to the deposit rate. In addition, ECB President Mario Draghi - whose term ends at the end of October - raised the possibility of interest rate cuts in his keynote speech at a conference in the Portuguese city of Sintra in mid-June. According to Draghi and other ECB representatives, the bank may also resume net purchases of bonds, including sovereign bonds. Since the end of 2018, the Asset Purchase Program (APP) has been limited to reinvesting funds from maturing bonds that were previously purchased from Eurosystem as part of the APP.

On the market, the gloomier economic outlook and statements from the ECB triggered a new slide in yields for German Bunds, with yields for 10-year German government bonds plummeting to a record low of – 0.40% at the start of the third quarter. Yields on 2Y Bunds fell to – 0.77%. However, far lower yields of only just over – 1% were also recorded for these in February 2017.

Stock market prices performed well, in spite of the political and economic risks. The DAX closed out the end of 2018 at 10,558 points. Thanks to hopes of monetary policy easing and the prospect of an agreement being reached in the US-China trade conflict, Germany's benchmark index rose to 12,398 points after the first six months of the year. The benchmark for the US stock exchanges, the Dow Jones Industrials, began at 23,327 points and also ended the first half-year significantly higher at 26,599. Price increases continued at the start of H2, with the index exceeding 27,000 points for the first time in its history.

The euro lost some ground against the US dollar on the currency market. A euro was worth USD 1.15 at the beginning of the year, and was down to USD 1.13 after six months. The rate fluctuated only marginally and remained between 1.15 and 1.11 on the basis of ECB reference rates. The pound sterling should also be noted when discussing euro exchange rates against other major currencies. GBP opened the year at GBP 0.90 to the euro, then rose to EUR 0.85 in March before dropping back to almost GBP 0.90 to the euro at the end of the first half-year. Market observers ascribe this to worries of the United Kingdom leaving the EU without a deal. The withdrawal date had previously been postponed on multiple occasions as parliament refused to back the government's plan and recently caused Prime Minister May to step down. The appointed Prime Minister Boris Johnson has promised that the country will leave the EU by the end of October at the latest.

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Business performance of the LBBW Group in the first half of 2019 Results of operations, net assets and financial position

Successful first half-year with improved earnings before taxes and strategic cornerstones refined

Conditions in the banking sector remained extremely challenging in the first half of 2019. Alongside persistently low interest rates weighing heavily on banks' result of operations, the sector is facing significant challenges as a result of technological change towards digital platforms with enormous market power, ongoing regulatory pressure, complex political conditions and stiff competition.

With its company strategy adopted in 2017 and the related four strategic cornerstones of business focus. sustainability, digitalization and agility, LBBW considers it has put the right systems in place to tackle the challenges and shape its own future. Improved results and lower costs since 2017 both show that the path taken is paying off. The strategic approach was refined in the first half of 2019 in all strategic cornerstones, with business performance focusing on continued growth by intensifying existing and gaining new client relationships, particularly in the new core sectors utilities and energy, pharmaceuticals and healthcare and telecommunication-media-technology (TMT), in order to diversify the credit portfolio. Further evidence that the business focus has been strengthened was provided by strong new business in Real Estate/Project Finance. The financing and deposit volume with private customers also saw an upturn, especially with high-net-worth private clients. Numerous digitalization initiatives made good progress, including developing the DEBTVISION platform, which now has over 200 registered investors. For the first time, trading transactions were handled on a blockchain basis using the international trade finance network Marco Polo. Money market instruments were also purchased and sold based entirely on blockchain for the first time ever through Weinberg Capital DAC, the first digital platform for money market instruments. Both financing and investment proposals for customers took into account sustainability aspects; for example, a positive incentive loan was concluded with Voith and a credit line via a banking consortium was taken out with the public services company Stadtwerke München, whereby interest rate terms are tied to the energy provider lowering CO2 emissions. Agile working methods were further cemented at the Group and help advance projects and software development more quickly and efficiently.

Consolidated profit/loss before tax improved perceptibly by EUR 36 million to EUR 319 million after the first six months of the year under review (previous year: EUR 282 million), thereby significantly exceeding the forecast figure. In addition to declining administrative expenses, the positive development was also lifted by net gains on remeasurement and disposal, which benefited from the effects described below under »Results of operations«. Net fee and commission income also developed well, although it was slightly lower than expected due to the negative impact of low interest rates in the deposit business.

With expenses holding more or less steady, *the cost/income ratio (CIR)* improved by 3.7 percentage points to 71.7% as at 30 June 2019 (previous year: 75.4%), driven mainly to a rise in income. This was a slight improvement against the target, with aperiodic cost development also having a positive impact. LBBW calculates its CIR as the ratio of total administrative expenses, expenses for the bank levy and deposit guarantee system and net restructuring income to total net interest income, net fee and commission income, net gains/losses on remeasurement and disposal less allowances for losses and other operating income/expenses. *Return on equity (ROE)* improved by 0.7 percentage points to 5.0% (previous year: 4.4%), significantly above target, thanks to good earnings performance. RoE as a performance indicator is calculated on the basis of (annualized) consolidated profit/loss before tax and average equity on the balance sheet. This figure is adjusted for the unappropriated profit for the current period.

Total assets rose moderately by EUR 23.9 billion as against 31 December 2018 to EUR 265.1 billion, slightly ahead of the planned figure for the end of 2019. The increase in total assets chiefly reflects growth in the securities repurchasing business and an expansion of business activities with major corporate customers and real estate financing, both in Germany and in new target markets such as Canada. Securities purchases to manage the LCR ratio also contributed to growth.

LBBW's *leverage ratio* was 4.3% as at the end of the reporting period (fully loaded in accordance with CRR/CRD), and was thus down moderately by 0.4 percentage points as against the previous year, primarily a result of expanding business activities. This remains significantly above the current regulatory minimum of 3.0%.

As at 30 June 2019, LBBW's *minimum liquidity coverage ratio (LCR)* under Commission Delegated Regulation (EU) 2015/61 with regard to liquidity coverage requirements was 141.9%, representing a 27.1 percentage point rise on the figure at the end of 2018 (114.8%). This increase resulted primarily from a higher volume of reverse repos, a rise in net cash inflows from both unsecured transactions and inflows from secured lending and capital market transactions. The statutory minimum for 2019 of 100% was therefore substantially exceeded.

Risk-weighted assets rose slightly by EUR 1.9 billion in the period under review to EUR 82.2 billion (previous year: EUR 80.3 billion). This was essentially due to growth in customer business. At the same time, market price risks reduced for the portion calculated in accordance with the internal model thanks to the changed presentation of Schuldscheine from the German federal states.

The LBBW Group's *capital ratios* as at the end of the reporting period remained well in excess of the regulatory capital requirements (CRR/CRD IV fully loaded). Specifically, the *common equity Tier 1 capital ratio* was 14.6% (31 December 2018: 15.1%) and the *total capital ratio* was 21.9% (31 December 2018: 21.9%).

The European Central Bank (ECB) informed LBBW that it is required to maintain a common equity Tier 1 capital ratio of 9.75% as at 1 March 2019. This ratio includes the Pillar 2 capital requirement and the common equity Tier 1 capital to be maintained as a capital conservation buffer in accordance with section 10c of the German Banking Act (KWG) and as a capital buffer in accordance with section 10g KWG for other systemically important institutions. The ECB has also declared a capital recommendation that goes beyond the mandatory requirement, which must also comprise CET1 capital.

The LBBW Group's risk-bearing capacity is also at a comfortable level. The utilization of *aggregate risk cover (ARC)* rose to 57.8% as at the end of the reporting period (31 December 2018: 42.4%). In particular, this increase resulted from the implementation of the ICAAP guideline as at the end of the first half of 2019, which lowered aggregate risk cover by EUR 4.8 billion in comparison to the end of 2018, chiefly because subordinated capital is no longer recognized by regulatory bodies for the economic capital account.

The development in the LBBW Group's key performance indicators was stable overall as against the end of 2018 in the first half of 2019.

Results of operations

With **profit before tax** of EUR 319 million in the first half of the 2019 financial year, LBBW significantly exceeded the previous year's figure by EUR 36 million. The condensed income statement for the LBBW Group has been presented below (please also see the comments in the notes for the figures for the individual segments):

	1 Jan. 2019 - 30 June 2019	1 Jan. 2018 - 30 June 2018	Char	nge
	EUR million	EUR million	EUR million	in %
Net interest income	811	796	15	1.9
Net fee and commission income	279	262	17	6.5
Net gains/losses on remeasurement and disposal	144	135	9	6.8
of which allowances for losses on loans and securities	- 63	- 33	- 30	89.9
Other operating income/expenses	52	58	- 6	- 9.6
Total operating income/expenses	1,286	1,250	36	2.9
Administrative expenses	- 864	- 878	14	- 1.6
Expenses for bank levy and deposit guarantee system	- 102	- 89	- 13	14.8
Consolidated profit/loss before tax	319	282	36	12.9
Income taxes	- 100	- 77	- 23	30.3
Net consolidated profit/loss	219	206	13	6.4

Figures may be subject to rounding differences. Percentages are based on the exact figures

Increasing by EUR 15 million to EUR 811 million, *net interest income* was slightly higher than in the previous year (EUR 796 million). This upturn benefited particularly from an expansion in business with major corporate customers and in the area of real estate financing, from stable financing margins reported in business with SME customers and large corporations. Ongoing historically low interest rates particularly strained the deposit business, which also saw high pressure on margins on account of the level of competition. While short-term interest rates in the daily and monthly ranges remained virtually unchanged, 10-year German government bonds shifted significantly into negative territory with a yield of – 0.33% as at 30 June 2019 – a decline of 63 basis points against 30 June 2018. The contribution from the ECB's targeted longer-term refinancing operations II (TLTRO II) shrank by EUR 14 million to EUR 8 million.

Net fee and commission income increased moderately in the first half of 2019 by EUR 17 million to EUR 279 million (previous year: EUR 262 million). Income from the lending business picked up by EUR 7 million to EUR 34 million, thanks largely to growth in business with large corporate customers. In addition, securities and custody business generated net fee and commission income of EUR 99 million, an improvement of EUR 4 million. The securities and underwriting business performed particularly well from issuing debt securities.

Net gains/losses on remeasurement and disposal improved moderately by EUR 9 million to EUR 144 million (previous year: EUR 135 million) and was defined by the at times opposing effects described below.

Net income from investments accounted for using the equity method fell by EUR 25 million to EUR 2 million, after being shaped in the previous year by reversals of write-downs to a higher fair value at an associate.

Individual cases had a particularly negative impact on *allowances for losses on loans and securities*, which rose significantly by EUR 30 million against the previous year to EUR – 63 million. Nonetheless, LBBW continues to enjoy good portfolio quality, as demonstrated by a rise in the exposure share in the investment grade range and an ongoing low share of defaults in relation to the overall portfolio.

The marked upturn in net income from *financial instruments measured at fair value through other comprehensive income* was caused in particular by higher contributions from sales of securities as part of managing the LCR portfolio. As a result net income from securities increased by EUR 30 million to EUR 43 million.

Net gains/losses from *financial instruments measured at fair value through profit or loss* climbed sharply by EUR 33 million to EUR 162 million (previous year: EUR 129 million). Capital market activities played a key role here and were reflected in the EUR 12 million upturn in the result, which rose to EUR 128 million. The contribution from banking book management also climbed by EUR 17 million. A key contributory factor here was the EUR 36 million improvement in the measurement results from derivative financial instruments. Net income from hedge accounting, which deteriorated from EUR – 11 million to EUR – 24 million, had an adverse effect. Net gains/losses from equity investments and other equity instruments reported with net gains/losses from financial instruments measured at fair value through profit or loss as an element of banking book activities amounted to EUR 7 million as at 30 June 2019. (previous year: EUR 33 million). The previous year's result was particularly affected by a subsequent purchase price payment in connection with a disposal of an equity investment in 2015.

Other operating income/expenses declined by EUR 6 million and came to EUR 52 million (previous year: EUR 58 million). There were also the following opposing effects. Net income from the sale of properties saw a particular downturn, falling by EUR 8 million. Additional expenses of EUR 12 million (net) were also incurred as a result of legal issues. This included net transfers to provisions of EUR 42 million. However, the first-time consolidation of the targens GmbH subsidiary boosted net income from construction contracts by EUR 5 million (previous year: EUR 0 million). In addition, higher lease income and fair value adjustments increased net income from investment properties by a total of EUR 6 million.

Despite continued high investment in the restructuring and modernization of IT, *administrative expenses* fell marginally by EUR 14 million year-on-year to EUR – 864 million (previous year: EUR – 878 million). As a result of including targens GmbH in the basis of consolidation, staff costs rose by EUR 11 million to EUR – 507 million at Group level (previous year: EUR – 497 million). At the same time, staff costs declined at LBBW Bank. Other administrative expenses declined considerably by EUR 40 million to EUR – 291 million (previous year: EUR – 331 million). This chiefly reflected lower IT, legal and consulting costs and the effect of the first-time application of the new accounting standards for recognizing leases (IFRS 16). This caused expenses that were previously shown as minimum leasing payments to be shifted to writedowns and interest expense, as IFRS 16 requires the lessee to recognize right-of-use assets and lease liabilities. Right-of-use assets are subject to depreciation, which also explains the substantial increase in depreciation of EUR 16 million.

The EUR 13 million rise in *expenses for bank levy and deposit guarantee system* to EUR – 102 million was caused in part by allocations to the guarantee system of the Sparkassen-Finanzgruppe as a result of negotiations to support NordLB. Changes made by the German Federal Financial Supervisory Authority (BaFin) regarding the method of calculating the risk adjustment multiplier, in particular the first-time use of a new risk indicator, have had a detrimental effect on LBBW's relative position in comparison to other banks in terms of the contribution to the bank levy. Although the contribution volume remained unchanged, the number of contributing banks once again fell by around 200, increasing LBBW's contribution.

At EUR 319 million, *consolidated profit before tax* was up EUR 36 million on the previous year. Despite income tax expenses rising to EUR – 100 million (previous year: EUR –77 million), *net consolidated profit/loss after taxes* increased by EUR 13 million to EUR 219 million after the first six months of 2019 (previous year: EUR 206 million).

Net assets and financial position

	30 June 2019	31 Dec. 2018	Change	
Assets	EUR million	EUR million	EUR million	in %
Cash and cash equivalents	16,774	24,721	- 7,947	- 32.1
Financial assets measured at amortized cost	178,756	157,127	21,629	13.8
Loans and advances to banks	55,116	46,749	8,367	17.9
Loans and advances to customers	122,020	109,231	12,788	11.7
Debentures and other fixed-income securities	1,619	1,146	474	41.3
Financial assets measured at fair value through other comprehensive income	27,371	22,821	4,550	19.9
Financial assets designated at fair value	1,214	1,207	7	0.6
Financial assets mandatorily measured at fair value through profit or loss	33,570	29,803	3,767	12.6
Shares in investments accounted for using the equity method	261	266	- 5	- 2.0
Portfolio hedge adjustment attributable to assets	899	569	329	57.9
Non-current assets held for sale and disposal groups	61	24	37	> 100.0
Intangible assets	210	224	- 14	- 6.2
Investment property	684	697	- 14	- 2.0
Property and equipment	796	463	333	72.0
Current income tax assets	173	142	31	21.7
Deferred income tax assets	1,142	1,133	9	0.8
Other assets	3,208	2,017	1,191	59.1
Total assets	265,119	241,214	23,905	9.9

	30 June 2019	31 Dec. 2018	Change	Change	
Equity and liabilities	EUR million	EUR million	EUR million	in %	
Financial liabilities measured at amortized cost	208,008	190,388	17,619	9.3	
Deposits from banks	71,831	63,585	8,246	13.0	
Deposits from customers	87,278	82,481	4,797	5.8	
Securitized liabilities	42,792	38,827	3,965	10.2	
Subordinated capital	6,106	5,495	612	11.1	
Financial liabilities designated at fair value	7,824	7,613	211	2.8	
Financial liabilities mandatorily measured at fair value through profit or loss	29,033	24,478	4,555	18.6	
Portfolio hedge adjustment attributable to liabilities	726	297	429	> 100.0	
Provisions	4,287	3,916	370	9.5	
Income tax liabilities	69	58	11	18.1	
Other liabilities	2,194	1,283	911	71.0	
Equity	12,978	13,179	- 202	- 1.5	
Total equity and liabilities	265,119	241,214	23,905	9.9	
Guarantee and surety obligations	7,778	7,583	195	2.6	
Irrevocable loan commitments	28,454	25,476	2,979	11.7	
Business volume	301,351	274,273	27,078	9.9	

Upturn in consolidated total assets

As at 30 June 2019, *total assets* were up EUR 23.9 billion as against the end of 2018 at EUR 265.1 billion. This increase essentially stems from continued growth in customer business and the higher volume in securities repurchase transactions. The developments in equity and liabilities were chiefly shaped by the rise in short-term refinancing.

The *business volume* (consolidated total assets including the off-balance-sheet surety and guarantee agreements and irrevocable loan commitments) amounted to EUR 301.4 billion, up EUR 27.1 billion on the figure as at 31 December 2018. In addition to the change in total assets in the reporting period, the increase was due to a rise in irrevocable loan commitments.

The mandatory application of accounting regulation IFRS 16 from 1 January 2019 resulted in changes to the recognition of lease assets. This replaces the previous accounting regulations of IAS 17 and the interpretations IFRIC 4, SIC 15 and SIC 27. The transition particularly affects accounting by the lessee, for whom the standard provides a single accounting model. Under this model, lessees are required to recognize all assets and liabilities from leases. The first-time adoption led to an increase in total assets of EUR 387 million.

Lending

Cash and cash equivalents amounted to EUR 16.8 billion as at 30 June 2019, EUR 7.9 billion lower than the figure for the previous year. This decline was essentially a result of lower central bank balances.

The item *Financial assets measured at amortized cost* rose considerably by EUR 21.6 billion to EUR 178.8 billion, attributable almost entirely to loans and advances to customers or loans and advances to banks.

Loans and advances to banks rose by EUR 8.4 billion, bringing their total to EUR 55.1 billion at the end of the reporting period. This primarily reflected the EUR 5.1 billion increase in securities repurchasing business with European banks and central counterparties. Overnight and term deposits also saw a rise of EUR 1.8 billion and public-sector loans of EUR 0.7 billion.

The portfolio of *loans and advances to customers* rose by EUR 12.8 billion to EUR 122.0 billion thanks to the upturn in lending business with large corporate customers and real estate financing as at 30 June 2019, a result of successfully adopting the growth strategy. The largest increase in volume was seen in the securities repurchasing business, which climbed by EUR 7.3 billion to EUR 19.3 billion. In addition, other loans rose by EUR 1.8 billion, current account claims by EUR 1.0 billion, overnight and term deposits also by EUR 1.0 billion and mortgage loans by EUR 0.9 billion.

Financial mandatorily assets measured at fair value through other comprehensive income saw a EUR 4.5 billion rise to EUR 27.4 billion. New business boosted bonds and debt securities by EUR 3.2 billion, partly in connection with securities purchases for a portfolio to manage the LCR. Money market instruments, in particular commercial papers and certificates of deposit, increased by EUR 1.0 billion as a result of expanding market presence abroad.

Financial mandatorily assets measured at fair value through profit or loss also increased by EUR 3.8 billion to EUR 33.6 billion. In addition to growth in the volume of new business, the sharp decline in interest rates in the first half of 2019 caused positive fair values from derivatives to rise by EUR 5.1 billion. On the other hand, other receivables from trading assets were down EUR 0.7 billion and promissory notes held for trading by EUR 0.3 billion.

Funding

In line with developments under assets, the item *financial liabilities measured at amortized cost* was affected by the most significant changes in volume in comparison to the previous year, with growth of EUR 17.6 billion to EUR 208.0 billion.

Deposits from banks climbed by EUR 8.2 billion to EUR 71.8 billion. In particular, this development was due to an increase in overnight and term deposits of EUR 5.8 billion. Transmitted loans saw an upturn of EUR 1.1 billion.

At EUR 87.3 billion, the item *deposits from customers* was up EUR 4.8 billion year-on-year – a moderate increase. The volume of current account liabilities increased by EUR 2.2 billion, with overnight and term deposits rising by EUR 1.8 billion. The German states and authorities in particular, but also high net worth private clients, increasingly turned to LBBW to invest their cash funds. Securities repurchasing business also saw growth of EUR 0.8 billion.

The volume of *securitized liabilities* expanded by EUR 4.0 billion in the reporting period to EUR 42.8 billion. Short-term refinancing via securitized money market transactions was expanded, increasing by EUR 3.7 billion. Sustainability is firmly established in LBBW's business model, both in strategic and operating terms, and so expertise was also boosted in the sustainable investments market segment. Neutral rating agencies regularly review LBBW's commitment to sustainability in all business areas and have attested to this by awarding high ratings. This is also demonstrated by the issue implemented within one week, as well as a green mortgage covered bond with a volume of USD 750 million and a term of three years and the first unsecured green senior non-preferred bond with a volume of EUR 750 million and a term of a term of five years. On the other hand there were maturities so that overall there was only a moderate increase of EUR 0.3 billion in bond issues.

Financial liabilities designated at fair value remained around the previous year's level, increasing by EUR 0.2 billion, as maturities offset the volume of new business. However, new bond issues increased Schuldschein loans and subordinated bonds by EUR 0.1 billion each.

As in the items under assets, *financial liabilities mandatorily measured at fair value through profit or loss* rose slightly by EUR 4.6 billion to EUR 29.0 billion. Regarding the expansion of new business, the sharp decline in interest rates in H12019 had an impact on the measurement of derivatives, resulting in a EUR 3.6 billion rise in negative fair values from derivatives. Securitized liabilities also increased by EUR 0.6 billion.

Equity

At EUR 13.0 billion as at 30 June 2019, LBBW's *equity* was virtually unchanged as against 31 December 2018 (previous year: EUR 13.2 billion). Current net income of EUR 0.2 billion offset the distribution of dividends to shareholders of EUR 0.3 billion. Another significant reduction in interest rate levels once again reduced the interest rate for discounting pension obligations from 1.73% to 1.12%. This resulted in actuarial losses of EUR 0.2 billion (net).

Financial position

LBBW's funding strategy is determined by the Asset Liability Committee (ALCo). Here the Group focuses on ensuring a balanced overall structure in terms of the groups of products and investors used. The Group's financial position was satisfactory throughout the entire first half of 2019 thanks to the good liquidity situation. LBBW was able to obtain funding to the desired extent at all times. CRR banks have been required to maintain a *liquidity coverage ratio (LCR)* of 100% since 1 January 2018. During the entire reporting period, the LCR was overfulfilled.

Risk report Risk management systems

The risk management methods and processes presented in the combined management report as at 31 December 2018 are still applied by the LBBW Group as at 30 June 2019. Material changes are described below.

Risk types

Detailed notes on the definition of risks and on the risk management system as a whole can be found in the combined management report for 2018. The following table provides a brief overview:

Risk category	Describes possible
Counterparty default risks	Losses arising from the default or deterioration in the credit rating of business partners. Defaults by sovereign borrowers or restrictions on payments. Losses arising from shortfall in proceeds from the liquidation of collateral.
Market price risks	Losses caused by changes in interest rates, credit spreads, equity prices, exchange rates, commodity prices, volatility. Problem of not being able to quickly close out larger positions at market value.
Liquidity risks	Problems meeting payment obligations in the short term.
Operational risks	Losses arising from the unsuitability or failure of internal processes and systems, people, or due to external events, including legal risks.
Investment risks	Losses in the value of Group companies and equity investments not included in the above risk categories.
Reputation risks	Losses caused by damage to the Bank's reputation.
Business risks	Losses due to less favorable business performance than expected or from strategic errors, provided that they do not relate to the aforementioned characteristic banking risks.
Pension risks	Increase in provisions for pensions.
Real estate risks	Losses in the value of the Group's real estate holdings.
Development risks	Losses resulting especially from potential plan variances in the project development business of LBBW Immobilien Management GmbH.
Model risks	Losses that can arise as a result of decisions that are based on the result of models. Triggering factors could include errors in the concept, application and validation of models.

Regulatory framework and development of the risk management process

On 4 November 2014, the ECB assumed the supervision of LBBW within the framework of the Single Supervisory Mechanism (SSM). LBBW is assigned to Directorate General I within the ECB's banking supervision, which monitors the most important banks.

One of the core tasks of the ECB is to carry out an independent assessment and review of banks' capital and liquidity resources. The central tool used here is the Supervisory Review and Evaluation Process (SREP). In addition to workshops, data queries and requests for information on various focus areas, stress tests are also an important supervisory tool.

As part of its annual supervisory stress tests, the ECB conducted a sensitivity analysis on the liquidity risk in 2019 to assess supervised banks' ability to manage idiosyncratic liquidity shocks. Including the supervisory quality assurance process, data was collected from February to the end of May of this year.

In the liquidity stress test, the ECB presented the banks with adverse and extreme hypothetical liquidity shocks in which the banks were faced with increasing liquidity outflows over a period of six months. The focus was on the banks' expected cash flows in the scenario adopted. On this basis, a survival period was calculated as a key parameter, i.e. the number of days for which a bank can maintain its operations in a crisis using its available cash and securities and without access to refinancing markets.

The supervisory liquidity stress test has no minimum passing requirement. The results of the stress test are included in the management's current supervisory assessment of the banks' liquidity risks and in the Supervisory Review and Evaluation Process (SREP). The supervisory authorities do not plan to publish the results of individual banks.

In addition to the liquidity stress test, the ECB has published other priorities for its supervisory work in 2019. Risks in conjunction with the business model and profitability are further monitored as part of ongoing supervisory work. The key focal topics of credit risk (non-performing loans, quality of lending guidelines and exposures) and risk management (targeted review of internal models, ICAAP/ILAAP, IT and cyber risks) remain largely unchanged. There are also activities with several risk dimensions, such as Brexit preparations, trade risks and measuring assets.

On 12 November 2018, the ECB released guidance relating to banks' internal processes for ensuring adequate capital and liquidity (ICAAP/ILAAP guidelines), which it takes into account for the 2019 SREP. Solid internal processes regarding adequate capital and liquidity are based on two complementary pillars – a regulatory and an economic perspective. Regulatory authorities review and assess the quality of these internal bank processes each year and the results are included in the bank-specific provisions regarding capital and liquidity requirements.

The LBBW Group has mechanisms in place to identify changing regulatory provisions and to take suitable measures as required and therefore already took preparatory measures in anticipation of modified requirements regarding the structure of internal bank processes for ensuring adequate capital and liquidity in 2018. Additional changes were made to methodology in 2019. This resulted in an increase in the utilization of aggregate risk cover in comparison to 31 December 2018.

The Basel Committee on Banking Supervision released BCBS 239 »Principles for effective risk data aggregation and risk reporting". The BCBS 239 aims to improve governance, the entire process chain for generating risk reports and risk reporting, thereby increasing the decision making processes at banks. In addition to the long-term, fundamental IT restructuring of integrated bank management, which plays a key role in meeting the technical BCBS 239 targets, a specialist implementation project has since been completed. BCBS 239 has been binding at LBBW since May 2019.

LBBW's integrated bank management is currently undergoing further development. The focus is on harmonizing the accounting systems and reporting structures between the steering segments finance, Group risk and financial controlling, and on creating the basis (processes, methods, IT) for further aligning integrated bank management with the more stringent requirements. The structural aspects are being addressed in a medium-term program.

Risk situation of the LBBW Group

LBBW manages its risks from two mutually complementary perspectives. To ensure adequate capitalization from an economic point of view, a Group-wide compilation of risks across all material risk types and subsidiaries, and the comparison of these with the capital calculated from an economic perspective (aggregate risk cover). Since the end of Q12019, risk-bearing capacity has been calculated, in accordance with the ECB's ICAAP guideline, at a confidence level of 99.9% with a narrow definition of capital without taking into consideration subordinated liabilities. In addition to the economic perspective, LBBW's risk appetite and management concept includes the regulatory steering group. This steering group is responsible for ensuring compliance with regulatory capital and risk parameters at all times. To this end, internal targets are set (tolerance levels above the minimum regulatory requirements) and compliance is ensured by way of an ongoing monitoring process. Details on the regulatory key figures can be found in the report on results of operations, net assets and financial position, the notes and in the section on liquidity risks.

The economic capital commitment has declined by a total of EUR 0.2 billion since the end of 2018. As part of implementing the ICAAP guideline, the confidence level was adjusted from 99.93% to the supervisory standard of 99.9%. The reduction in counterparty default risks and operational risks is particularly due to this change in method. For market price risks, this effect is more than offset by portfolio changes and an additional change to methodology.

As at the end of the first half of 2019, aggregate risk cover (ARC) had declined by EUR 4.8 billion compared to the end of 2018 as a result of the implementation of the ICAAP guideline. This reduction chiefly reflects the fact that subordinated capital is no longer recognized by regulatory bodies for the economic capital account in the amount of EUR 4.7 billion as at 31 December 2018.

To sum up, it can be stated that the risk-bearing capacity of the LBBW Group was maintained at all times during the first half of 2019, even taking into account new methodology. The stress resistance required in the sense of permanent viability was also guaranteed at all times, taking into account short-term effective measures.

The economic capital limit was maintained at all times at Group level. The utilization of aggregate risk cover was 58% as at 30 June 2019.

LBBW Group - Risk-bearing capacity

	30 June	2019 31 Dec. 2018		2018
EUR million	Absolute ¹	Utilization	Absolute ¹	Utilization
Aggregate risk cover	12,044	58%	16,838	42%
Economic capital limit ²	10,000	70%	12,800	56 %
Correlated total economic capital	6,956		7,146	
of which:				
interrisk correlations	- 470		- 481	
Counterparty default risks	3,707		4,086	
Market price risks	2,234		1,885	
Investment risks	41		40	
Operational risks	628		790	
Development risks	144		146	
Real estate risks	125		123	
Other risks ³	547		558	

Confidence level 30 June 2019: 99.9 %/one year holding period, 31 December 2018: 99.93 %/one year holding period.
 The individual risk types are capped by economic capital limits.
 Other risks (particularly reputation, business, pension and model risks).

Risk types¹

Counterparty risk

Risk situation of the LBBW Group²

The description of the risk situation is based on the credit risk management methods and instruments described in the combined management report for 2018.

The primary parameter in the following comments is gross/net exposure. In this context, gross exposure is defined as the fair value or utilization plus outstanding external loan commitments. Net exposure also takes risk-mitigating effects into account. These include netting and collateral agreements, the hedging effect of credit derivatives or the inclusion of classic credit collateral such as real estate liens, financial collateral, guarantees or bonds.

In addition to the following tables, detailed overviews broken down by rating classes, sectors, regions and size classes have been added to note 29 (Counterparty risk) in accordance with the disclosure requirements under IFRS 7.

Development of exposure

The following table shows the performance of the two exposure variables and the risk-mitigating effects on the respective reporting date.

Development of exposure

EUR million	30 June 2019	31 Dec. 2018
Gross exposure	374,911	317,242
Netting/collateral	119,817	79,608
Credit derivatives (protection buy)	6,648	7,210
Classic credit collateral	41,906	41,547
Net exposure	206,541	188,878

Gross exposure amounts to EUR 375 billion as at the end of the reporting period, and is therefore around EUR 58 billion higher than as at the end of 2018, induced primarily by the market performance of interest rate derivatives. As a result of the simultaneous increase in the risk-reducing effects of netting and collateral agreements and despite a decline in credit derivatives (protection buy), the increase is not fully reflected in net exposure. Net exposure rose by EUR 18 billion or 9% to EUR 207 billion.

The information below on portfolio quality, sectors, regions and size classes provide an overview of the aspects relevant to the LBBW Group's risk situation on the basis of its net exposure.

Portfolio quality

The breakdown by internal rating class shows the year-on-year development in portfolio quality.

Portfolio quality

	EUR million	in %	EUR million	in %
Net exposure	30 June 2019	30 June 2019	31 Dec. 2018	31 Dec. 2018
1(AAAA)	31,284	15%	25,776	14%
1(AAA) - 1(A-)	97,520	47%	89,474	47 %
2 - 5	56,376	27%	52,662	28 %
6 - 8	14,418	7%	13,863	7 %
9 - 10	2,691	1%	2,786	1 %
11 - 15	1,662	1%	1,702	1 %
16 - 18 (default) ¹	804	0%	848	0 %
Other ²	1,785	1%	1,767	1 %
Total	206,541	100 %	188,878	100 %

1 »Default« refers to exposure for which a default event as defined in Art. 148 CRR has occurred, e.g. improbability of repayment or 90-day default.

The net exposure is presented before impairment. 2 Includes non-rated transactions, in particular rating waivers.

The LBBW Group's portfolio has a high quality. The investment grade share (ratings of 1(AAAA) to 5) increased slightly to 89.7% (31 December 2018: 88.9%), chiefly as a result of an increase in exposure with good credit ratings. Accordingly, the non-investment grade share of the portfolio (ratings 6 to 15) fell to 9.1% (previous year: 9.7%). The top rating class 1 (AAAA) mainly includes German non-central public-sector entities. The non-performing exposure was also slightly reduced further to 0.4% of the entire portfolio, in line with the trend of previous years.

Sectors

The presentation of the sectors by net exposure, credit value-at-risk (CVaR) and default portfolio also provides information on the scope of business activities and the risk situation in the respective sector. The sector classification is based on LBBW's internal risk-oriented industry code that corresponds with the organizational risk management responsibilities in the corporates portfolio. The sector structure was optimized in 2018, which included the introduction of new focus sectors (e.g. pharmaceuticals and healthcare).

The Group CVaR is lower than in the previous year. This decline is attributable primarily to methodological changes¹, which led to opposing developments in comparison to the increase in net exposure.

Sectors

EUR million	Net exposure 30 June 2019	CVaR 30 June 2019	Net exposure on default 30 June 2019	Net exposure 31 Dec. 2018	CVaR 31 Dec. 2018	Net exposure on default 31 Dec. 2018
Financials	88,111	853	52	75,395	892	32
of which transactions under specific public-sector liability ¹	12,087	8	0	6,277	29	0
Corporates	81,158	1,807	685	77,277	2,141	727
Automotive	12,591	371	161	12,903	439	140
Construction	7,462	167	62	6,615	190	65
Chemicals and commodities	6,816	134	42	5,945	139	46
of which chemicals	3,112	59	5	2,963	69	5
of which commodities	3,704	75	37	2,981	71	40
Retail and consumer goods	12,959	299	165	13,024	366	149
of which consumer goods	9,126	183	52	9,350	233	70
of which durables	3,833	116	113	3,674	133	80
Industry	9,752	193	97	9,342	228	100
Pharmaceuticals and healthcare	4,495	84	7	4,139	105	9
TM and electronics/IT	7,186	126	55	6,157	145	60
Transport and logistics	5,811	130	7	5,862	167	7
Utilities and energy	7,975	207	42	7,644	244	96
of which utilities and disposal companies	4,458	93	34	4,148	114	37
of which renewable energies	3,517	114	8	3,496	130	59
Other	6,111	96	47	5,647	118	54
Real Estate	11,115	379	37	10,390	424	56
Commercial real estate (CRE)	7,769	311	26	6,985	339	36
Housing	3,346	68	11	3,404	85	20
Public sector	20,745	220	0	20,586	266	0
Private individuals	5,413	103	30	5,229	110	33
Total	206,541	3,362	804	188,878	3,833	848

1 This figure shows transactions with a statutory guarantee (Gewährträgerhaftung) and transactions with central banks and banks with a public-sector background.

Financials represent the largest of the five main sectors with net exposure of EUR 88 billion as at the end of the reporting period. The increase of EUR 13 billion as against the end of 2018 is essentially due to the increased exposure to central banks and private banks. The rise in exposure to central banks also entails a higher number of transactions under special public-sector liability.

In the corporates portfolio, above all the TM and electronics/IT, chemicals and commodities and construction sectors contributed EUR 4 billion to exposure, bringing the total to EUR 81 billion in the first half of 2019. As in the previous year, automotive is the most important sector in the portfolio in terms of concentration aspects and will therefore be monitored closely in the interests of managing sector concentrations. The current economic slowdown, political risks and, in particular, the impact of technological change (primarily e-mobility, autonomous driving) on manufacturers and suppliers are assessed on an ongoing basis and incorporated into the company and credit analyses.

In addition to the automotive sector, commercial real estate is one of the most important sectors in the portfolio. Having diversified our strategic locations, we do not see any excessive concentration risk in this portfolio. Growth in commercial real estate increased the net exposure in real estate as a whole by EUR 1 billion year-on-year to EUR 11 billion.

Public-sector net exposure is on par with the previous year at EUR 21 billion.

The private individuals portfolio was also stable and has a particularly high level of granularity.

Regions

The share of domestic business in the net exposure is 65.9%. The basic distribution by region is largely constant, although there were regional shifts in North America due to a rise in exposure to the central bank as at the end of the reporting period. The focus on the stable and low-risk core markets in private, SME and large customer business, and the function as a central bank for the savings banks, will ensure a dominant German share in the future as well.

Foreign exposure is spread across Western Europe and North America in particular. Exposure to Eastern Europe, Latin America and Africa predominantly results from export finance. Their share of net exposure is of subordinate importance.

Regions

Net exposure in %	Share 30 June 2019	Share 31 Dec. 2018
Germany	65.9 %	69.1 %
Western Europe (excluding Germany)	22.2%	22.0 %
North America	7.0 %	3.9 %
Asia/Pacific	3.0 %	2.6 %
Eastern Europe	1.0 %	0.8 %
Latin America	0.6 %	0.7 %
Africa	0.1 %	0.1 %
Other ¹	0.3 %	0.7 %
Total	100.0 %	100.0 %

1 Item includes transactions not allocated to a particular country (e.g. transactions with supranational institutions).

Trade conflicts, in particular the dispute between the US and China, have ramped up in recent months and represented at least one of the driving factors behind the marked economic slowdown in leading industrialized countries. From a risk perspective, the economic slowdown will have a particular impact on countries that are already the subject of scrutiny on capital markets for other reasons – such as debtridden Italy or the UK, which is wrapped up in Brexit discussions.

Uncertainty regarding the form Brexit will take was also reflected in volatile equities and currency markets in the first half of the year. In comparison to 31 December 2018, the risk of the United Kingdom leaving the European Union without a deal has not declined. As a result, it remains difficult for the banking sector to reliably assess the impact of Brexit. LBBW believes that the potential impact of Brexit will be manageable overall, and is countering the risks with ongoing monitoring. Increased uncertainty in relevant portfolios has already been reflected in the valuation for the end of 2018.

As part of the early warning process, a comprehensive body of experts regularly evaluates global economic and political developments, taking into account the relevance of these in terms of LBBW's business policy. Potential consequences for LBBW are estimated on the basis of possible scenarios.

Size classes

The following breakdown by size class is based on the customer level or, if part of the Group, the borrower unit level.

Size classes

	Number	Net exposure in %	Number	Net exposure in %
Net exposure	30 June 2019	30 June 2019	31 Dec. 2018	31 Dec. 2018
Up to EUR 10 million	713,140	10.5 %	708,635	11.4%
Up to EUR 50 million	1,218	13.1%	1,169	13.8%
Up to EUR 100 million	287	9.8 %	272	10.1 %
Up to EUR 500 million	309	31.5 %	308	35.0 %
Up to EUR 1 billion	47	15.6 %	44	16.1 %
Over EUR 1 billion	22	17.3%	14	11.2%
LBBW Group	52	2.2 %	53	2.4 %
Total	715,075	100.0 %	710,495	100.0 %

The size classes up to a net exposure of EUR 100 million account for 34% of the net exposure (previous year: 35%). The large number of customers is due in particular to the retail portfolio.

With shares of 94% and 99% respectively, very good to good credit ratings (1 (AAAA) to 5) dominate the two net exposure size classes EUR 100 million to EUR 500 million and EUR 500 million to EUR 1 billion.

The number of exposures with a net exposure in excess of EUR 1 billion rose from 14 in the previous year to 22 overall, driving their share of the portfolio up by six percentage points to 17%. This increase relates primarily to financials. Financials dominate this size class as at the reporting date 30 June 2019 with a share of 52%, while corporates account for a further 30% and the public sector (German non-central public sector entities) for 18%. These are counterparties with exclusively very good to good ratings (minimum rating class 1 (A-), two with the rating class 2 and two with the rating class 3). The large exposures will continue to be monitored closely in the interests of managing concentration risks.

Market price risks

Risk situation of the LBBW Group

The LBBW Group's market price risk increased in the first half of 2019.

The following table shows the composition of the value-at-risk (99%/10 days) by risk type at LBBW Group level:

VaR 99%/10 days

EUR million	Average	Maximum	Minimum	30 June 2019	31 Dec. 2018
LBBW Group	99	122	86	106	88
Swap risk	46	52	41	43	49
Credit spread risk	93	122	78	99	78
Equity risks	5	9	3	6	7
Currency risks	1	3	1	1	1

The rise in overall risk and the credit spread risk stems largely from building up and reallocating securities exposures in the portfolios for LCR and liquidity management purposes.

In order to take more volatile market phases into account as well, LBBW calculates economic capital from the maximum of VaR (covariance matrix from a 250-day history) and the long-term VaR. Long-term VaR is based on two five-year observation periods each, which also include crisis periods and more volatile market phases. This enhances the resilience of the calculated economic capital against crises.

The internal risk model for calculating LBBW's exposure to market price risks has been approved by the regulatory authorities for equity risks and for general interest rate risks in the trading book without funds (CRR portfolio). The risks identified in this way are weighted and applied towards capital backing requirements.

LBBW's risk model is subject to a statistical backward comparison (backtesting) as part of the validation program. The backtesting of clean P/L of the internal risk model for the previous 250 trading days gave rise to three exceptions for the CRR portfolio. One exception resulted from increased market volatility on account of political developments in Italy. Another exception occurred at the start of the year when credit spreads of bonds widened in light of a high number of new issues. The third exception was caused by a sharp change in yield curves following a comment by the President of the ECB regarding negative interest rates.

Additional backtesting on the basis of dirty P/L^1 is performed on account of regulatory requirements. On this basis, three exceptions were also found in the CRR portfolio as at the end of the reporting period for the past 250 trading days. The first two exceptions were caused by strong fluctuations in USD yield curves, which are relevant to products with short maturities. The third exception reflects a significant change in USD swap rates after US economic figures were released.

The change in the value for the stress scenario with the greatest impact on the LBBW Group increased in the first half of 2019. This change can also be attributed to the change in positions in securities for LCR and liquidity management purposes. The stress test scenarios are monitored on an ongoing basis and adapted to current market conditions as necessary. The scenarios are also reviewed for adequacy annually, particularly in the light of current portfolio and market developments.

1 Dirty P/L is the actual change in value, net of fees and commission.

There was a slight increase in market price risk in the Bank's trading book.

The following table shows the composition of the value-at-risk (99%/10 days) by risk type at trading book level:

VaR 99%/10 days

EUR million	Average	Maximum	Minimum	30 June 2019	31 Dec. 2018
Trading book	11	14	9	12	11
Swap risk	5	8	3	4	5
Credit spread risk	9	11	8	10	8
Equity risks	5	9	3	6	7
Currency risks	1	3	1	1	1

Liquidity risks

Risk situation of the LBBW Group

Continued excess liquidity on the market is also reflected in LBBW's extensive liquidity. The customer deposit business showed good performance and capital market placements – both covered and uncovered – attracted lively interest among national and international investors. The LBBW Group's sources of funding are very stable in terms of volume and diversification.

Funding requirements and counterbalancing capacity broke down as follows as at 30 June 2019:

Overview of funding requirements and counterbalancing capacity

EUR billion as at 30 June 2019		12 months
Funding requirement from the business portfolio (deterministic cash flow) ¹	- 1.9	- 2.6
Material call risks (stochastic cash flow)	15.5	29.4
Liquidity buffer	24.4	30.2
Counterbalancing capacity on the market	48.1	63.3

1 Values are negative as liquidity flows from the business portfolio currently exceed the funding requirements over a period of three or twelve months.

The funding requirement from the business portfolio was negative as at the end of the reporting period, as liquidity inflows exceeded the outflows and thus de facto resulted in an investment requirement. In the shorter-term, in particular, this picture is marked by net inflows in EUR (investment requirement), which are offset by funding requirements in key foreign currencies at LBBW (USD and GBP). Counterbalancing capacity was sufficient to compensate for any short-term liquidity outflows and still ensures very high overcollateralization over a three and 12-month horizon. In the view of 12 months, the surplus cover from cover registers (Deckungsregister) not required to preserve the covered bond rating is applied towards the free liquidity reserves. Funding potential in the market is approximated on the basis of historical data on the unsecured funds actually raised.

The intended stress resistance level was maintained throughout the first half of 2019. The liquidity risk stress scenarios rating downgrade, financial market crisis and market crisis with downgrade, structured in accordance with the guidelines of MaRisk (BTR 3.2), show that the remaining counterbalancing capacity via the market, plus the free liquidity buffer, always comfortably exceeds the potential funding requirements under stress scenarios for this period.

Results of the economic stress scenarios

Scenario EUR billion as at 30 June 2019	Funding requirements (3 months)	Counterbalancing capacity (central banks and market) (3 months)
Rating downgrade	17.3	47.7
Financial market crisis	18.3	60.5
Market crisis with downgrade	18.5	55.7

The required minimum of 100% for the European liquidity coverage ratio (LCR) was complied with. The Group's LCR was 141.9% as at 30 June 2019 (31 December 2018: 114.8%).

Operational risks

Risk situation of the LBBW Group

The comments on the risk situation as at the end of 2018, in particular in connection with the legal risks arising from customer transactions involving complex derivatives and developments in consumer protection law in addition to the partial application of principles developed for consumers to commercial clients, continue to apply. Due to the ongoing development of banking case law, the banking landscape will continue to face legal risks. LBBW takes this into account by monitoring the legal situation on an ongoing basis. On the basis of current knowledge, adequate provision has been made to cover any resulting legal risks.

As at the end of 2018, there are still tax law risks concerning the requirements for deducting capital gains tax. The Federal Ministry of Finance recently passed an administrative order on these issues. An updated legal opinion with retrospective effects on the basis of new case law or new proclamations and a detailed review by the tax authorities cannot be ruled out.

The LBBW Group's processes and instruments for identifying, collecting and managing operational risks undergo regular review in the light of new regulatory requirements and are modified where necessary. Appropriate resources are used to take new requirements into account and to collect the necessary data. In addition, various committees regularly share information.

IT risk management continues to focus on risks arising from cyberspace threats in particular. These risks are addressed with a comprehensive package of measures aimed at prevention, detection and response.

Other material risks

Regarding the other material risks, namely

- Investment risks
- Real estate risks
- Development risks
- Reputation risks
- Business risks
- Pension risks
- Model risk

the statements made in the risk report in the LBBW Group's combined management report for 2018 continue to apply. There were no material changes in the first half of 2019.

Forecast and opportunity report

Anticipated economic performance

Economic prospects for the rest of 2019 have deteriorated noticeably. As industrial production has shrunk, downside risks have surged. LBBW is anticipating real GDP growth of just 0.6% against 2018 for 2019 as a whole. The picture is somewhat brighter for the eurozone than for Germany, but even there the GDP growth forecast of 1.1% is well under the figure for 2018 (1.9%). Inflation in 2019 looks set to remain moderate both in Germany (1.6%) and in the eurozone (1.3%).

In light of the economy's downward trend, the ECB will likely decide to ease monetary policy in the second half of the year. This includes TLTRO III, which has already been announced for September. In addition, the ECB will also likely resolve to cut the deposit rate by 10 basis points (probably in September). Resuming net bond purchases, in particular of government bonds, is also being discussed. A change of management at the helm of the ECB, with Mario Draghi being replaced by Christine Lagarde, is unlikely to significantly change the bank's approach. The ECB has stated that it is considering introducing relief measures to mitigate the side effects of negative interest rates. For example, this could constitute a tiered deposit rate for banks that depends on the amount of deposit the bank holds with the ECB. The Federal Reserve is likely to cut its benchmark interest rate another two times by the end of the year, in each instance by 25 bp, and then set a federal funds target rate of between 1.75% and 2.25%.

Alongside the economic downturn, political risks will likely remain a key issue on financial markets. The terms of Brexit have still not been resolved. Similarly, no comprehensive agreement between the US and China has yet been reached in the trade dispute. Although bilateral negotiations are ongoing, these have not yet produced any useful results. Given this muddled situation, financial markets look set to be facing a tough second half. LBBW expects a yield on 10-year Bunds of – 0.20% at the end of the year. The yield on 10-year US Treasuries is likely to be around 2.00% at the end of 2019. We expect the EUR-USD exchange rate to remain roughly at current levels at USD 1.13 to the euro. On the stock markets, the DAX will likely fall to 12,000 points at the year-end. In the US, LBBW also expects the Dow Jones Industrials to weaken to 25,250 points at the end of 2019.

Industry and competitive situation

Given Europe's modest economic performance in the first half of the year, the second half looks set to cement the economy's slowing momentum on account of ongoing geopolitical risks. Even in Germany, the country's strong focus on exports will probably cause the economy to lose speed. In the German banking sector, it is also likely that economic momentum will ease, lending growth will lose steam and allowances for losses on loans and securities will gradually pick up in the future. At the end of May, the German Financial Stability Committee also recommended introducing a counter-cyclical capital buffer in order to address cyclical risks at an early stage. A subsequent general administrative act by the BaFin introduced a buffer of 0.25% of risk weighted assets on 1 July 2019.

Nonetheless, LBBW feels that the German banking system still has a fundamentally solid footing, with high asset quality and adequate capital resources. However, the consistently high level of competitive intensity and the environment of low and negative interest rates, which is persisting for longer than expected, is expected to squeeze profitability. This is compounded by continued pressure on earnings as a result of regulatory requirements, where the issue of sustainability is increasingly important and included in regulatory targets. Furthermore, technological change is increasingly gathering momentum, thus requiring the adjustment of existing business models. At the same time, however, this also requires stepping up investment in digitalization. Germany's banks thus have to achieve a balancing act, continuing to reduce the cost basis while also investing in IT to refine business models. Boosting profitability in the long run remains a major challenge for the banking sector.

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Company forecast

General conditions

The statements made by LBBW in the company forecast in the Forecast and opportunity report at the end of 2018 regarding its projections for the 2019 financial year were based on the budget prepared at the end of 2018. These expectations were compared to the figures for the end of 2018.

These comments were reviewed after the first half of 2019 based on LBBW's forecast and taking into account current macroeconomic conditions for the remaining months of the 2019 financial year. The resulting deviations from the original expectations based on the forecast figures are presented below.

Assumptions made in the forecast at the end of 2018 regarding persistently challenging conditions still largely apply, although some parameters – in particular low interest rates – have worsened again and so will likely cause more of a strain than expected. The slowdown in economic growth in Germany and the eurozone and the impact of current protectionism look set to squeeze development as expected. Circumstances surrounding regulatory requirements, high competition and ongoing digitalization are also expected to remain challenging.

Outlook for LBBW

The *most significant financial performance indicators* for LBBW will likely develop as follows until the end of the 2019 financial year at the Group level, in comparison with original expectations:

Customer focus will continue to take center stage in the remaining half of the 2019 financial year. With this, expansion of the lending business should continue and so *total assets* and *risk weighted assets* in accordance with CRR/CRD IV at the LBBW Group are likely to rise to meet the planned level by the end of 2019.

In line with anticipated performance of risk weighted assets, the *common equity Tier* 1 (*CET* 1) *capital ratio* (*»fully loaded«*) and the *total capital ratio* (*»fully loaded«*) are also likely to reach expected levels by the end of 2019, with LBBW thus continuing to enjoy solid capitalization. As expected, the common equity Tier 1 (CET 1) capital ratio is to remain well in excess of the CRR/CRD IV minimum requirements and substantially above the requirement of 9.75%, which also includes the Pillar 2 requirements, the capital conservation buffer (Section 10 c KWG) and the capital buffer for other systemically important institutions (Section 10 g KWG). Even taking into account current and already published future requirements regarding a countercyclical capital buffer (Section 10 d KWG) and the availability of extra common equity Tier 1 capital expected by ECB supervisory authorities in the Pillar 2 Guidance capital recommendation, LBBW's common equity Tier 1 capital ratio should still, as expected, perceptibly exceed requirements.

The non-risk-weighted *leverage ratio* is also likely to reach the planned level by the end of 2019 in line with expected balance sheet developments, keeping it significantly above the minimum level of 3% stipulated by the Basel Committee.

The following statements on economic capital management take into account the changes to methodology made by the ECB with effect from 1 January 2019 in its guidance relating to Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP). To ensure comparability with LBBW's current forecast, the target figures produced at the end of 2018 were adjusted for the new methodology. According to these, the *utilization of aggregate risk cover* is likely to be in line with planning at the end of 2019. We believe that this means LBBW will be able to ensure a very comfortable risk-bearing capacity situation and solid capitalization at all times.

In terms of liquidity, LBBW's *liquidity coverage ratio* is likely to be substantially above the minimum target of 100% by the end of 2019. By the end of 2019, LBBW should also have moderately exceeded the future minimum *net stable funding ratio* target of 100%, which is increasingly at the heart of LBBW's integrated bank management.

Given the persistently challenging general conditions, LBBW expects *consolidated profit/loss before tax* at the end of 2019 to remain slightly below forecasts but still marginally higher than the figure for the previous year. The primary reason behind this expected change to the forecast is the high pressure on income stemming from persistently challenging and to some extent worsened general conditions. Lower interest rates than assumed in the forecast will likely continue to heighten pressure on margins, especially on deposits in retail banking. Nonetheless, this should be offset by growth in corporate, real estate and project finance business. The economic weakening and the impact of the current protectionist currents are likely to become evident in moderately higher allowances for losses on loans and securities, something which has already been impacted by individual allowance cases which have already occurred. The generally challenging capital market environment will also probably mean that total income will be expected to fall marginally below anticipated levels. At the same time, expenses should remain marginally lower than anticipated, with the *cost/income ratio* thus in line with planning. In accordance with earnings performance, LBBW expects to see *return on equity* slightly below the figure forecast.

LBBW is forecasting the following developments for the *operating segments* in the remainder of the 2019 financial year, in comparison to original expectations:

LBBW expects the earnings before tax of the *Corporate Customers segment* to be moderately higher than forecast in the 2019 financial year despite specific cases of allowances for losses on loans and securities, which are likely to result in these allowances being far above forecast. This positive development was spurred primarily by the good progress made in expanding customer business, which should be reflected in a moderate increase in assets and marginally higher risk weighted assets at the end of 2019 in comparison to forecasts. Expenses are also likely to remain marginally lower than forecast. Considering this good performance expected, earnings before tax in the segment should be far above previous year figures. LBBW expects to see return on equity slightly above the forecast figure thanks to good earnings performance. The cost/income ratio, too, is likely to be marginally better than expected in view of higher income and lower expenses in comparison to planning.

LBBW expects the earnings before tax of the *Real Estate/Project Finance segment* to be far above forecast for the 2019 financial year. This improvement is essentially to be achieved through above-target growth, reflected in a moderate increase in assets and risk weighted assets in comparison to forecasts by the end of 2019. As a result, LBBW expects interest income to be marginally higher than forecast and net fee and commission income to be substantially higher. Expenses are also likely to fall marginally below planning. By contrast, the high quality of the lending portfolio will probably cause allowances for losses on loans and securities to remain considerably below target. Segment earnings before tax should also be far above previous year figures. While return on equity is expected to be up moderately on forecasts in accordance with good earnings performance, the cost/income ratio looks set to be in line with planning. LBBW expects the earnings before tax of the *Capital Markets Business segment* to be well below forecasts in the 2019 financial year. Key drivers here will likely be high pressure on margins, customers' increasing reluctance regarding interest rate products in light of ongoing low interest rates and measurement effects. Segment earnings before tax are also expected to be slightly below previous year figures in the 2019 financial year. Assets and risk weighted assets are likely to remain slightly below target as at the end of 2019. LBBW expects return on equity to be considerably lower than forecast on account of earnings performance. The cost/income ratio is also likely to be far higher than planned.

In the *Private Customers/Savings Banks segment*, LBBW expects segment earnings before tax to remain in positive territory in the 2019 financial year, albeit significantly below planning. The key drivers of this will probably be ongoing high pressure on margins in lending and securities business and interest rate developments in the deposit business, as a result of which LBBW expects net interest income to be slightly lower than forecast. An individual allowance for losses on loans and advances which has already been taken should also represent another key driver as a result of which allowances for losses on loans and securities for the 2019 financial year are expected to be considerably higher than planned. At the same time, expenses looks set to be moderately lower than planned thanks to cost discipline. Segment earnings before tax will probably also remain significantly below previous year figures. As at the end of 2019, assets are likely to be slightly lower than forecast and risk weighted assets marginally lower. In accordance with earnings performance, LBBW expects to see return on equity substantially below the figure forecast, whereas the cost/income ratio is expected to be in line with planning.

In its *annual financial statements according to the German Commercial Code (HGB)* for the 2019 financial year, *LBBW (Bank)* anticipates *net profit/loss for the year before tax* to be perceptibly below the planned figure, although this is likely to remain on par with the previous year. This expected deviation is essentially in line with IFRS consolidated profit/loss before tax. Interest-related negative effects from pension provisions are also expected to be substantially higher than expected, with a correspondingly negative impact on net earnings.

Over the remainder of the 2019 financial year, statements made could be positively or negatively affected by various *opportunities and risks* described in detail in the Forecast and Opportunity Report at the end of 2018.

Individual risks have already influenced LBBW's expectations for the 2019 financial year and are taken into consideration in the assessment of LBBW's forecast. The risk that low interest rates will linger for longer than expected and risks arising from a slowdown in economic growth and current protectionism have been taken in account in accordance with current developments and expectations. Nonetheless, it remains possible that these risks will be further inflamed in the 2019 financial year, not least as a result of considerable political uncertainty. Other risks described at the end of 2018 in connection with increasing competition, stricter regulatory requirements, membership in the bank-related guarantee fund of the Landesbanks and the »European bank levy« still apply.

The opportunities described at the end of 2018 as a result of an improvement to the general conditions listed under risks are still generally applicable although, in line with current developments and expectations, we do not expect to see more rapid interest rate hikes or stronger economic performance.



Condensed consolidated interim financial statements

Condensed consolidated interim financial statements

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Income statement

for the period 1 January to 30 June 2019

EUR million	Notes	1 Jan 30 June 2019	1 Jan 30 June 2018
Net interest income	4	811	796
Interest income and current income from equity instruments ¹		6,943	6,915
Interest expenses and current expenses from equity instruments ²		- 6,132	- 6,119
Net fee and commission income	5	279	262
Fee and commission income		343	325
Fee and commission expenses		- 64	- 64
Net gains/losses on remeasurement and disposal	6	144	135
of which allowances for losses on loans and securities		- 63	- 33
Other operating income/expenses	7	52	58
Administrative expenses	8	- 864	- 878
Expenses for bank levy and deposit guarantee system	9	- 102	- 89
Consolidated profit/loss before tax		319	282
Income taxes	10	- 100	- 77
Net consolidated profit/loss		219	206
of which attributable to shareholders after tax		219	206

Interest income reported includes negative interest income of EUR - 128 million (previous year: EUR - 116 million).
 Interest expenses reported include positive interest expenses of EUR 106 million (previous year: EUR 117 million).

Statement of comprehensive income

for the period 1 January to 30 June 2019

EUR million	Notes	1 Jan 30 June 2019	1 Jan 30 June 2018
Net consolidated profit/loss		219	206
Items that will not be transferred subsequently to the income statement			
Retained earnings		- 218	- 3
Actuarial gains/losses before tax		- 315	- 4
Income taxes	10	97	1
Measurement gains/losses from own credit rating		- 3	1
Measurement gains/losses from own credit rating		- 4	2
Income taxes	10	1	- 1
Measurement gains/losses from equity instruments (financial assets measured at fair value through other comprehensive income)		7	- 38
Measurement gains/losses before tax		10	- 38
Income taxes	10	- 3	0
Items that will be transferred subsequently to the income statement when specific conditions are r	net		
Measurement gains/losses from debt instruments (financial assets measured at fair value through other comprehensive income)		43	- 75
Measurement gains/losses before tax		17	- 107
Change in allowances for losses on loans and securities		1	0
Transferred to income statement		43	1
Income taxes	10	- 18	31
Currency translation differences		3	2
Changes before tax		3	2
Net consolidated profit/loss in equity		- 168	- 112
Net consolidated total comprehensive income		51	94
of which attributable to shareholders after tax		50	93

Balance sheet

as at 30 June 2019

Assets

EUR million	Notes	30 June 2019	31 Dec. 2018
Cash and cash equivalents	11	16,774	24,721
Financial assets measured at amortized cost	12	178,756	157,127
Loans and advances to banks		55,116	46,749
Loans and advances to customers		122,020	109,231
Debentures and other fixed-income securities		1,619	1,146
Financial assets measured at fair value through other comprehensive income	13	27,371	22,821
Financial assets designated at fair value	14	1,214	1,207
Financial assets mandatorily measured at fair value through profit or loss	15	33,570	29,803
Shares in investments accounted for using the equity method	16	261	266
Portfolio hedge adjustment attributable to assets		899	569
Non-current assets held for sale and disposal groups	17	61	24
Intangible assets	18	210	224
Investment property	19	684	697
Property and equipment	20	796	463
Current income tax assets		173	142
Deferred income tax assets		1,142	1,133
Other assets	21	3,208	2,017
Total assets		265,119	241,214

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Equity and liabilities

EUR million	Notes	30 June 2019	31 Dec. 2018
Financial liabilities measured at amortized cost	22	208,008	190,388
Deposits from banks		71,831	63,585
Deposits from customers		87,278	82,481
Securitized liabilities		42,792	38,827
Subordinated capital		6,106	5,495
Financial liabilities designated at fair value	23	7,824	7,613
Financial liabilities mandatorily measured at fair value through profit or loss	24	29,033	24,478
Portfolio hedge adjustment attributable to liabilities		726	297
Provisions	25	4,287	3,916
Current income tax liabilities		40	32
Deferred income tax liabilities		29	27
Other liabilities	26	2,194	1,283
Equity	27	12,978	13,179
Share capital		3,484	3,484
Capital reserve		8,240	8,240
Retained earnings		908	970
Other comprehensive income		95	45
Unappropriated profit/loss		219	420
Shareholders' equity		12,946	13,159
Equity attributable to non-controlling interests		32	20
Total equity and liabilities		265,119	241,214

Statement of changes in equity

for the period 1 January to 30 June 2019

EUR million	Share capital	Capital reserve	Retained earnings	Valuation reserve for equity instruments	Valuation reserve for debt instruments	
Equity as at 31 December 2017	3,484	8,240	820	345	- 52	
Reclassification of opening balances due to adoption of IFRS 9	0	0	125	- 80	0	
IFRS 9 effects of first-time adoption	0	0	- 167	0	8	
IFRS 15 effects of first-time adoption	0	0	2	0	0	
Equity as at 1 January 2018	3,484	8,240	779	266	- 43	
Allocation to retained earnings	0	0	416	0	0	
Distribution to shareholders	0	0	- 173	0	0	
Capital increase/capital decrease	0	0	0	0	0	
Changes in the scope of consolidation	0	0	0	0	0	
Net consolidated profit/loss in equity	0	0	- 3	- 38	- 75	
Net consolidated profit/loss	0	0	0	0	0	
Net consolidated total comprehensive income	0	0	- 3	- 38	- 75	
Other changes in equity	0	0	- 2	0	0	
Equity as at 30 June 2018	3,484	8,240	1,017	227	- 118	
Changes in the scope of consolidation	0	0	- 17	0	0	
Net consolidated profit/loss in equity	0	0	- 34	- 16	- 88	
Net consolidated profit/loss	0	0	0	0	0	
Net consolidated total comprehensive income	0	0	- 34	- 16	- 88	
Other changes in equity	0	0	3	0	0	
Equity as at 31 December 2018	3,484	8,240	970	211	- 207	
IFRS 16 effects of first-time adoption	0	0	- 14	0	0	
Equity as at 1 January 2019	3,484	8,240	956	211	- 207	
Allocation to retained earnings	0	0	420	0	0	
Distribution to shareholders	0	0	- 250	0	0	
Net consolidated profit/loss in equity	0	0	- 218	7	43	
Net consolidated profit/loss	0	0	0	0	0	
Net consolidated total comprehensive income	0	0	- 218	7	43	
Other changes in equity	0	0	0	0	0	
Equity as at 30 June 2019	3,484	8,240	908	218	- 164	

Total	Equity attributable to non-controlling interests	Shareholders' equity	Unappropriated profit/loss	Currency translation reserve	Measurement gains/losses from own credit rating	from investments accounted for using the equity method	
13,377	46	13,331	416	23	11	44	
0		0		2			
0		0		- 2	0	- 44	
- 180		- 180	0	0	- 21	0	
2	0	2	0	0	0	0	
13,198	46	13,152	416	21	- 11	0	
0	0	0	- 416	0	0	0	
- 173	0	- 173	0	0	0	0	
8	8	0	0	0	0	0	
- 30	- 30	0	0	0	0	0	
- 113	0	- 113	0	2	1	0	
206	0	206	206	0	0	0	
94	0	93	206	2	1	0	
- 1	1	- 2	0	0	0	0	
13,095	25	13,070	206	23	- 9	0	
- 17	0	- 17	0	0	0	0	
- 108	0	- 108	0	1	26	3	
214	0	214	214	0	0	0	
104	0	104	214	1	26	3	
- 4	- 5	1	0	0	0	- 3	
13,179	20	13,159	420	25	16	0	
- 14	0	- 14	0	0	0	0	
13,166	20	13,145	420	25	16	0	
0	0	0	- 420	0	0	0	
- 250	0	- 250	0	0	0	0	
- 168	0	- 168	0	3	- 3	0	
219	0	219	219	0	0	0	
51	0	50	219	3	- 3	0	
		0		0	- 3	0	
11	11		0				
12,978	32	12,946	219	27	14	0	

Measurement

Condensed cash flow statement

for the period 1 January to 30 June 2019

EUR million	Notes	1 Jan 30 June 2019	1 Jan 30 June 2018
Cash and cash equivalents at the beginning of the period	11	24,721	22,729
Cash flow from operating activities		- 8,277	10,068
Cash flow from investing activities		- 22	- 68
Cash flow from financing activities		353	- 80
Changes to cash and cash equivalents owing to exchange rates, basis of consolidation and measurement		- 1	- 128
Cash and cash equivalents at the end of the period	11	16,774	32,522

Cash and cash equivalents at the end of the period fell significantly due toclosing dates factors.

In addition to the cash change in equity (dividend payment), cash flow from financing activities includes the cash flows from the silent partners' contributions and additional subordinated capital. During the period under review, the volume of subordinated capital held increased by EUR 612 million from the previous year. In addition to the cash increase of EUR 597 million, the change resulted from measurement effects of EUR 60 million and the change in deferred interest of EUR – 45 million.

Selected notes to the consolidated interim financial statements

for the first half of the 2019 financial year

Basis of Group accounting

Landesbank Baden-Württemberg (LBBW (Bank)), as the parent company of the Group (LBBW), is a public law institution (rechtsfähige Anstalt des öffentlichen Rechts) with registered offices in Stuttgart, Karlsruhe, Mannheim and Mainz. The commercial register numbers at the responsible district court are as follows: district court of Stuttgart HRA 12704, district court of Mannheim HRA 104440 (for Karlsruhe) and HRA 4356 (for Mannheim) and district court of Mainz HRA 40687.

LBBW offers the full range of products and services throughout Germany that a Mittelstand-minded universal bank provides. In the state capital Stuttgart, BW-Bank fulfills the role of a savings bank as LBBW's customer bank. LBBW also assists its corporate customers and those of the savings banks in their international operations. Subsidiaries specializing in specific areas of business such as leases, factoring, asset management, real estate or equity finance diversify and supplement LBBW's portfolio of services within the Group.

The consolidated interim financial statements of LBBW as at 30 June 2019 were prepared in accordance with section 115 of the Wertpapierhandelsgesetz (WpHG – German Securities Trading Act) in conjunction with section 117 no. 2 WpHG pursuant to the International Financial Reporting Standards (IFRS) and their interpretations (SIC, IFRIC) as adopted in the European Union. The standards and interpretations published at the time of preparation of the financial statements, adopted by the European Union and relevant and effective for the Group, are authoritative. In particular, the requirements set out in IAS 34 Interim Financial Reporting were taken into account.

Accounting policies

1. Accounting principles

In accordance with IAS 34.8, the consolidated interim financial statements as at 30 June 2019 do not contain all the information and disclosures required of the consolidated financial statements and should therefore be read in conjunction with the consolidated financial statements as at 31 December 2018.

The same Group-wide accounting policies are applied as those in the consolidated financial statements as at 31 December 2018. Additional key accounting policies and management discretion applied in the preparation of these consolidated interim financial statements are explained in detail in notes 1 and 2. Information on the basis of consolidation can be found in note 3. Notes on segment reporting are followed by details of the individual items of the income statement and the balance sheet (notes 4 to 27). Information on financial instruments and other information are provided in notes 28 to 37.

Unless stated otherwise, the accounting policies were applied uniformly and consistently to the reporting periods shown. All consolidated companies and investments accounted for using the equity method have prepared their interim financial statements as at 30 June 2019. The reporting currency is euro (EUR). The amounts reported in the balance sheet and the income statement are generally rounded to millions of euro in accordance with commercial principles. This may result in minor aggregation differences, though these do not have any adverse effect on the quality of reporting.

2. Changes and estimates

IFRS applied for the first time

The following IFRS were applied for the first time in the 2019 financial year:

IFRS 16 Leases

This standard contains the new requirements for the recognition of leases and replaces the previous IAS 17 and the associated interpretations IFRIC 4, SIC15 and SIC27. While the rules for the lessors are still as under IAS 17, the requirements for the lessees take a completely new approach that provides for the capitalization of the right of use and the recognition of the present value of future lease payments as a lease liability. In accordance, write-downs on rights-of-use and interest expenses from the interest accrued on lease liabilities are to be recognized in the income statement in the future, as opposed to the previous recognition of expenses from operating leases.

As part of implementing LBBW's IFRS 16 project, portfolios were analyzed, contract data collected and any effects on the balance sheet or income statement were evaluated. Adjustments were made to IT systems to reflect continued leases within the meaning of IFRS 16.C3. Leases with low-value underlying assets are implemented in simplified terms. Furthermore, leasing or non-leasing components are not separated for certain asset clusters within the meaning of IFRS 16.15.

For LBBW, there were effects with regard to former operating leases, in particular for real estate, which increased total assets and liabilities as rights of use and lease liabilities by EUR 387 million at the time of initial adoption. The transition to the new standard was carried out in accordance with the modified, retrospective method and resulted in a first-time adoption effect of EUR – 14 million, which was recognized directly in equity through other comprehensive income.

IFRIC 23 Uncertainty over Income Tax Treatments

IFRIC 23 clarifies uncertainty over income tax treatments. The clarification defines the issue at hand, assesses how likely it is to occur, calculates the specific tax values on which the accounting is based and considers new findings.

The clarification confirms LBBW's previous approach and thus has no effect on the balance sheet: Income tax is assessed at the level of the individual item, taking any existing interactions into account if necessary. If it is probable that the tax treatment will be accepted, current and deferred taxes are calculated on this basis. If, however, there is uncertainty as to whether the tax treatment will be accepted (not probable), either the most likely amount which would be recognized for tax purposes or the expected value of the various scenarios will be used, depending on which estimate is most appropriate. A full understanding of the circumstances by the tax authorities is always assumed. Finally, the assumptions and decisions made are reviewed at the end of every reporting period and, if necessary, are adjusted to take new information into account.

Long-term Interests in Associates and Joint Ventures – Amendments to IAS 28

This standard governs the consideration of non-voting shares in other enterprises. These must be included in the analysis of material influence but will continue to be assessed in accordance with IFRS 9.

The first-time adoption of this standard has no material effect on the consolidated financial statements.

Annual Improvements to IFRS 2015 – 2017 Cycle – Amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23

This collective standard that was approved within the scope of the annual improvement projects is an IASB tool for implementing necessary but not otherwise urgent amendments to the existing IFRS framework. The changes may be of a purely editorial nature but they may also affect the recognition, measurement and reporting of assets and liabilities or the extent of disclosures.

The first-time adoption of this standard has no material effect on the consolidated financial statements.

Plan Amendment, Curtailment or Settlement – Amendments to IAS 19

This standard takes into consideration the measurement of pension obligations due to plan amendments, curtailment and settlement on the basis of updated assumptions.

There were no plan amendments, curtailments or settlements at the time the amendments were introduced and so there is no impact on the consolidated financial statements.

IFRS to be applied in the future

The following IFRSs were not yet effective at the time these financial statements were approved for publication. Unless stated otherwise, these IFRS are already recognized in European law and LBBW does not intend to apply them early on a voluntary basis:

Amendments to References to the Conceptual Framework in IFRS Standards

This standard updates the references to the Conceptual Framework for Financial Reporting in IFRS Standards.

This change is expected to be effective for the first time in the 2020 financial year. The impact of the first-time adoption of this standard is still being reviewed. The standard had not yet been endorsed in European law at the date on which these financial statements were approved for publication.

Definition of a Business - amendments to IFRS 3

This standard clarifies the definition of a business within the meaning of IFRS 3. An updated definition and additional guidelines and examples have resolved previous ambiguity when it came to providing a definition in practice.

This change is expected to be effective for the first time in the 2020 financial year. The impact of the first-time adoption of this standard is still being reviewed. The standard had not yet been endorsed in European law at the date on which these financial statements were approved for publication.

Definition of Material – amendments to IAS 1 and IAS 8

This standard contains clarifications regarding the definition of materiality, as, in practice, questions are frequently raised about its use when making decisions as to whether information is sufficiently material so as to require its inclusion in the financial statements.

This change is expected to be effective for the first time in the 2020 financial year. The impact of the first-time adoption of this standard is still being reviewed. The standard had not yet been endorsed in European law at the date on which these financial statements were approved for publication.

IFRS 17 Insurance Contracts

This standard includes the new provisions for the recognition of insurance contracts and replaces the previous IFRS 4.

These changes are expected to be effective for the first time in the 2021 financial year. The impact of the first-time adoption of this standard is still being reviewed. The standard had not yet been endorsed in European law at the date on which these financial statements were approved for publication.

3. Basis of consolidation

In addition to LBBW (Bank) as the parent company, there was no change in the 104 subsidiaries including eight structured entities included in the consolidated interim financial statements.

The consolidated subsidiary MKB Mittelrheinische Bank Gesellschaft mit beschränkter Haftung was renamed MMV Bank GmbH. The consolidated subsidiary BW-Immobilien GmbH was also renamed LBBW Corporate Real Estate Management GmbH.

Seven joint ventures and five associates (unchanged from the previous year) were accounted for using the equity method in the consolidated financial statements.

A total of 55 subsidiaries (previous year: 57 subsidiaries) were not included in the consolidated interim financial statements because their individual and aggregate influence on the net assets, financial position and results of operations of the LBBW Group is not significant. These are predominantly property and shelf companies.

Segment reporting

The segment reporting of the LBBW Group for the first half of 2019 has been prepared in accordance with the provisions of IFRS 8. Following the »management approach«, segment reporting is therefore based on internal management reporting to the Group's Board of Managing Directors, which, in its function as the chief operating decision-maker, regularly makes decisions about the allocation of resources and the assessment of the performance of the segments on this basis.

Segment definition

The business segments presented below are defined as product and customer groups – based on the Group's internal organizational structures – in accordance with the internal management report. Subsidiaries and equity investments are assigned to the individual segments according to their business orientation. There have been no changes to LBBW's segmentation in comparison to 2018. The description of the individual segments can be found in the 2018 Annual Report.

Measurement methods

Segment information is based on the internal financial control data documented by Financial Controlling, which combine external financial reporting methods and economic measurement methods. The resulting differences in measurement and reporting compared to the IFRS Group figures are presented in the reconciliation statement.

LBBW's income and expenses are allocated to the individual segments in which they arise. There is therefore no significant income resulting from transactions between the segments.

Net interest income is calculated using the market interest method. Interest income and expense are netted and shown as net interest income. This also includes capital benefit, i.e. investment income from restricted equity.

»Net gains/losses on remeasurement« consist of net income/expenses from investments accounted for using the equity method, net gains/losses from financial assets measured at amortized cost (above all allowances for losses on loans and securities), net gains/losses from financial instruments measured at fair value through other comprehensive income and net gains/losses from financial instruments measured at fair value through profit or loss. These are assigned to the segments in which they arise.

Net income/expenses from investment property are recognized as part of other operating income/expenses.

Besides direct personnel and material expenses, the administrative expenses of a segment include expenses assigned on the basis of intragroup cost allocation.

Expenses for the bank levy and deposit guarantee system, in addition to net gains/losses from restructuring, are allocated to the segments in which they arise.

The assets on the balance sheet are reported as segment assets. They are allocated to the segments on the basis of internal management reporting.

The average restricted capital in the segments is calculated on the basis of calculated risk-weighted assets and imputed Tier 1 capital backing. A segment's return on equity (RoE) is calculated as the ratio of (annualized) consolidated profit/loss before tax to the maximum planned average restricted equity and average tied-up equity in the current reporting period. For the Group, RoE is calculated from the ratio of (annualized) consolidated profit/loss before tax to average equity on the balance sheet. This figure is adjusted for the unappropriated profit for the current reporting period.

For the segment disclosures below, the cost/income ratio (CIR) is calculated as the ratio of total administrative expenses, expenses for the bank levy and deposit guarantee system and net restructuring income to total net interest income, net commission income, net gains on remeasurement and disposal less allowances for losses on loans and securities and other operating income/expenses.

Segment allocation was refined further in the first half of 2019 as a result of methodological developments. The prior-year amounts were adjusted in line with the new reporting method to ensure comparability.

1 Jan. – 30 June 2019 EUR million	Corporate Customers	Real Estate/ Project Finance	Capital Markets Business	Private Customers/ Savings Banks	Corporate Items/ Reconciliation/ Consolidation	LBBW Group
Net interest income	393	153	97	155	12	811
Net fee and commission income	85	11	68	121	- 5	279
Net gains/losses on remeasurement and disposal	- 12	- 11	182	- 13	- 3	144
of which allowances for losses on loans and securities ¹	- 39	- 11	1	- 16	3	- 62
Other operating income/expenses	4	44	- 7	4	7	52
Total operating income/expenses	470	197	340	268	10	1,286
Administrative expenses	- 295	- 74	- 228	- 255	- 13	- 864
Expenses for bank levy and deposit guarantee system	- 15	- 7	- 23	- 2	- 56	- 102
Consolidated profit/loss before tax	160	116	90	12	- 59	319
Income taxes						- 100
Net consolidated profit/loss						219
Segment assets (EUR billion)	62.4	28.7	131.5	34.2	8.3	265.1
Risk-weighted assets ² (EUR billion)	38.2	12.9	16.6	8.2	6.3	82.2
Tied-up equity ² (EUR billion)	4.9	1.7	2.1	1.1	2.9	12.7
RoE (in %)	6.5	13.6	7.2	2.2		5.0
CIR (in %)	61.0	39.0	73.6	90.4		71.7

Segment results

Relates to the category »Financial assets measured at amortized cost«. In addition, the allowances for losses on loans and securities for »Financial assets measured at fair value through other comprehensive income« is attributable to a net addition of EUR - 1 million.
 In accordance with CRR/CRD IV.

1 Jan. – 30 June 2018 EUR million	Corporate Customers	Real Estate/ Project Finance	Capital Markets Business	Private Customers/ Savings Banks	Corporate Items/ Reconciliation/ Consolidation	LBBW Group
Net interest income	386	136	127	161	- 13	796
Net fee and commission income	80	7	64	116	- 7	262
Net gains/losses on remeasurement and disposal	11	- 8	116	1	15	135
of which allowances for losses on loans and securities ¹	- 24	- 10	1	- 3	3	- 33
Other operating income/expenses	5	46	0	- 3	10	58
Total operating income/expenses	482	180	307	276	5	1,250
Administrative expenses	- 306	- 73	- 234	- 261	- 4	- 878
Expenses for bank levy and deposit guarantee system	- 13	- 6	- 22	- 2	- 46	- 89
Consolidated profit/loss before tax	162	102	51	13	- 45	282
Income taxes						- 77
Net consolidated profit/loss						206
Segment assets (EUR billion)	56.7	24.9	134.9	33.2	8.8	258.5
Risk-weighted assets ²						
(EUR billion)	35.6	10.7	18.3	8.1	6.4	79.1
Tied-up equity ²						
(EUR billion)	4.4	1.3	2.6	1.0	3.6	13.0
RoE (in %)	7.4	14.4	3.7	2.2		4.4
CIR (in %)	63.0	41.3	84.0	94.4		75.4

1 $\,$ Relates to the category »Financial assets measured at amortized cost«. 2 $\,$ In accordance with CRR/CRD IV.

Details on Corporate Items, Reconciliation and Consolidation

	Corporate Items		Reconciliation/Consolidation		Corporate Items/ Reconciliation/Consolidation	
EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018	1 Jan 30 June 2019	1 Jan 30 June 2018	1 Jan 30 June 2019	1 Jan 30 June 2018
Net interest income	12	11	0	- 24	12	- 13
Net fee and commission income	- 5	- 5	0	- 2	- 5	- 7
Net gains/losses on remeasurement and disposal	1	29	- 4	- 14	- 3	15
of which allowances for losses on loans and securities ¹	3	3	0	0	3	3
Other operating income/expenses	7	10	0	0	7	10
Total operating income/expenses	15	45	- 5	- 40	10	5
Administrative expenses	- 13	- 4	0	0	- 13	- 4
Expenses for bank levy and deposit guarantee system	- 56	- 46	0	0	- 56	- 46
Consolidated profit/loss before tax	- 53	- 5	- 5	- 40	- 59	- 45
Segment assets (EUR billion)	6.8	5.6	1.5	0.0	8.3	8.8
Risk-weighted assets ² (EUR billion)	8.1	8.2	- 1.9	- 2.1	6.3	6.4
Tied-up equity ² (EUR billion)	3.2	3.8	- 0.3	- 0.3	2.9	3.6

Relates to the category »Financial assets measured at amortized cost«. In addition, the allowances for losses on loans and securities for »Financial assets measured at fair value through other comprehensive income« is attributable to a net addition of EUR - 1 million in the current year (previous year: EUR 0 million).
 In accordance with CRR/CRD IV.

Reconciliation of segment results to the consolidated income statement

In the first half of 2019, the total of »Reconciliation/Consolidation« on the consolidated profit/loss before tax increased to EUR – 5 million (previous year: EUR – 40 million) and is essentially due to the following factors:

 In internal management reporting, net interest income is calculated on the basis of the market interest method. Differences compared to the income statement therefore result from prior-period net interest income and measurements specific to IFRS not included in internal management reporting.

Notes to the income statement

4. Net interest income

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Interest income and current income from equity instruments	6,943	6,915
Interest income ¹	6,917	6,877
Trading derivatives	4,630	4,757
Lending and money market transactions	1,469	1,269
Hedging derivatives	404	405
Fixed-income securities and debentures	82	70
Early termination fees ³	26	37
Leasing business	124	139
Other	182	201
Current income from equity instruments	25	37
Equities and other non-fixed-income securities	6	14
Equity investments and affiliates	19	24
Interest expenses and current expenses from equity instruments	- 6,132	- 6,119
Interest expenses ²	- 6,132	- 6,119
Trading derivatives	- 4,431	- 4,610
Hedging derivatives	- 381	- 362
Deposits	- 604	- 466
Securitized liabilities	- 348	- 301
Leasing business	- 11	- 24
Lease liabilities	- 1	n/a
Subordinated capital	- 122	- 106
Other	- 234	- 251
Total	811	796

Interest income reported includes negative interest income of EUR - 128 million (previous year: EUR - 116 million).
 Interest expenses reported include positive interest expenses of EUR 106 million (previous year: EUR 117 million).

Interest expenses reported include positive interest expenses of EUR 106 million (p
 The offsetting effect from refinancing costs is included in interest expenses.

In accordance with the application of IFRS 16, interest expenses from the interest accrued on lease liabilities is to be recognized in the income statement for the first time, as opposed to the previous recognition of expenses from operating leases.

Net interest income for the first half of the financial year included EUR 8 million (previous year: EUR 23 million) in connection with government grants under targeted longer-term refinancing operations II (TLTRO II).

This upturn benefited particularly from an expansion in business with major corporate customers and in the area of real estate financing, with stable financing margins reported in business with SME customers and large corporations. Ongoing historically low interest rates particularly strained the deposit business, which also saw high pressure on margins on account of the level of competition.

The interest income and expenses from financial assets and liabilities not measured at fair value through profit or loss are distributed on an accrual basis and break down as follows:

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Financial assets measured at amortized cost		
Interest income ¹	1,467	1,208
- Financial assets measured at fair value through other comprehensive income		
Interest income ²	144	135
- Financial liabilities measured at amortized cost		
Interest expenses ³	- 1,014	- 832
Interest income reported includes negative interest income of EUR - 126 million (previous year: EUR - 112 million).		

Interest income reported includes negative interest income of EUR - 1 million (previous year: EUR - 4 million).
 Interest expenses reported include positive interest expenses of EUR 106 million (previous year: EUR 117 million).

5. Net fee and commission income

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Fee and commission income	343	325
Securities and custody business	136	133
Payments business	64	63
Brokerage business	24	26
Loans and guarantees ¹	67	57
Other	52	47
Fee and commission expenses	- 64	- 64
Securities and custody business	- 37	- 38
Payments business	- 13	- 13
Loans and guarantees ¹	- 5	- 4
Brokerage business	- 3	- 3
Leasing business	- 1	- 1
Other	- 5	- 4
Total	279	262

1 Includes lending, trustee, guarantee and credit business.

Revenues from contracts with customers within net fee and commission income reflect fees for various services. In the securities and custody business, revenues are generated primarily from custody accounts, the custodian bank function and from securities transactions. Income from securities transactions essentially relates to the function as paying agent and arranger within the context of Schuldscheine and debt securities transactions. One-off services are recognized for a particular point in time, whereas revenues from rolling services such as the custodian bank function are recognized over a period of time. Payments services essentially comprise providing credit and debit cards and processing transfers and debits. Fees for services as part of lending business are recognized once at the time the service is rendered. Services comprise activities within export financing and underwriting, credit and guarantee business. Services are billed either during the year or at the end of the year depending on the type of service provided. Transaction prices are determined on the basis of contractually agreed payments and recognized in the amount at which no reimbursement is anticipated.

Income from the lending business picked up in the first half of the financial year, thanks largely to growth in business with large corporate customers. Securities and custody business was improved as a result of higher commission from the underwriting business. Other fee and commission income included commission revenues from asset management of EUR 32 million, unchanged on the previous year (previous year: EUR 32 million).

6. Net gains/losses on remeasurement and disposal

Net gains/losses on remeasurement break down as follows:

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Net income/expenses from investments accounted for using the equity method	2	27
Net gains/losses from financial assets measured at amortized cost	- 62	- 34
Net gains/losses from financial instruments measured at fair value through other comprehensive income	43	12
Net gains/losses from financial instruments measured at fair value through profit or loss	162	129
Total	144	135

Net income/expenses from investments accounted for using the equity method

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Net gains/losses on measurement	2	27
Net gains/losses from investments in associates	1	28
Current income	12	2
Impairment	- 10	- 1
Reversals of impairment losses	0	27
Net gains/losses from shares in joint ventures	0	- 2
Current income	1	0
Impairment	0	- 2
Total	2	27

Net gains/losses from financial assets measured at amortized cost

EUR million	1 Jan. – 30 June 2019	1 Jan 30 June 2018
Net gains/losses on remeasurement (allowances for losses on loans and securities)	- 62	- 33
Reversal of/disposals from allowances for losses on loans and securities	131	149
Net gains/losses from provisions for lending business	- 10	0
Recoveries on loans and securities previously written off	11	6
Direct loan write-offs	- 4	- 7
Additions to allowances for losses on loans and securities	- 188	- 179
Other expenses for the lending business	- 2	- 1
Total	- 62	- 34

Individual cases had a particularly negative impact on allowances for losses on loans and securities, which rose significantly against the previous year. Nonetheless, LBBW continues to enjoy good portfolio quality, as demonstrated by a rise in the exposure share in the investment grade range and a still low default rate.

Net gains/losses from financial instruments measured at fair value through other comprehensive income

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Net gains/losses on remeasurement (allowances for losses on loans and securities)	- 1	0
Reversal of/disposals from allowances for losses on loans and securities	1	2
Additions to allowances for losses on loans and securities	- 1	- 2
Realized gains/losses	43	12
Net gains/losses on disposal	43	12
Total	43	12

The marked upturn in net income from financial instruments measured at fair value through other comprehensive income was caused in particular by higher contributions from sales of securities as part of managing the LCR portfolio.

Net gains/losses from financial instruments measured at fair value through profit or loss

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Net gains/losses from hedge accounting	- 24	- 11
Portfolio fair value hedge	- 22	- 11
of which hedged items	360	- 2
of which hedging instruments	- 382	- 9
Micro fair value hedge	- 2	0
of which hedged items	79	38
of which hedging instruments	- 81	- 38
Net trading gains/losses	175	95
Lending business	13	1
Equity transactions	473	- 107
Foreign exchange transact	- 5	- 10
Economic hedging derivatives	66	78
Interest rate transactions	- 379	160
Gains/losses from foreign exchange/commodity products	8	- 27
Net income/loss from financial instruments designated at fair value	- 96	1
Unrealized gains/losses	- 96	1
Net gains/losses from financial instruments measured at fair value through profit or loss not classified as held for trading and financial investments in equity instruments	107	44
Net gains/losses from bills	0	- 1
Net gains/losses from credits and loans	100	12
Net gains/losses from equity investments	5	6
Net gains/losses from investments in affiliates	- 3	0
Net gains/losses from shares and other equity instruments	5	27
Total	162	129

A key factor behind the increase in this item was capital market activities, which were reflected in improved trading income. Measurement effects from hedging transactions for hedging items designated at fair value also had a positive impact here. The offsetting effect from hedged items was presented in net gains/losses from financial instruments designated at fair value.

Net gains/losses from credits and loans benefited from measurement effects as a result of lower interest rates. This was countered by an effect in net trading gains/losses from closed positions. The previous year's net gains from shares and other equity instruments was particularly influenced by a subsequent purchase price payment in connection with a disposal of an equity investment in 2015.

Net income from hedge accounting, on the other hand, had an adverse effect, essentially driven by sales of hedged items in the portfolio hedge.

7. Other operating income/expenses

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Other operating income	181	146
Disposal of inventories	15	47
Reversal of other provisions	29	10
Revenue from property services	8	7
Income from cost refunds by third parties	16	15
Management of other property portfolios	3	1
Operating leases	11	10
Fixed assets and intangible assets	1	0
Lease income from investment property	26	25
Net income from the fair value measurement of investment property	15	10
Miscellaneous operating income	58	21
Other operating expenses	- 129	- 88
Disposal of inventories	- 11	- 35
Addition to other provisions	- 69	- 8
Operating leases	- 3	- 3
Operating expenses for leased properties	- 5	- 7
Net losses from the fair value measurement of investment property	- 1	0
Foreign currency translation on investment property	- 1	0
Miscellaneous operating expenses	- 38	- 34
Total	52	58

Net income from the disposal of inventories saw a particular downturn, falling by EUR 8 million.

Increase in/reversal of other provisions resulted in net expenses of EUR 42 million, chiefly a result of the increase in provisions for legal risks.

Miscellaneous operating income was shaped by extraordinary income from concluded settlement negotiations. This item also saw an increase in income from construction contracts in connection with the first-time consolidation of targens GmbH as at 31 December 2018.

In addition, higher lease income and fair value adjustments increased net income from investment properties by a total of EUR 6 million.

8. Administrative expenses

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Staff costs	- 507	- 497
Wages and salaries	- 354	- 351
Expenses for pensions and benefits	- 64	- 65
Social security contributions	- 59	- 57
Other staff costs	- 30	- 24
Other administrative expenses	- 291	- 331
IT costs	- 152	- 163
Legal and consulting expenses	- 24	- 34
Expenses from operating leases	n/a	- 24
Expenses from leases	- 1	n/a
Cost of premises	- 28	- 26
Association and other contributions	- 20	- 20
Advertising, public relations and representation costs	- 11	- 11
Audit costs	- 5	- 6
Miscellaneous administrative expenses	- 50	- 48
Depreciation, amortization and write-downs ¹	- 66	- 50
Amortization and write-downs of intangible assets	- 31	- 33
Depreciation and write-downs of property and equipment	- 14	- 17
Depreciation and write-downs on rights-of-use	- 20	n/a
Total	- 864	- 878

1 Including depreciation/amortization and impairment.

Staff costs rose as a result of consolidating targens GmbH as at 31 December 2018.

However, other administrative expenses decreased sharply. This chiefly reflected lower IT and consulting costs and the effect of the first-time application of the new accounting standards for recognizing leases (IFRS 16). This caused expenses that were previously shown as minimum leasing payments to be shifted to write-downs and interest expenses, as IFRS 16 requires the lessee to recognize right-of-use assets and lease liabilities. Other administrative expenses included expenses for training programs and general office management.

Right-of-use assets to be recognized for the first time under IFRS 16 are subject to depreciation and so depreciation and write-downs rose noticeably.

9. Expenses for bank levy and deposit guarantee system

EUR million	1 Jan 30 June 2019	1 Jan 30 June 2018
Expenses for bank levy	- 69	- 64
Expenses for deposit guarantee system	- 33	- 25
Total	- 102	- 89

The rise in expenses for the deposit guarantee system was caused in part by allocations to the guarantee system of the Sparkassen-Finanzgruppe as a result of negotiations to support NordLB.

The contribution for the bank levy also increased as the number of contributing banks once again fell by around 200 (with the contribution volume remaining unchanged), as well as due to the introduction of a new risk indicator.

10. Income taxes

EUR million	1 Jan. – 30 June 2019	1 Jan 30 June 2018
Income taxes from previous years	8	4
Income taxes from the reporting period	- 23	- 38
Deferred income taxes	- 84	- 42
Total	- 100	- 77

The notional effective tax rate for the Group in the reporting period was 32% (previous year: 27%).

Notes to the balance sheet

11. Cash and cash equivalents

EUR million	30 June 2019	31 Dec. 2018
Balances with central banks	16,650	24,540
Cash	124	181
Total	16,774	24,721

Balances with central banks included balances with Deutsche Bundesbank of EUR 10,423 million (previous year: EUR 24,418 million).

12. Financial assets measured at amortized cost

Loans and advances to banks

The breakdown of loans and advances to banks by type of business is as follows:

EUR million	30 June 2019	31 Dec. 2018
Public-sector loans	28,464	27,813
Current account claims	2,415	1,169
Securities repurchase transactions	12,741	7,673
Other loans	2,751	2,919
Borrower's note loans	70	70
Overnight and term money	7,491	5,680
Mortgage loans	588	565
Other receivables	613	867
Total, gross	55,133	46,756
Allowances for losses on loans and securities	- 16	- 6
Total, net	55,116	46,749

Changes in loans and advances to banks primarily reflected the increase in securities repurchase business with European banks and central counterparties.

The breakdown of loans and advances to banks by region is as follows:

EUR million	30 June 2019	31 Dec. 2018
Banks within Germany	35,232	33,541
Banks outside Germany	19,900	13,215
Total, gross	55,133	46,756
Allowances for losses on loans and securities	- 16	- 6
Total, net	55,116	46,749

Loans and advances to customers

The breakdown of loans and advances to customers by type of business is as follows:

EUR million	30 June 2019	31 Dec. 2018
Other loans	26,251	24,493
Mortgage loans	33,076	32,219
Public-sector loans	11,968	12,308
Receivables from finance leases	5,448	5,307
Transmitted loans	3,526	3,308
Securities repurchase transactions	19,263	11,947
Current account claims	3,926	2,870
Overnight and term money	7,271	6,240
Borrower's note loans	7,126	6,298
Other receivables	5,041	5,091
Total, gross	122,896	110,080
Allowances for losses on loans and securities	- 876	- 849
Total, net	122,020	109,231

The portfolio of loans and advances to customers rose thanks to the upturn in lending business with large corporate customers and real estate financing, a result of adopting the growth strategy. The largest increase in volume was seen in the securities repurchase business, essentially stemming from business with central counterparties.

The breakdown of loans and advances to customers by region is as follows:

EUR million	30 June 2019	31 Dec. 2018
Customers within Germany	77,160	75,332
Customers outside Germany	45,736	34,748
Total, gross	122,896	110,080
Allowances for losses on loans and securities	- 876	- 849
Total, net	122,020	109,231

Debentures and other fixed-income securities

Money market instruments	616	0
Government bonds and government debentures	394	394
Other bonds and debentures	618	762
Total, gross	1,628	1,155
Allowances for losses on loans and securities	- 9	- 10
Total, net	1,619	1,146

Money market paper saw an upturn on the back of opportunities for short-term liquidity investment.

13. Financial assets measured at fair value through other comprehensive income

EUR million	30 June 2019	31 Dec. 2018
Debentures and other fixed-income securities	23,630	19,487
Money market instruments	1,955	963
Bonds and debentures	21,675	18,523
Receivables	3,222	2,825
Equity instruments	519	509
Equity investments	517	507
Shares in affiliates	2	2
Total	27,371	22,821

New business resulted in an upturn in bonds and debt securities, partly in connection with securities purchases for a portfolio to manage the LCR. Holdings of money market paper (commercial papers and certificates of deposit) also increased thanks to expanding market presence abroad.

Allowances for losses on loans and securities for financial assets measured at fair value through other comprehensive income are shown under note 28.

14. Financial assets designated at fair value

EUR million	30 June 2019	31 Dec. 2018
Debentures and other fixed-income securities	47	44
Bonds and debentures	47	44
Receivables	1,168	1,163
Total	1,214	1,207

15. Financial assets mandatorily measured at fair value through profit or loss

Financial assets mandatorily measured at fair value through profit or loss break down as follows:

EUR million	30 June 2019	31 Dec. 2018
Positive fair values from hedging derivatives	1,762	1,969
Trading assets	30,456	26,459
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and financial investments in equity instruments	1,352	1,375
Total	33,570	29,803

Positive fair values from hedging derivatives

EUR million	30 June 2019	31 Dec. 2018
Positive fair values from portfolio fair value hedges	1,374	1,625
Positive fair values from micro fair value hedges	388	344
Total	1,762	1,969

Trading assets

EUR million	30 June 2019	31 Dec. 2018
Positive fair values from derivative financial instruments	20,610	15,498
Debentures and other fixed-income securities	5,481	5,531
Money market instruments	412	320
Bonds and debentures	5,069	5,211
Receivables	3,402	4,344
Borrower's note loans	2,965	3,235
Other money market transactions	1	17
Receivables from securities repurchase agreements	47	0
Other receivables	388	1,092
Equity instruments	964	1,087
Equities	305	402
Investment fund units	658	685
Total	30,456	26,459

In addition to growth in the volume of new business, the sharp decline in interest rates in the first half of 2019 resulted in a rise in positive fair values from derivative financial instruments. At the same time, other receivables declined on account of placements.

Financial instruments measured at fair value through profit or loss, not classified as held for trading, and financial investments in equity instruments

EUR million	30 June 2019	31 Dec. 2018
Debentures and other fixed-income securities	18	18
Bonds	12	13
Silent partner contributions	5	5
Receivables	875	890
Loans and advances to customers	875	890
Equity instruments	460	467
Equities	11	12
Investment fund units	272	269
Equity investments	152	155
Shares in affiliates	24	31
Total	1,352	1,375

16. Shares in investments accounted for using the equity method

EUR million	30 June 2019	31 Dec. 2018
Associates	256	262
Joint ventures	5	5
Total	261	266

17. Non-current assets held for sale and disposal groups

In the course of the constant optimization of its portfolio, LBBW held or concluded negotiations for the sale of non-current assets held for sale and disposal groups in the period under review.

The following changes have arisen in »Non-current assets held for sale and disposal groups« since the previous year:

- Sales talks began for three investment properties in the second half of 2018. One property in the Corporate Items segment was sold in the first half of 2019 and two further properties in the Real Estate/Project Finance segment were sold after the balance sheet date as at 31 December 2018.
- Sales talks for two properties reported as property and equipment also began in the second half of 2018. One property was sold in the first half of 2019 and the second shortly after the reporting date as at 30 June 2019. This affects the Corporates Items reporting segment.
- Sales negotiations began for an investment property in the Real Estate/Project Finance segment in the first half of 2019. It was sold shortly after the reporting date as at 30 June 2019.
- In addition, sales talks began for three properties reported as property and equipment in the first half of 2019. The sale is expected to take place in the second half of 2019. This affects the Corporate Items segment.

The reclassification of non-current assets in accordance with IFRS 5 did not result in any impairment in the period under review.

EUR million	30 June 2019	31 Dec. 2018
Assets		
Financial assets mandatorily measured at fair value through profit or loss	2	0
Investment property	55	23
Property and equipment	2	1
Total	61	24

The main groups of assets and liabilities held for sale were as follows:

18. Intangible assets

EUR million	30 June 2019	31 Dec. 2018
Purchased software	99	118
Advance payments and cost for development and preparation	23	20
Internally generated intangible assets	42	39
Other purchased intangible assets	45	47
Total	210	224

19. Investment property

The fair value is calculated using the discounted cash flow method as described below. The respective building serves as a cash-generating unit. The expected cash flows generated per cash-generating unit are calculated assuming income from property management. For a detailed planning period of ten years, the cash generated is calculated as the net amount of payments received and payments made in connection with management of the property. A residual value for the cash-generating unit is forecast for the end of the planning period by capitalizing the cash generated in the tenth year as a perpetual annuity.

For commercial real estate, future income in the planning period is forecast based on the contractually agreed target rent or, after the contract period has expired, the market rent specific to the property. This is calculated using a measurement tool based on the discounted cash flow method.

Future expenditure is determined in different ways: Administrative expenses are based on standard market rates. Costs associated with loss of rental income are calculated at a flat rate on the basis of the target rents, depending on the sales cost and the credit standing of the tenant. Costs associated with vacancies and new rental costs, maintenance costs and maintenance backlogs are calculated for each specific property, supplemented by the Group's own experience if applicable. If ground rent (Erbbauzins) is to be taken into account, this is calculated individually on the basis of existing contracts.

The cash surpluses generated in each period are discounted to the measurement date by applying a market discount rate specific to the property. The discount rate is derived from the capitalization rate plus a percentage-based risk premium. The capitalization rate takes into account factors such as the quality of the property, the type of property and the macro and micro-location.

The carrying amounts of investment property at fair value developed as follows:

EUR million	Investment property	Rights-of-use from leases
Carrying amount as at 31 December 2018	697	0
Initial adoption of IFRS 16	- 10	35
Carrying amount as at 1 January 2019	688	35
Disposals	- 1	0
Reclassification to non-current assets or disposal groups held for sale	- 55	0
Currency translation differences	2	1
Changes in fair value from assets (through profit or loss)	15	- 1
Carrying amount as at 30 June 2019	649	35

EUR million	Investment property	Rights-of-use from leases
Carrying amount as at 31 December 2017	554	n/a
Carrying amount as at 1 January 2018	554	n/a
Additions	97	n/a
Disposals	- 25	n/a
Reclassification to non-current assets or disposal groups held for sale	- 23	n/a
Reclassification from non-current assets or disposal groups held for sale	61	n/a
Currency translation differences	4	n/a
Changes in fair value from assets (through profit or loss)	28	n/a
Carrying amount as at 31 December 2018	697	n/a

Rights-of-use from leases were capitalized for the first time as at 1 January 2019 as a result of applying IFRS 16.

See note 32 for additional quantitative information.

20. Property and equipment

EUR million	30 June 2019	31 Dec. 2018
Land and buildings	318	322
Leased assets under operating leases	50	54
Operating and office equipment	75	72
Technical equipment and machinery	11	11
Rights-of-use from leases	340	n/a
Leased assets under finance leases	n/a	1
Advance payments and assets under construction	3	2
Total	796	463

Rights-of-use from leases were capitalized for the first time as at 1 January 2019 as a result of applying IFRS 16.

21. Other assets

EUR million	30 June 2019	31 Dec. 2018
Inventories	731	669
Receivables from tax authorities	104	54
Other miscellaneous assets	2,372	1,294
Total	3,208	2,017

The rise in other miscellaneous assets is partly related to higher margin holdings. This also affected »Other liabilities« (see note 26).

22. Financial liabilities measured at amortized cost

Deposits from banks

The breakdown of deposits from banks by type of business is as follows:

EUR million	30 June 2019	31 Dec. 2018
Securities repurchase transactions	3,708	3,434
Transmitted loans	28,022	26,899
Borrower's note loans	3,149	3,157
Overnight and term money	31,199	25,390
Public-sector registered covered bonds issued	439	484
Current account liabilities	1,831	1,918
Mortgage-backed registered covered bonds issued	153	224
Leases	248	248
Other liabilities	3,082	1,832
Total	71,831	63,585

Transmitted loans rose, in particular due to new business in development loans. The volume of overnight and term deposits also saw an upturn on the back of new business with international banks.

The breakdown of deposits from banks by region is as follows:

EUR million	30 June 2019	31 Dec. 2018
Banks within Germany	46,465	43,467
Banks outside Germany	25,366	20,119
Total	71,831	63,585

Deposits from customers

The breakdown of deposits from customers by type of business is as follows:

EUR million	30 June 2019	31 Dec. 2018
Current account liabilities	45,199	42,987
Overnight and term money	26,394	24,639
Borrower's note loans	2,063	1,922
Securities repurchase transactions	1,776	1,004
Public-sector registered covered bonds issued	2,449	2,540
Savings deposits	6,235	6,439
Mortgage-backed registered covered bonds issued	304	513
Other liabilities	2,857	2,437
Total	87,278	82,481

The change in this balance sheet item was primarily due to an increase in current account liabilities and overnight and term deposits. Especially German states and authorities, but also high net-worth private clients, increasingly turned to LBBW to invest their cash funds in the form of overnight and term deposits.

The breakdown of deposits from customers by region is as follows:

EUR million	30 June 2019	31 Dec. 2018
Customers within Germany	77,838	74,029
Customers outside Germany	9,440	8,451
Total	87,278	82,481

Securitized liabilities

EUR million	30 June 2019	31 Dec. 2018
Issued debentures	27,503	27,246
Mortgage-backed covered bonds	9,544	9,372
Public-sector covered bonds	4,255	3,900
Other debentures	13,704	13,974
Other securitized liabilities	15,289	11,581
Total	42,792	38,827

Issued debentures increased due to the issue of a green mortgage covered bond with a volume of USD 750 million and an unsecured green senior non-preferred bond with a volume of EUR 750 million. This was countered by maturities and so the increase was only moderate overall.

Short-term refinancing via securitized money market transactions was expanded, increasing other securitized liabilities.

Subordinated capital

EUR million	30 June 2019	31 Dec. 2018
Typical silent partners' contributions	1,064	1,081
Subordinated liabilities	4,931	4,308
Capital generated from profit participation rights	111	106
Total	6,106	5,495

New issues of subordinated deposits and debentures led to a rise in the balance sheet item.

23. Financial liabilities designated at fair value

EUR million	30 June 2019	31 Dec. 2018
Borrower's note loans	853	789
Securitized liabilities	5,071	5,077
Subordinated deposits	175	167
Junior bonds	691	568
Money market transactions	110	100
Other	924	912
Total	7,824	7,613

24. Financial liabilities mandatorily measured at fair value through profit or loss

Financial liabilities mandatorily measured at fair value through profit or loss break down as follows:

EUR million	30 June 2019	31 Dec. 2018
Negative fair values from hedging derivatives	3,279	3,062
Trading liabilities	25,754	21,416
Total	29,033	24,478

Negative fair values from hedging derivatives

EUR million	30 June 2019	31 Dec. 2018
Negative fair values from portfolio fair value hedges	2,339	2,225
Negative fair values from micro fair value hedges	941	838
Total	3,279	3,062

Trading liabilities

EUR million	30 June 2019	31 Dec. 2018
Negative fair values from derivatives	17,865	14,292
Other trading liabilities	7,889	7,124
Delivery obligations from short sales of securities	1,696	1,559
Securitized liabilities	6,035	5,436
Borrower's note loans	158	127
Other	1	1
Total	25,754	21,416

In addition to the expansion of new business, the sharp decline in interest rates in the first half of 2019 had an impact on the measurement of derivatives, resulting in a rise in negative fair values from derivatives.

The rise in securitized liabilities in trading liabilities was driven chiefly by an increase in the fair values of structured issues.

25. Provisions

EUR million	30 June 2019	31 Dec. 2018
Provisions for pensions	3,560	3,235
Provisions for litigation and recourse risk	221	188
Provisions for lending business	132	121
Other personnel-related provisions	107	124
Other provisions	267	248
Total	4,287	3,916

The change to pension provisions essentially reflects the change to the accounting interest rate under IAS 19 from 1.73% to 1.12%.

Allowances for losses on loans and securities for financial guarantees and loan commitments recognized in accordance with IFRS 9 are included in provisions for credit risks.

The following table shows the development of provisions for credit risks:

EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment after recognition	Total
Balance as at 1 January 2019	23	39	59	121
Changes	- 7	- 4	26	14
Transfer to stage 1	5	- 5	0	0
Transfer to stage 2	- 1	1	0	0
Transfer to stage 3	0	- 3	3	0
Additions	3	14	50	67
Reversals	- 14	- 12	- 27	- 53
Additions	4	1	5	10
Disposals	- 2	- 2	- 9	- 13
Balance as at 30 June 2019	17	33	81	132

26. Other liabilities

130	48
15	36
38	78
2	2
n/a	2
387	n/a
182	96
1,440	1,021
2,194	1,283
	182 1,440

The increase in other miscellaneous liabilities essentially resulted from higher margin holdings. This also affected »Other assets« (see note 21).

Due to the first-time adoption of IFRS 16, the present value of future lease payments as a lease liability was recognized for the first time as at 1 January 2019.

27. Equity

EUR million	30 June 2019	31 Dec. 2018
Share capital	3,484	3,484
Capital reserve	8,240	8,240
Retained earnings	908	970
Other comprehensive income	95	45
Unappropriated profit/loss	219	420
Shareholders' equity	12,946	13,159
Equity attributable to non-controlling interests	32	20
Total	12,978	13,179

Another significant reduction in interest rate levels once again reduced the interest rate for discounting pension obligations, hence cumulative actuarial gains and losses after tax of EUR – 1,076 million were recognized in retained earnings (previous year: EUR – 858 million).

As at the end of the current reporting period, a measurement effect after deferred taxes of EUR 14 million (previous year: EUR 16 million) in connection with the measurement of LBBW's own credit rating was included in other comprehensive income.

Equity includes taxes recognized in other comprehensive income of EUR 524 million (previous year: EUR 447 million).

The detailed development of the individual components of the Equity item is shown in statement of changes in equity.

Notes on financial instruments

28. Allowances for losses on loans and securities

The allowances for losses on loans and securities recognized break down as follows:

EUR million	30 June 2019	31 Dec. 2018
Financial assets measured at amortized cost	901	865
Loans and advances to banks	16	6
Loans and advances to customers	876	849
Debentures and other fixed-income securities	9	10
Financial assets measured at fair value through other comprehensive income	3	2
Debentures and other fixed-income securities	3	2
Total	904	867

Financial assets measured at amortized cost

The allowances for losses on loans and securities deducted from assets developed as follows:

EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment after recognition	Credit impairment at recognition	Total
Balance as at 1 January 2019	59	287	499	21	865
Changes	- 8	7	47	- 2	43
Transfer to stage 1	11	- 11	- 1	0	0
Transfer to stage 2	- 4	6	- 2	0	0
Transfer to stage 3	- 1	- 3	4	0	0
Additions	10	45	111	0	165
Reversals	- 24	- 30	- 36	- 2	- 92
Utilization	0	0	- 29	0	- 29
Additions	11	3	8	0	23
Disposals	- 6	- 5	- 28	0	- 39
Other changes	0	0	8	0	9
Balance as at 30 June 2019	56	292	535	19	901

EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment since recognition	Credit impairment at recognition	Total
Balance as at 1 January 2018	60	224	551	30	866
Changes	- 24	66	- 56	- 11	- 24
Transfer to stage 1	13	- 13	- 1	0	0
Transfer to stage 2	- 13	15	- 2	0	0
Transfer to stage 3	- 3	- 4	7	0	0
Additions	13	140	186	0	338
Reversals	- 34	- 72	- 112	- 6	- 224
Utilization	0	0	- 134	- 5	- 139
Additions	25	0	0	0	25
Disposals	- 3	- 3	- 19	0	- 25
Other changes	0	0	22	1	24
Balance as at 31 December 2018	59	287	499	21	865

Financial assets measured at fair value through other comprehensive income

Allowances for losses on loans and securities developed as follows:

EUR million	Stage 1 12-month expected credit loss	Total	
Balance as at 1 January 2019	2	2	
Additions	1	1	
Balance as at 30 June 2019	3	3	

EUR million	Stage 1 12-month expected credit loss	Total
Balance as at 1 January 2018	3	3
Changes	- 1	- 1
Additions	1	1
Reversals	- 2	- 2
Additions	1	1
Balance as at 31 December 2018	2	2

29. Counterparty risk

The quantitative information on credit risk is based on the management approach. By contrast to the basis of consolidation for accounting purposes under IFRS, only the SüdLeasing Group is included in consolidation under the management approach. In line with internal risk management, the primary parameter in the information below is gross/net exposure.

Collateral

The LBBW has high standards for collateral. Guidelines and collateral strategy requirements ensure that collateral is of a high quality. In addition to the individual measurement of collateral, its carrying amount is also subject to LGD modeling haircuts (recovery rates).

The following table shows the maximum counterparty risk and the effect of risk-mitigating measures.

30 June 2019 EUR million	Gross exposure	Netting/ collateral	Credit derivatives (protection buy)	Credit collateral	Net exposure
Financial assets measured at fair value					
Financial assets mandatorily measured at fair value through profit or loss	86,346	63,004	6,648	666	16,028
Trading assets	78,573	56,777	6,648	595	14,554
Derivatives	66,203	52,437	5,488	551	7,728
Equity instruments	1,019	994	0	0	25
Debentures and other fixed-income securities	5,806	1,231	93	0	4,482
Receivables	5,545	2,115	1,066	44	2,319
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	1,472	212	0	61	1,199
Equity instruments	636	212	0	0	425
Debentures and other fixed-income securities	12	0	0	0	12
Receivables	823	0	0	61	762
Positive fair values from hedging derivatives	6,300	6,015	0	10	275
Financial assets designated at fair value	986	0	0	17	969
Debentures and other fixed-income securities	46	0	0	0	46
Receivables	941	0	0	17	923
Financial assets measured at fair value through other comprehensive income	27,211	0	0	0	27,211
Equity instruments	1,905	0	0	0	1,905
Debentures and other fixed-income securities	22,674	0	0	0	22,674
Receivables	2,632	0	0	0	2,632
Financial assets measured at amortized cost					
Cash and cash equivalents	7,363	0	0	0	7,363
Loans and advances to banks	70,006	31,480	0	676	37,850
Loans and advances to customers	122,457	25,333	0	37,456	59,668
Debentures and other fixed-income securities	1,549	0	0	0	1,549
Total	315,918	119,817	6,648	38,816	150,637
Loan commitments and other agreements	58,994	0	0	3,091	55,903
Total exposure	374,911	119,817	6,648	41,906	206,541

31 Dec. 2018 EUR million	Gross exposure	Netting/ collateral	Credit derivatives (protection buy)	Credit collateral	Net exposure
Financial assets measured at fair value					
Financial assets mandatorily measured at fair value through profit or loss	62,368	39,970	7,210	481	14.707
Trading assets	57,167	34,987	7,210	451	14,707
Derivatives	45,280	31,705	6,151	391	7,033
Equity instruments	1,087	1,042	0	0	45
Debentures and other fixed-income securities	5,513	886		0	4,626
Receivables	5,287	1,353	1,059	67	2,807
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	1,354	211		59	1,084
Equity instruments	610	211	0	0	399
Debentures and other fixed-income securities	12	0	0	0	12
Receivables	731	0	0	59	672
Positive fair values from hedging derivatives	5,201	4,983	0	23	195
Financial assets designated at fair value	1,011	0	0	18	993
Debentures and other fixed-income securities	44	0	0	0	44
Receivables	967	0	0	18	950
Financial assets measured at fair value through other comprehensive income	23,246	0		0	23,246
Equity instruments	1,848	0	0	0	1,848
Debentures and other fixed-income securities	18,994	0	0	0	18,994
Receivables	2,404	0	0	0	2,404
Financial assets measured at amortized cost					
Cash and cash equivalents	1,165	0	0	0	1,165
Loans and advances to banks	56,947	19,989	0	661	36,297
Loans and advances to customers	112,526	19,437	0	37,377	55,711
Debentures and other fixed-income securities	1,041	0	0	0	1,041
Total	259,658	79,608	7,210	38,596	134,244
Loan commitments and other agreements	57,584	0	0	2,951	54,633
-					

The combined effect of netting and collateral agreements, credit derivatives (protection buy) and credit collateral (risk mitigation) in relation to the maximum counterparty risk of EUR 375 billion as at 30 June 2019 is EUR 168 billion or 44.9% in total (previous year: 40.5%). The increased share of risk mitigation is mainly on account of higher weightings for repo/lending transactions and collateral performance of interest rate derivatives. Credit collateral has developed stably. Nonetheless, there are differences between segments - for example, credit collateral is higher for real estate financing than for corporate customers.

79,608

7,210

41,547

188,878

317,242

Total exposure

In exceptional cases (<1% of the portfolio), the securities cover the gross exposure in full, meaning that no impairment losses are recognized.

Of the total portfolio of EUR 375 billion as at 30 June 2019, transactions with a gross exposure of EUR 277 billion are subject to the provisions for allowances for losses on loans and securities set out in IFRS 9. The overwhelming portion of these assets (99.7%) is not credit-impaired.

Credit-impaired assets

Credit-Impaired assets in accordance with IFRS 9 are financial instruments in default (rating 16 to 18). These rating classes accounted for gross exposure of EUR 1.1 billion as at 30 June 2019.

The table below shows the maximum counterparty risk and the effect of risk-mitigating measures on credit-impaired assets:

30 June 2019 EUR million	Gross exposure	Credit collateral	Net exposure
Financial assets measured at amortized cost			
Loans and advances to banks	20	2	17
Loans and advances to customers	858	248	609
Total	878	251	627
Loan commitments and other agreements	176	16	160
Total exposure	1,054	267	787

31 Dec. 2018 EUR million	Gross exposure	Credit collateral	Net exposure
Financial assets measured at amortized cost			
Loans and advances to banks	1	0	1
Loans and advances to customers	854	243	611
Total	855	243	612
Loan commitments and other agreements	215	36	179
Total exposure	1,070	279	791

Default risk and concentrations

The following information is based on the tables in the risk report for counterparty risk. However, unlike those tables, only financial instruments subject to the scope of the provisions for allowances for losses on loans and securities in IFRS 9 are presented here.

The following table presents gross exposure by rating class:

30 June 2019 EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment since recognition	Credit impairment at recognition	Total
1 (AAAA)	25,612	13	0	0	25,625
1 (AAA)- 1 (A-)	146,108	684	0	2	146,794
2-5	65,247	9,066	0	17	74,329
6-8	13,811	4,719	0	3	18,533
9-10	2,027	1,986	0	3	4,016
11-15	1,112	2,493	0	5	3,610
16-18 (default)1	0	0	1,029	25	1,054
Other ²	3,388	11	0	0	3,399
Total	257,304	18,973	1,029	55	277,361

1 »Default« refers to exposure for which a default event as defined in Art. 148 CRR has occurred, e.g. improbability of repayment or 90-day default. The gross exposure is presented before impairment

Includes non-rated transactions, in particular rating waivers.

31 Dec. 2018 EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment since recognition	Credit impairment at recognition	Total
1 (AAAA)	20,938	0	0	0	20,939
1 (AAA)- 1 (A-)	126,463	497	0	2	126,962
2-5	56,237	9,557	0	17	65,811
6-8	13,997	4,022	0	0	18,019
9-10	2,458	1,996	0	7	4,462
11-15	1,111	2,515	0	8	3,633
16-18 (default) ¹	0	0	1,042	28	1,070
Other ²	3,357	16	0	0	3,372
Total	224,561	18,602	1,043	63	244,268

1 »Default« refers to exposure for which a default event as defined in Art. 148 CRR has occurred, e.g. improbability of repayment or 90-day default. The gross exposure is presented before impairment.

Includes non-rated transactions, in particular rating waivers.

92.8% of assets were assigned to stage 1 as at 30 June 2019, and another 6.8% to stage 2. Stage 3 and the category »Credit impairment at recognition« are not significant.

The following table presents gross exposure by sector:

30 June 2019 EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment since recognition	Credit impairment at recognition	Total
Financials	126,772	1,538	85	2	128,397
of which transactions under		,			,
specific state liability ¹	12,140	0	0	0	12,141
Corporates	79,956	10,400	833	30	91,219
Automotive	9,894	3,250	188	0	13,331
Construction	7,442	844	88	3	8,377
Chemicals and commodities	7,116	311	47	0	7,474
of which chemicals	3,500	74	7	0	3,581
of which commodities	3,616	237	39	0	3,893
Retail and consumer goods	13,999	1,657	225	3	15,884
of which consumer goods	9,902	840	69	0	10,812
of which durables	4,097	817	156	3	5,072
Industry	9,538	1,098	112	0	10,747
Pharmaceuticals and healthcare	4,667	470	9	3	5,149
TM and electronics/IT	6,484	515	8	0	7,006
Transport and logistics	7,129	350	61	0	7,540
Utilities and energy	7,234	1,205	49	3	8,492
of which utilities and disposal companies	4,626	269	37	3	4,935
of which renewable energies	2,608	936	12	0	3,557
Other	6,454	699	46	18	7,218
Real Estate	25,857	4,927	45	11	30,839
Commercial real estate (CRE)	18,419	4,578	29	9	23,034
Housing	7,438	349	16	2	7,805
Public sector	15,056	107	0	0	15,162
Private individuals	9,663	2,002	66	12	11,743
Total	257,304	18,973	1,029	55	277,361

1 Item includes transactions with a statutory guarantee (Gewährträgerhaftung) and transactions with central banks and banks with a public-sector background.

31 Dec. 2018 EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment since recognition	Credit impairment at recognition	Total
Financials	98,909	1,186		2	100,131
of which transactions under specific state liability ¹	5,860	0	0	2	5,862
Corporates	75,185	10,393	857	35	86,470
Automotive	9,680	3,138	153	0	12,970
Construction	6,473	911	114	3	7,500
Chemicals and commodities	6,120	438	50	0	6,609
of which chemicals	3,141	256	7	0	3,405
of which commodities	2,979	182	43	0	3,204
Retail and consumer goods	14,073	1,764	205	5	16,046
of which consumer goods	10,360	822	84	0	11,268
of which durables	3,712	942	120	4	4,779
Industry	9,022	1,191	118	3	10,334
Pharmaceuticals and healthcare	4,289	445	11	3	4,747
TM and electronics/IT	6,047	514	9	0	6,570
Transport and logistics	6,158	348	66	0	6,572
Utilities and energy	7,104	1,059	84	3	8,251
of which utilities and disposal companies	4,371	294	39	3	4,707
of which renewable energies	2,734	765	46	0	3,544
Other	6,219	585	47	18	6,869
Real Estate	24,378	4,984	75	11	29,447
Commercial real estate (CRE)	17,376	4,606	50	9	22,041
Housing	7,002	377	25	2	7,406
Public sector	16,215	134	0	0	16,349
Private individuals	9,874	1,905	78	14	11,871
Total	224,561	18,602	1,043	63	244,268

1 Item includes transactions with a statutory guarantee (Gewährträgerhaftung) and transactions with central banks and banks with a public-sector background.

The exposures in financials and the public sector (and the German public sector in particular) generally have very good, stable credit quality with a low exposure share in stage 2. There is a slightly higher share of stage 2 exposure in the corporates and real estate portfolio. In the automotive sector, this is rooted in long-term uncertainty regarding change in the industry and the impact on manufacturers and suppliers. In the commercial real estate sector (CRE), the sub-portfolio in the United Kingdom is currently experiencing uncertainty on account of Brexit and subsequent developments.

The following table presents gross exposure by region:

30 June 2019 EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment since recognition	Credit impairment at recognition	Total
Germany	144,474	12,430	826	29	157,759
Western Europe (excluding Germany)	68,027	4,052	82	23	72,184
North America	32,895	1,156	27	0	34,077
Asia/Pacific	7,108	153	3	0	7,264
Eastern Europe	2,699	804	51	0	3,554
Latin America	1,321	359	40	3	1,722
Africa	366	19	0	0	385
Other ¹	415	0	0	0	415
Total	257,304	18,973	1,029	55	277,361

1 Item includes transactions not allocated to a particular country (e.g. transactions with supranational institutions).

31 Dec. 2018 EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment since recognition	Credit impairment at recognition	Total
Germany	139,861	11,485	871	33	152,250
Western Europe (excluding Germany)	58,185	4,189	55	23	62,453
North America	16,288	1,266	14	0	17,567
Asia/Pacific	5,715	248	6	0	5,970
Eastern Europe	1,838	1,073	58	0	2,970
Latin America	1,473	277	38	6	1,795
Africa	367	64	0	0	431
Other ¹	833	0	0	0	833
Total	224,561	18,602	1,043	63	244,268

1 Item includes transactions not allocated to a particular country (e.g. transactions with supranational institutions).

In particular, Eastern Europe and Latin America have higher stage 2 exposure shares as at 30 June 2019 than the average for the overall portfolio. However, these regions account for only a small share of the portfolio.

The following table presents gross exposure by size class:

30 June 2019 EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment after recognition	Credit impairment at recognition	Total
Up to EUR 10 million	26,562	4,714	540	19	31,834
Up to EUR 50 million	27,703	3,795	401	37	31,936
Up to EUR 100 million	21,500	3,826	71	0	25,398
Up to EUR 500 million	75,077	6,416	12	0	81,505
Up to EUR 1 billion	28,088	110	0	0	28,198
Over EUR 1 billion	77,177	75	0	0	77,253
LBBW Group	1,196	36	4	0	1,236
Total	257,304	18,973	1,029	55	277,361

31 Dec. 2018 EUR million	Stage 1 12-month expected credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment after recognition	Credit impairment at recognition	Total
Up to EUR 10 million	26,124	4,733	570	26	31,452
Up to EUR 50 million	27,338	3,936	397	37	31,707
Up to EUR 100 million	20,654	3,049	72	0	23,775
Up to EUR 500 million	74,235	6,632	4	0	80,872
Up to EUR 1 billion	25,183	46	0	0	25,229
Over EUR 1 billion	49,972	125	0	0	50,097
LBBW Group	1,056	79	0	0	1,136
Total	224,561	18,602	1,043	63	244,268

Large-volume exposures in excess of EUR 500 million are almost exclusively allocated to stage 1. Nearly half of the stage 2 transactions amount to less than EUR 50 million as at 30 June 2019.

The risk report contains further information on impairment on the portfolio.

Forbearance

As at 30 June 2019, LBBW held assets with a net carrying amount of EUR 480 million (previous year: EUR 556 million) for which forbearance measures were adopted. Concessions to terms and conditions were essentially granted. A EUR 154 million (previous year: EUR 176 million) sub-portfolio of the assets for which forbearance measures have been adopted comprises credit-impaired assets.

LBBW has received guarantees of EUR 54 million (previous year: EUR 43 million) for assets with forbearance measures.

30. Fair value measurement

The disclosures in the following notes essentially satisfy the requirements of IFRS 13 and IFRS 7. Further IFRS 7 disclosures can be found in the risk report.

Fair value is defined in accordance with IFRS 13 as the price at which an asset could be bought and sold at the measurement date in an orderly transaction between market participants.

When determining the fair value, a company specifies the preferred (i.e. the principal) market for the asset or liability or, in the absence thereof, the most advantageous market. LBBW defines the principal market as the market with the highest trading volume and highest level of market activity for the cash-generating unit. This is not necessarily the market on which LBBW's trading activity is the highest. LBBW sees the most advantageous market as that market on which – taking transaction and transport costs into account – the maximum proceeds can be achieved or the lowest amount must be paid when transferring a liability.

When calculating fair values, LBBW uses prices (if available) from the principal market, provided these represent prices used within the scope of regular and current transactions. These are reviewed on the basis of the following criteria: timely availability, amount, executability and bid-offer spreads.

If no prices quoted in active markets are available, measurement methods, prices for similar assets or liabilities on active markets, prices for identical or similar assets or liabilities on non-active markets are used. Input parameters used for measurement methods are based on inputs observable on the markets if available. The application of these models and the use of these parameters requires assumptions and assessments on the part of the management, the extent of which depends on price transparency with regard to the financial instrument and its market and the complexity of the instrument. A significant amount of subjective assessment is necessary, particularly if there are no inputs observable on the markets.

The aim of the applying measurement methods is to determine the price at which a transaction for a financial asset or liability could take place between knowledgeable third parties at the end of the reporting period. Measurement methods therefore have to include all factors which market participants would take into account when determining prices.

The fair values of holdings measured at fair value are subject to the LBBW Group's internal controls and processes that set out the standards for the independent review or validation of fair values. These controls and procedures are monitored by the IPV and Market Data organizational unit within the Risk Controlling division. The models, the data used in them and the resulting fair values are regularly reviewed by the Market Risk Controlling Methodology organizational unit.

The following table contains an overview of the measurement models used for financial instruments:

Financial instruments	Measurement models	Material inputs
Interest rate swaps and options	Net present value method, Black-Scholes, replication and Copula-based models, Markov functional model and Libor market models	Yield curves, swaption volatility, cap volatility, correlations, mean reversion
Forward rate agreements	Net present value method	Yield curves
Forward commodity agreements, currency forwards	Net present value method	Commodity rates/exchange rates, yield curves
Stock/index options, equity index/dividend futures	Black-Scholes, local volatility model, present value method	Equity prices, share volatility, dividends, interest rates (swap, repo)
Currency options	Garman-Kohlhagen (modified Black-Scholes)	FX rates, yield curves, FX volatility
Commodity options	Garman-Kohlhagen (modified Black-Scholes)	Commodity rates, yield curves, volatility
Credit derivatives	Intensity model, credit correlation model	Credit spreads, yield curves, correlations
Money market transactions	Net present value method	Credit spreads, yield curves
Securities repurchase transactions	Net present value method	Yield curves
Borrower's note loans, loans	Net present value method	Credit spreads, yield curves
Securities, forward security transactions	Net present value method	Securities prices, credit spreads, yield curves
Own bearer notes and borrower's note loans issued	Net present value method	Yield curves, own credit spread
Investments and shares in affiliates	Net asset value method, discounted cash flow method, income value method	Capitalization rate, projected figures
Securitized transactions	Net present value method	Liquidity spreads, yield curves, prepayments, arrears and default rates, loss severity

The valuation and the use of material parameters for non-current assets and disposal groups held for sale, as well as liabilities from disposal groups, is performed in line with the original balance sheet items.

The financial instruments stated above are allocated to the following LBBW risk classes:

Class

Financial instruments

Financial assets mandatorily measured at fair value through profit or loss	
Trading assets	
Derivatives	Currency options, interest rate swaps and interest rate options, credit derivatives equity/index options, equity index/dividend futures, commodity options
Equity instruments	Investment fund units, equities
Debentures and other fixed-income securities	Securities, forward security agreements, money market transactions, borrower's note loans
Receivables	Borrower's note loans, money market transactions, loans
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	
Equity instruments	Investment units, equity investments, shares in affiliates, equities
Debentures and other fixed-income securities	Bonds
Receivables	Borrower's note loans, money market transactions, loans
Positive fair values from hedging derivatives	Interest rate swaps and cross-currency interest rate swaps
Financial assets designated at fair value	
Debentures and other fixed-income securities	Money market transactions, bonds and debentures
Receivables	Borrower's note loans, money market transactions, loans
Financial assets measured at fair value through other comprehensive income	
Equity instruments	Investment units, equity investments, shares in affiliates, equities
Debentures and other fixed-income securities	Money market transactions, bonds and debentures
Receivables	Borrower's note loans, money market transactions, loans
Non-current assets held for sale and disposal groups	According to the respective balance sheet item
Financial assets measured at amortized cost	
Cash and cash equivalents	Cash, balances with central banks, public-sector bills and bills of exchange
Loans and advances to banks	Loans, borrower's note loans, securities repurchase transactions, money mark transactions
Loans and advances to customers	Loans, borrower's note loans, securities repurchase transactions, money mark transactions
Debentures and other fixed-income securities	Money market transactions, bonds and debentures
Non-current assets held for sale and disposal groups	According to the respective balance sheet item
Financial liabilities measured at fair value	
Financial liabilities mandatorily measured at fair value through profit or loss	
Trading liabilities	
Derivatives	Currency options, interest rate swaps and interest rate options, credit derivative equity/index options, equity index/dividend futures, commodity options
Delivery obligations from short sales of securities	Delivery obligations from short sales of securities
Deposits	Borrower's note loans, money market transactions
Securitized liabilities	Issued debentures
Negative fair values from hedging derivatives	Interest rate swaps and cross-currency interest rate swaps
Financial liabilities designated at fair value	
Securitized liabilities	Issued debentures
Other financial liabilities	Subordinated deposits, borrower's note loans, money market transactions
Liabilities from disposal groups	According to the respective balance sheet item
Financial liabilities measured at amortized cost	
Deposits from banks	Borrower's note loans, loans, forwards, money market transactions, securities repurchase transactions
Deposits from customers	Borrower's note loans, loans, forwards, money market transactions, securities repurchase transactions
Securitized liabilities	Issued debentures, money market transactions
	Bonde participation cortificator
Subordinated capital	Bonds, participation certificates

To the extent possible, the securities in the trading portfolio are measured using market prices or liquid prices of the relevant OTC market. If no active market price is available, fixed-income securities are measured using the discounted cash flow method based on yield curves dependent on the rating or sector and credit spreads derived from market data.

Exchange-traded derivatives are measured using market prices. The fair values of equity-based derivatives are calculated uniformly using models on the basis of the portfolio approach.

The fair value of OTC derivatives is calculated using measurement models. A distinction is made between simple derivatives traded on liquid markets (such as interest rate swaps, cross-currency interest rate swaps and currency options) and complex derivatives that are traded on illiquid markets.

Simple derivatives traded on active markets are valued using recognized valuation measures that resort at most to non-observable parameters on a minor scale.

Derivatives whose fair value is calculated on the basis of complex methods using non-observable parameters with a material influence on the valuation are classified in Level III of the measurement hierarchy. In order to reduce price uncertainty from the unobservable parameters as far as possible, these are calibrated so that measurements from observed transactions or offers for comparable instruments, consensus prices of price service agencies or valuations of other market participants from matching processes match LBBW's own measurements to the extent possible.

For certain complex interest derivatives, the interest-interest correlations required for measurement by reference to option price models are based on expert estimates which are partially gained from historical observations and partially from correlations derived from market prices. The »Correlation« parameter is assumed to be non-observable in this case and a Day One Reserve is formed for these complex interest rate derivatives.

LBBW uses the portfolio exception in accordance with IFRS 13.48 to measure derivatives in the following cases:

- The adjustment amount is calculated on the basis of the net risk positions for some fair value adjustments (e.g. close-out costs).
- When measuring counterparty risks in relation to OTC derivatives, for which netting agreements were entered into with the counterparty, the credit value adjustments (hereinafter referred to as CVA) were calculated on net positions.

The fair value of securitizations for which the market prices of market services providers are available is measured on the basis of these prices and classified as level II (see fair value hierarchy). The fair values of securitization transactions for which current market prices are not sufficiently available (level III) are calculated using measurement models. These are standard market models based on the discounted cash flow method.

If the fair value of a financial instrument calculated using measurement methods does not sufficiently take into account factors such as bid-offer spreads or close-out costs, liquidity, model, credit or counterparty risk, the Bank calculates valuation adjustments. The methods used do not always take into account inputs observed on the market. Valuation adjustments are currently made within LBBW for the following issues in particular:

- Recognition of counterparty default risks from OTC derivatives (CVA).
- Adjustment to mid-price based valuations on the use of bid/ask prices, for example, as close-out valuation adjustments for OTC interest rate and credit derivatives
- Weaknesses in the models or inputs used, for example, model valuation adjustments for specific equities, interest rate and credit derivatives.
- Day one profit or loss on specific complex derivatives and loans measured at fair value

If available, quoted prices on active markets are used to calculate the fair value of listed equity investments assigned to the category »Financial assets mandatorily measured at fair value through profit or loss« or »Financial assets measured at fair value through other comprehensive income«. For non-listed equity investments or if prices traded on an active market are not available, the fair value is measured using a measurement method. In these cases, LBBW essentially measures fair value using the net income value, the discounted cash flow or the net asset value method. The valuation method is selected on the basis of a fixed decision tree. The fair value of real estate leasing special purpose vehicles is measured on the basis of the DCF method. The net income value approach is used to measure all other major equity investments. If the application of the net asset value method is used, provided the equity investment's business activities are stable.

The fair value of assets and liabilities measured at amortized cost is calculated by discounting the future cash flows, taking into account rating-dependent spreads (exception: repurchase transactions). If rating-dependent spreads are derived from rating information obtained from external sources, this constitutes level II classification. Rating information obtained from internal sources constitutes level III classification. The fair values of receivables with a default rating are determined on the basis of expected future cash flows. The carrying amount is stated as the fair value of current assets and liabilities (e.g. current account assets and liabilities).

31. Fair value of financial instruments

The following table compares the carrying amounts and fair values of financial instruments:

Assets

	30 June	2019	31 Dec. 2018	
EUR million	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets measured at fair value				
Financial assets mandatorily measured at fair value	33,570	33,570	29,803	29,803
Trading assets	30,456	30,456	26,459	26,459
Derivatives	20,610	20,610	15,498	15,498
Equity instruments	964	964	1,087	1,087
Debentures and other fixed-income securities	5,481	5,481	5,531	5,531
Receivables	3,402	3,402	4,344	4,344
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	1,352	1,352	1,375	1,375
Equity instruments	460	460	467	467
Debentures and other fixed-income securities	18	18	18	18
Receivables	875	875	890	890
Positive fair values from hedging derivatives	1,762	1,762	1,969	1,969
Financial assets designated at fair value	1,214	1,214	1,207	1,207
Debentures and other fixed-income securities	47	47	44	44
Receivables	1,168	1,168	1,163	1,163
Financial assets measured at fair value through other comprehensive income	27,371	27,371	22,821	22,821
Equity instruments	519	519	509	509
Debentures and other fixed-income securities	23,630	23,630	19,487	19,487
Receivables	3,222	3,222	2,825	2,825
Non-current assets held for sale and disposal groups	4	4	0	0
Financial assets measured at amortized cost				
Cash and cash equivalents	16,774	16,774	24,721	24,721
Loans and advances to banks	55,116	55,659	46,749	46,817
Loans and advances to customers	122,020	131,999	109,231	117,842
Debentures and other fixed-income securities	1,619	1,615	1,146	1,134

Equity and liabilities

	30 June	30 June 2019		2018
EUR million	Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities measured at fair value				
Financial liabilities mandatorily measured at fair value	29,033	29,033	24,478	24,478
Trading liabilities	25,754	25,754	21,416	21,416
Derivatives	17,865	17,865	14,292	14,292
Delivery obligations from short sales of securities	1,696	1,696	1,559	1,559
Deposits	158	158	128	128
Securitized liabilities	6,035	6,035	5,436	5,436
Negative fair values from hedging derivatives	3,279	3,279	3,062	3,062
Financial liabilities designated at fair value	7,824	7,824	7,613	7,613
Securitized liabilities	5,762	5,762	5,645	5,645
Other financial liabilities	2,062	2,062	1,969	1,969
Financial liabilities measured at amortized cost				
Deposits from banks	71,831	73,298	63,585	63,963
Deposits from customers	87,278	88,567	82,481	83,651
Securitized liabilities	42,792	43,675	38,827	39,330
Subordinated capital	6,106	6,424	5,495	5,432

See note 17 for the detailed breakdown and measurement of assets and disposal groups held for sale.

32. Fair value hierarchy

In order to satisfy the disclosure requirements as set out in IFRS 13, this Note includes both disclosures on financial instruments and disclosures on investment property.

The fair values used when measuring financial instruments and investment property are assigned to a three-level fair value hierarchy, taking into account the measurement methods and parameters used to carry-out this measurement. If parameters from different levels are used to determine the fair value, the resulting fair value is assigned to the next level whose parameters has a material effect on fair value measurement.

The three-level fair value hierarchy with level I, level II, and level III – the terminology provided for in IFRS 13 – is specified as follows at LBBW:

- All financial instruments with unadjusted prices quoted on active markets are assigned to the first group (level I).
- Derivatives measured using models, tradable credits, structured Group debt instruments designated at fair value, units in investment funds and certain corporate/financial and government bonds with automatic provision from market information systems (observable parameters) and liquid asset-backed securities are assigned to the second group (level II).
- Level III comprises financial instruments for which one or more parameters are not based on observable market data and these data have a more than immaterial effect on the fair value of an instrument. These include complex OTC derivatives, certain private equity investments, certain high-grade structured bonds including illiquid asset-backed securities and structured securitizations.

The following table shows the breakdown of the balance sheet classifications by measurement method:

Assets

	Prices trade markets	ed on active (level I)	Measurement method – on the basis of externally observable parameters (level II)		Measurement method – on the basis externally unobservable parameters (level III)	
EUR million	30 June 2019	31 Dec. 2018	30 June 2019	31 Dec. 2018	30 June 2019	31 Dec. 2018
Financial assets measured at fair val	ue					
Financial assets mandatorily measured at fair value through profit or loss	2,061	2,067	30,733	26,036	776	1,700
Trading assets	2,041	2,050	28,038	23,240	376	1,169
Derivatives	22	39	20,427	15,302	161	157
Equity instruments	305	401	658	686	0	0
Debentures and other fixed- income securities	1,713	1,610	3,768	3,921	0	0
Receivables	1	0	3,185	3,331	215	1,012
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	20	17	932	827	400	531
Equity instruments	14	12	272	269	173	186
Debentures and other fixed- income securities	5	5	7	7	5	5
Receivables	0	0	653	551	222	339
Positive fair values from hedging derivatives	0	0	1,762	1,969	0	0
Financial assets designated at fair value	0	0	1,061	1,054	154	153
Debentures and other fixed- income securities	0	0	47	44	0	0
Receivables	0	0	1,014	1,010	154	153
Financial assets measured at fair value through other comprehensive income	17,885	15,535	9,061	6,861	425	425
Equity instruments	94	84	0	0	425	425
Debentures and other fixed- income securities	17,791	15,451	5,839	4,036	0	0
Receivables	0	0	3,222	2,825	0	0
Non-current assets held for sale and disposal groups	0	0	0	0	59	23
Investment property	0	0	0	0	684	697

Equity and liabilities

	Prices trade markets		Measurement method – on the basis of externally observable parameters (level II)		Measurement method – on the basis externally unobservable parameters (level III)	
EUR million	30 June 2019	31 Dec. 2018	30 June 2019	31 Dec. 2018	30 June 2019	31 Dec. 2018
Financial liabilities measured at fair	value					
Financial liabilities mandatorily measured at fair value through profit or loss	1,710	1,612	27,125	22,666	199	200
Trading liabilities	1,710	1,612	23,845	19,604	199	200
Derivatives	29	53	17,637	14,039	199	200
Delivery obligations from short sales of securities	1,680	1,558	16	2	0	0
Deposits	1	1	158	128	0	0
Securitized liabilities	0	0	6,035	5,436	0	0
Negative fair values from derivative hedging instruments	0	0	3,279	3,062	0	0
Financial liabilities designated at fair value	0	0	7,320	7,112	504	501
Securitized liabilities	0	0	5,376	5,260	386	385
Other financial liabilities	0	0	1,944	1,852	118	116

Transfers between levels

If the main parameters used in fair value measurement change, the classification in the fair value hierarchy is also adjusted. As at the end of the reporting period, the necessary reclassifications between levels I to III are carried out based on defined quality criteria for the market data used in measurement. Prompt availability, volume, executability and bid-offer spreads of the market data used play a particular role.

For financial instruments measured using models, LBBW's Risk Controlling identifies the model parameters required for fair value measurement. The models are subject to a regular validation process and the observability of the necessary model inputs is monitored in Risk Controlling's price review process. This allows those financial instruments to be identified that must be transferred between levels II and III of the measurement hierarchy.

The following reclassifications were made between levels I and II of the fair value hierarchy since the end of the last reporting period:

Assets

	Reclassification from level I to level II		Reclassification from level II to level I	
EUR million	30 June 2019	31 Dec. 2018	30 June 2019	31 Dec. 2018
Financial assets measured at fair value				
Financial assets mandatorily measured at fair value through profit or loss	0	43	0	127
Trading assets	0	43	0	127
Equity instruments	0	0	0	127
Debentures and other fixed-income securities	20	43	175	0
Financial assets designated at fair value	0	19	0	0
Debentures and other fixed-income securities	0	19	0	0
Financial assets measured at fair value through other comprehensive income	0	319	0	0
Equity instruments	0	319	0	0
Debentures and other fixed-income securities	36	0	31	0

Equity and liabilities

		n from level I to el II	Reclassification from level II to level I	
EUR million	30 June 2019	31 Dec. 2018	30 June 2019	31 Dec. 2018
Financial liabilities measured at fair value				
Financial liabilities mandatorily measured at fair value through profit or loss	0	1	0	0
Trading liabilities	0	1	0	0
Delivery obligations from short sales of securities	11	1	1	0

In the first half of 2019, LBBW reclassified instruments from level I to II of the fair value hierarchy as there were no longer quoted prices from active markets for the corresponding financial instruments. Instruments were also reclassified in the other direction as quoted prices from active markets became available again.

Development of level III.

The development of the portfolios and profit and loss of financial instruments measured at fair value and investment property, which were calculated using measurement models on the basis of material unobservable parameters (level III), is shown in the tables below. The unrealized profit and loss on level III financial instruments is based on both observable and unobservable parameters. Many of these financial instruments are hedged for economic purposes by financial instruments assigned to other hierarchical levels. The compensating gains and losses from these hedges are not included in the above tables as IFRS 13 stipulates that only unrealized gains and losses on Level III financial instruments must be reported.

Assets

Financial assets measure other comprehe	Financial assets designated at fair value	
Equity instruments	Debentures and other fixed-income securities	Receivables

EUR million

Carrying amount as at 31 December 2018	425	0	153	
Initial adoption of IFRS 16	0	0	0	
Carrying amount as at 1 January 2019	425	0	153	
Gains and losses recognized in net consolidated profit/loss	0	0	1	
Net interest income and current net income from equity instruments	0	0	- 3	
Net gains/losses from financial instruments measured at fair value through profit or loss	0	0	5	
Other earnings items	0	0	0	
Additions through acquisitions	0	0	0	
Disposals through sales	0	0	0	
Repayments/offsetting	0	0	0	
Other changes	0	0	0	
Reclassification from level III	0	0	0	
Transfers in accordance with IFRS 5	0	0	0	
Carrying amount as at 30 June 2019	425	0	154	
of which unrealized gains and losses recognized in net consolidated profit/loss for financial instruments held as at the reporting date	0	0	1	
Net interest income and current net income from equity instruments	0	0	- 3	
Net gains/losses from financial instruments measured at fair value through profit or loss	0	0	5	
Other earnings items	0	0	0	

F	inancial assets ma	ndatorily measure	d at fair value thr	bugh profit or loss		Investment property	Non-current assets held for sale and disposal groups	Total
	Trading assets		through profit	Financial instruments measured at fair value through profit or loss, not classified as held for trading, and financial investments in equity instruments				
Derivatives	Equity instruments	Receivables	Equity instruments	Debentures and other fixed-income securities	Receivables			
157	0	1,012	186	5	339	697	23	2,998
0	0	0	0	0	0	26	0	26
157	0	1,012	186	5	339	723	23	3,024
15	0	0	1	0	1	8	0	27
- 2	0	0	0	0	0	0	0	- 5
16	0	0	1	0	1	0	0	23
0	0	0	0	0	0	8	0	8
0	0	204	2	0	0	0	0	207
0	0	- 974	- 9	0	0	- 1	- 23	- 1,007
- 11	0	- 19	- 2	0	- 119	0	0	- 152
0	0	0	0	0	0	8	0	8
0	0	- 8	0	0	0	0	0	- 8
0	0	0	- 4	0	0	- 55	59	0
161	0	215	173	5	222	684	59	2,098
15	0	0	1	0	1	8	0	27
- 2	0	0	0	0	0	0	0	- 5
16	0	0	1	0	1	0	0	23
0	0	0	0	0	0	8	0	8

Financial assets measured at fair value through other comprehensive income		Financial assets designated at fair value	
Equity instruments	Debentures and other fixed-income securities	Receivables	

EUR million

Carrying amount as at 1 January 2018	6	2	154	
Gains and losses recognized in net consolidated profit/loss	0	0	- 2	_
Net interest income and current net income from equity instruments	0	0	0	
Net gains/losses from financial instruments measured at fair value through profit or loss	0	0	- 2	
Other earnings items	0	0	0	
Income and expenses recognized in other comprehensive income ¹	- 40	0	0	
Additions through acquisitions	0	0	0	
Disposals through sales	0	- 2	0	
Repayments/offsetting	0	0	0	
Changes in the scope of consolidation	0	0	0	
Other changes	0	0	0	
Reclassification to level III	459	0	0	
Reclassification from level III	0	0	0	
Transfers in accordance with IFRS 5	0	0	0	
Carrying amount as at 31 December 2018	425	0	153	
of which unrealized gains and losses recognized in net consolidated profit/loss for financial instruments held as at the reporting date	0	0	- 2	
Net interest income and current net income from equity instruments	0	0	0	
Net gains/losses from financial instruments measured at fair value through profit or loss	0	0	- 2	
Other earnings items	0	0	0	

1 Amounts recognized under »Revaluation reserve«.

	Non-current	
	assets held for	
	sale and	
nvestment	disposal	
property	groups	Total

Investr

Financial assets mandatorily measured at fair value through profit or loss

Financial instruments measured at fair value through profit or loss, not classified as held for trading, and financial investments in equity instruments

	Trading assets			instruments				
Derivatives	Equity instruments	Receivables	Equity	Debentures and other fixed-income securities	Receivables			
219	2	112	189	13	460	554	104	1,816
- 30	0	0	6	0	- 6	37	1	6
1	0	0	0	0	0	0	0	1
- 31	0	0	6	0	- 6	0	0	- 33
0	0	0	0	0	0	37	1	38
0	0	0	0	0	0	0	0	- 40
0	0	1,002	44	0	28	97	0	1,170
0	0	- 93	- 34	0	0	- 26	- 46	- 200
- 34	- 1	- 9	0	0	- 143	0	0	- 187
0	0	0	- 19	0	0	0	0	- 19
0	0	0	0	0	0	- 4	1	- 3
2	0	0	0	0	0	0	0	461
0	0	0	0	- 7	0	0	0	- 8
0	0	0	0	0	0	38	- 38	0
157	0	1,012	186	5	339	697	23	2,998
- 30	0	0	6	0	- 6	31	0	- 1
1	0	0	0	0	0	0	0	1
								22
- 31	0	0	6	0	- 6	0	0	- 33
0		0	0	0	0	31	0	31

Equity and liabilities

	Financial liabilities (Valu	-	Financial liabilities mandatorily measured at fair value through profit or loss	Total
	Securitized liabilities	Other financial liabilities	Trading liabilities	
EUR million			Derivatives	
Carrying amount as at 1 January 2019	385	116	200	701
Gains and losses recognized in net consolidated profit/loss	2	1	14	17
Net interest income and current net income from equity instruments	- 2	- 1	4	0
Net gains/losses from financial instruments measured at fair value through profit or loss	4	2	10	16
Income and expenses recognized in other comprehensive income ¹	0	1	0	0
Repayments/offsetting	0	0	- 15	- 15
Carrying amount as at 30 June 2019	386	118	199	703
of which unrealized gains and losses recognized in net consolidated profit/loss for financial instruments held as at the reporting date	2	1	14	17
Net interest income and current net income from equity instruments	- 2	- 1	4	0
Net gains/losses from financial instruments measured at fair value through profit or loss	4	2	11	17

1 Amounts recognized under »Revaluation reserve«.

	Financial liabilities o valu	-	Financial liabilities mandatorily measured at fair value through profit or loss	Total
	Securitized liabilities	Other financial liabilities	Trading liabilities	
EUR million			Derivatives	
Carrying amount as at 1 January 2018	497	116	281	895
Gains and losses recognized in net consolidated profit/loss	11	1	- 70	- 58
Net interest income and current net income from equity instruments	3	0	- 2	1
Net gains/losses from financial instruments measured at fair value through profit or loss	8	1	- 68	- 59
Income and expenses recognized in other comprehensive income ¹	1	0	0	0
Disposals through sales	- 49	0	0	- 49
Repayments/offsetting	- 75	0	- 14	- 89
Reclassification to level III	0	0	2	2
Carrying amount as at 31 December 2018	385	116	200	701
of which unrealized gains and losses recognized in net consolidated profit/loss for financial instruments held as at the reporting date	11	1	- 70	- 58
Net interest income and current net income from equity instruments	3	0	- 2	1
Net gains/losses from financial instruments measured at fair value through profit or loss	8	1	- 68	- 59
4 Annual management				

1 Amounts recognized under »Revaluation reserve«.

Sensitivity analysis level III

If the model value of financial instruments is based on unobservable market parameters, alternative parameters are used to determine the potential estimation uncertainty. For most of the securities and derivatives classified as level III, only one unobservable parameter is included in the fair value calculation, preventing any interactions between level III parameters. The overall sensitivity of the products whose fair value calculation includes more than one unobservable parameter is immaterial. Interactions between these inputs have therefore not been calculated.

For the investments classified as level III, sensitivities are essentially calculated by shifting the individual beta factors up or down. If no beta factors are used in measurement, the sensitivities are calculated on the basis of the average percentage change in fair value. This is based on the upward/downward shift of the investments whose measurement is based on a beta factor.

The information is intended to show the potential effects of the relative uncertainty in the fair values of financial instruments, the measurement of which is based on unobservable parameters:

Assets

	Positive chang	es in fair value	Negative changes in fair value		
	instruments m	s from financial easured at fair luation reserve	Net gains/losses from financial instruments measured at fair value and revaluation reserve		
EUR million	30 June 2019	31 Dec. 2018	30 June 2019	31 Dec. 2018	
Financial assets measured at fair value					
Financial assets mandatorily measured at fair value through profit or loss	19.1	26.9	- 16.7	- 24.1	
Trading assets	8.3	15.2	- 7.0	- 14.0	
Derivatives	3.1	3.5	- 1.8	- 2.6	
Receivables	5.2	11.7	- 5.2	- 11.4	
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	10.8	11.7	- 9.8	- 10.1	
Equity instruments	4.3	3.8	- 3.3	- 3.3	
Receivables	6.5	7.9	- 6.5	- 6.8	
Financial assets measured at fair value through other comprehensive income	25.3	24.0	- 23.1	- 21.8	
Equity instruments	25.3	24.0	- 23.1	- 21.8	
Total	44.4	50.9	- 39.9	- 45.9	

Equity and liabilities

	Positive chang	es in fair value	Negative changes in fair value		
	Net gains/losse instruments m value and reva	easured at fair	Net gains/losses from financial instruments measured at fair value and revaluation reserve		
EUR million	R million 30 June 2019 31 Dec. 2018		30 June 2019	31 Dec. 2018	
Financial liabilities measured at fair value					
Financial liabilities mandatorily measured at fair value through profit or loss	4.0	5.6	- 5.3	- 6.9	
Trading liabilities	4.0	5.6	- 5.3	- 6.9	
Derivatives	4.0	5.6	- 5.3	- 6.9	
Financial liabilities designated at fair value	0.7	0.9	- 0.4	- 0.6	
Securitized liabilities	0.7	0.9	- 0.4	- 0.6	
Total	4.7	6.5	- 5.7	- 7.5	

Significant unobservable level III parameters

The significant unobservable parameters of the financial instruments measured at fair value and classified as level III and investment property are shown in the following tables.

The range shown below depicts the highs and lows in the non-observable parameters on which the valuations in the Level III category were based. As the financial instruments and investment property in question differ significantly, the range of certain parameters can be considerable.

The parameter shifts in the table depict the changes in the unobservable parameters that are tested in the sensitivity analysis. They thus provide information on the range of alternative parameters selected by LBBW for its calculation of fair value.

Assets

30 June 2019 EUR million	Measurement methods	Significant unobservable parameters	Range	Parameter shift
Financial assets measured at fair val	Ue			
Financial assets mandatorily measured at fair value through profit or loss				
Trading assets				
Derivatives	Option price models	Interest rate correlation	- 82% - 100%	relative - 20%/+ 10%
		Currency correlation	17%	absolute - 30 %/+ 30 %
		Other model parameters	- 0.68 - 3.82	relative - 11%/+ 11%
Receivables	Net present value method	Credit spread (bp)	73 - 298	relative - 10 - 30 %, + 10 - 30 %
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments				
Equity instruments	Net asset value method	n/a	n/a	n/a
	Discounted cash flow method	Capitalization rate	2.39 % - 3.85 %	individually per instrument
	Net income value method	Beta factor	1.00 - 1.23	relative + 5 %/- 5 %
Receivables	Net present value method	Credit spread (bp)	243 - 782	relative - 30%/+ 30%
Financial assets designated at fair value				
Receivables	Option price models	Interest rate correlation	20% - 96%	relative - 20 %/+ 10 %
Financial assets measured at fair value through other comprehensive income				
Equity instruments	Net asset value method	n/a	n/a	n/a
	Discounted cash flow method	n/a	n/a	n/a
	Net income value method	Beta factor	1	relative + 5 %/- 5 %
Investment property	Discounted cash flow method	Rent dynamization/ indexing	1.5 %	n/a
		Discounting interest rate	1.5 % - 9.0 %	
		Rental loss risk	2.0 % - 4.0 %	
		Basic maintenance costs	EUR 2.5 - 18/m ²	
		Administrative costs (% of target rent)	1.0 % - 6.5 %	

31 Dec. 2018 EUR million	Measurement methods	Significant unobservable parameters	Range	Parameter shift
Financial assets measured at fair val	ue			
Financial assets mandatorily measured at fair value through profit or loss				
Trading assets				
Derivatives	Option price models	Interest rate correlation	- 82% - 99%	relative - 20 %/+ 10 %
		Currency correlation	28%	absolute - 30 %/+ 30 %
		Other model parameters	- 0.67 - 3.22	relative - 22%/+ 22%
Receivables	Net present value method	Credit spread (bp)	73 - 325	relative - 10 - 30 %/+ 10 - 30 %
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments				
Equity instruments	Net asset value method	n/a	n/a	n/a
	Discounted cash flow method	Capitalization rate	2.32 % - 4.15 %	individually per instrument
	Net income value method	Beta factor	1.00 - 1.19	relative + 5 %/- 5 %
Receivables	Net present value method	Credit spread (bp)	32 - 799	relative - 30 %/+ 30 %
Financial assets designated at fair value				
Receivables	Option price models	Interest rate correlation	21% - 99%	relative - 20 %/+ 10 %
Financial assets measured at fair value through other comprehensive income				
Equity instruments	Net asset value method	n/a	n/a	n/a
	Discounted cash flow method	n/a	n/a	n/a
	Net income value method	Beta factor	1	relative + 5 %/- 5 %
	Discounted cash flow	Rent dynamization/		
Investment property	method	indexing	1.5 %	n/a
		Discounting interest rate	1.5 % - 9.0 %	
		Rental loss risk	2.0% - 4.0%	
		Basic maintenance costs	EUR 2.5 - 18/m ²	
		Administrative costs		
		(% of target rent)	1.0 % - 6.5 %	

Equity and liabilities

30 June 2019 EUR million	Measurement methods	Significant unobservable parameters	Range	Parameter shift
Financial liabilities measured at fair va	lue			
Financial liabilities mandatorily measured at fair value through profit or loss				
Trading liabilities				
Derivatives	Option price models	Interest rate correlation	- 82 % - 100 %	relative - 20 %/+ 10 %
		Currency correlation	17%	absolute - 30 %/+ 30 %
		Other model parameters	- 0.68 - 3.82	relative - 11%/+ 11%
	TRS model	Discount curve (bp)	45 - 88	relative - 30 %/+ 30 %
Financial liabilities designated at fair value				
Securitized liabilities	Option price models	Interest rate correlation	- 81 - 96%	relative - 20%/+ 10%
		Currency correlation	17%	absolute - 30 %/+ 30 %

Measurement methods	Significant Unobservable parameters	Range	Parameter shift
ue			
Option price models	Interest rate correlation	- 82% - 99%	relative - 20%/+ 10%
	Currency correlation	28%	absolute - 30 %/+ 30 %
	Other model parameters	- 0.67 - 3.22	relative - 22 %/+ 22 %
TRS model	Discount curve (bp)	42 - 91	relative - 30 %/+ 30 %
Option price models	Interest rate correlation	10% - 99%	relative - 20%/+ 10%
	Currency correlation	28%	absolute - 30 %/+ 30 %
	methods ue Option price models TRS model	Measurement methods unobservable parameters ue Option price models Interest rate correlation Currency correlation Other model parameters TRS model Discount curve (bp) Option price models	Measurement methods unobservable parameters Range ue

The valuation and the use of material parameters for non-current assets held for sale and disposal groups as well as liabilities from disposal groups is performed in line with the original balance sheet items.

Day One Profit or Loss

The use of unobservable parameters for the measurement of financial instruments can lead to differences between the transaction price and the fair value. This deviation is referred to as day one profit or loss, which is distributed throughout the term of the financial instrument through profit or loss.

Credit spreads and correlations between interest rates and default risks of different asset classes are not consistently observable on the market or cannot be derived from prices observed on the market. Market participants can have different opinions on the characteristics of the unobservable parameters used in these models, hence the transaction price can deviate from what LBBW considers to be the fair value.

LBBW recognizes day one profits for trading portfolios of interest rate-linked derivatives.

The table below shows the changes in day one profits for the first half of the 2019 financial year in comparison to the end of 2018, which were deferred as a result of applying material non-observable parameters for financial instruments carried at fair value:

EUR million	2019	2018
Balance as at 1 January	0	0
New transactions (allocations)	1	0
Balance as at 30 June/31 December	1	0

33. Issuing activities

EUR million	30 June 2019	31 Dec. 2018
Securitized liabilities	42,792	38,827
Securitized liabilities designated at fair value	5,071	5,077
Securitized liabilities mandatorily measured at fair value through profit or loss	6,035	5,436
Total	53,898	49,340

During the period under review, new issues, essentially short-dated money market paper, with a nominal volume of EUR 490,087 million (previous year: EUR 817,531 million) were issued. Initial sales may fall substantially short of the issued nominal volume. During the same period the volume of buybacks amounted to a nominal amount of EUR 2,687 million (previous year: EUR 6,017 million) and the volume of repayments to a nominal of EUR 319,191 million (previous year: EUR 503,890 million).

Other information

34. Related party disclosures The LBBW Group performs related party transactions in the ordinary course of business. The extent of these transactions is shown in the table below:

30 June 2019 EUR million	Shareholders	Members of the Board of Managing Directors and Supervisory Board	Non- consolidated subsidiaries	Associates	Joint ventures	Other related parties
Financial assets measured at amortized cost	572	3	4	224	- 2	1,427
Financial assets measured at fair value through other comprehensive income	609	0	21	169	0	0
Financial assets designated at fair value	19	0	0	0	0	0
Financial assets mandatorily measured at fair value through profit or loss	2,059	0	14	131	6	787
Other assets	0	0	1	4	0	0
Total assets	3,259	3	40	529	3	2,214
Financial liabilities measured at amortized cost	1,669	9	39	131	13	11,464
Financial liabilities designated at fair value	0	0	0	0	0	22
Financial liabilities mandatorily measured at fair value through profit or loss	0	0	0	61	0	169
Total equity and liabilities	1,669	9	39	193	13	11,654
Off-balance-sheet transactions	327	1	10	85	5	936

31 Dec. 2018 EUR million	Shareholders	Members of the Board of Managing Directors and Supervisory Board	Non- consolidated subsidiaries	Associates	Joint ventures	Other related parties
Financial assets measured at amortized cost	625	3	4	228	1	1,455
Financial assets measured at fair value through other comprehensive income	0	0	31	168	0	0
Financial assets designated at fair value	44	0	0	0	0	0
Financial assets mandatorily measured at fair value through profit or loss	1,340	0	26	117	5	213
Other assets	0	0	1	0	0	0
Total assets	2,009	3	62	514	7	1,668
Financial liabilities measured at amortized cost	2,207	7	61	139	12	10,860
Financial liabilities designated at fair value	0	0	0	0	0	22
Financial liabilities mandatorily measured at fair value through profit or loss	0	0	0	48	0	124
Total equity and liabilities	2,207	7	61	187	12	11,006
Off-balance-sheet transactions	326	1	8	66	2	793

Related party transactions resulted in material effects in net interest income of EUR 66 million (previous year: EUR 44 million).

35. Off-balance-sheet transactions

Contingent liabilities

EUR million	30 June 2019	31 Dec. 2018
Sureties and guarantee agreements	7,778	7,583
Other contingent liabilities	109	86
Total	7,887	7,669

Contingent liabilities are dominated by sureties and guarantee agreements.

- In accordance with section 765(1) of the German Civil Code (BGB), a surety is a contractual obligation by the guarantor to the creditor of a third party to be responsible for the third party's obligation.
- Guarantee agreements are all contractual commitments that do not qualify as a surety and that concern the responsibility for a certain success or performance or for the non-occurrence of a certain disadvantage or damage.
- A documentary letter of credit is a promise given by a bank to make payment on presentation of specific documents.

This does not include financial guarantees.

In the event of objective indications of impairment, any loss is to be calculated using probability-weighted scenarios. The amount of the provision is determined by the present-value amount at which the Bank expects the beneficiary under a guarantee to make a claim against it, minus expected inflows e.g. from rights (rights of recourse, securities etc.).

In addition to legal risks, other contingent liabilities also include payment obligations towards the restructuring fund (bank levy) payable in part or in full on first demand in the event of resolution measures and for which cash collateral has been provided.

The German Deposit Guarantee Act (Einlagensicherungsgesetz – EinSiG), which came into force on 3 July 2015, governs the future financial resources of statutory and bank-related guarantee systems, including the bank-related guarantee system of the Sparkassen-Finanzgruppe. LBBW makes an irrevocable commitment to the owner of the bank-related guarantee system, German Savings Bank Association (Deutscher Sparkassen- und Giroverband – DSGV), to make further payments on first demand e. g. in the compensation case pursuant to Section 10 EinSiG, in addition to the annual contribution. Other contingent liabilities include collateral provided in this context.

Contingent claims

EUR million	30 June 2019	31 Dec. 2018
Legal disputes	7	7
Total	7	7

36. Equity and total amount at risk

The following table shows the values under the currently valid regulations including transitional provisions in accordance with CRR.

EUR million	30 June 2019	31 Dec. 2018
Own funds	18,068	17,690
Tier 1 capital	12,730	13,039
of which common equity Tier 1 capital (CET1)	12,007	12,119
of which additional Tier 1 capital (AT 1)	723	920
Supplementary capital (Tier 2)	5,338	4,651
Total amount at risk	82,198	80,348
Risk weighted exposure amounts for credit, counterparty and dilution risk, and advance payments	71,802	69,249
Total amount at risk for settlement and supply risks	1	0
Total exposure amount for position, foreign exchange and commodity risk	4,524	5,145
Total risk exposure amount for operational risks	4,661	4,685
Total amount of risk due to CVA	1,211	1,269
Total capital ratio (in %)	22.0	22.0
Tier 1 capital ratio (in %)	15.5	16.2
Common equity Tier 1 (CET 1) capital ratio (in %)	14.6	15.1

The common equity Tier I (CET 1) of the LBBW Group decreased as against the end of the previous year. This is essentially a result of the increase in actuarial losses and a slight rise in the value adjustment deficit. This was offset by the transfer of the profit for 2018 to retained earnings and the improvement in the revaluation reserve. Additional tier 1 capital (AT 1) declined as the CRR transitional provisions now apply. This is due to the fact that the threshold for offsetting grandfathered silent partners' contributions, which decreases each year, is not currently reached. By contrast, supplementary capital (T 2) increased. This is attributable to the offsetting of silent partners' contributions that, in accordance with CRR, no

longer fulfill the conditions for AT1 and instead meet only the conditions for T2, as well as three further subordinated bonds issued as part of the MTN program. These issues amounted to AUD 100 million, EUR 500 million and JPY 2 billion. Subordinated Schuldscheine and registered bonds of EUR 74 million were also placed on the market. The amortization of Tier 2 capital components on the basis of the number of days that have passed had the opposite effect, as did the decrease in the eligible value adjustment surplus.

The total amount of risk increased slightly compared to the end of the previous year. This partly reflected new transactions concluded in the »Corporates« exposure class under the CRSA and »Corporates« under IRB. New business and an upturn in repo/lending transactions in the »Banks« exposure class under IRB also brought about an increase. This was offset by the decline in the »Special financing« exposure class under IRB due to the inclusion of additional syndicate members, repayments and the expiration of transactions. Market risks reduced for the portion calculated in accordance with the internal model thanks to the new presentation of German states' Schuldscheine.

37. Events after the balance sheet date

There were no events after the end of the reporting period.



Further Information

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Responsibility statement

To the best of our knowledge, and in accordance with the applicable framework for half-year financial reporting, the consolidated interim financial statements give a true and fair view of the net assets, financial position and results of operations of the Group, and the interim group management report gives a true and fair view of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected future development of the Group in the remainder of the financial year.

Stuttgart, Karlsruhe, Mannheim and Mainz, 7 August 2019

The Board of Managing Directors

RAINER NESKE

Chairman



THORSTEN SCHÖNENBERGER

MICHAEL HORN Deputy Chairman

DR CHRISTIAN RICKEN

VOLKER WIRTH

Review report

To Landesbank Baden-Württemberg, Stuttgart, Karlsruhe, Mannheim and Mainz

We have reviewed the condensed consolidated interim financial statements – comprising the income statement, statement of total comprehensive income, balance sheet, statement of changes in equity, condensed cash flow statement and the selected notes to the consolidated interim financial statements – together with the interim group management report of Landesbank Baden-Württemberg, Stuttgart, Karlsruhe, Mannheim and Mainz, for the period from 1 January to 30 June 2019 that are part of the half-yearly financial report according to section 115 of the Wertpapierhandelsgesetz (WpHG – German Securities Trading Act). The preparation of the condensed consolidated interim financial statements in accordance with International Accounting Standard IAS 34, as is applicable to interim financial reporting as adopted by the EU, and of the interim group management reports, is the responsibility of the company's management.

Our responsibility is to issue a report on the condensed consolidated interim financial statements and on the interim group management report based on our review. We performed our review of the condensed consolidated interim financial statements and the interim group management report in accordance with German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Those standards require that we plan and perform the review so that we can preclude through critical evaluation, with a certain level of assurance, that the condensed consolidated interim financial statements have not been prepared, in material respects, in accordance with IAS 34 as applicable to interim financial reporting as adopted by the EU, and that the interim group management report has not been prepared, in material respects, in accordance with the WpHG applicable to interim group management reports. A review is limited primarily to inquiries of company employees and analytical assessments and therefore does not provide the assurance attainable in a financial statement audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we cannot issue an auditor's report.

Based on our review, no matters have come to our attention that cause us to presume that the condensed consolidated interim financial statements have not been prepared, in material respects, in accordance with the IAS 34 applicable to interim financial reporting as adopted by the EU, or that the interim group management report has not been prepared, in material respects, in accordance with the requirements of the WpHG applicable to interim group management reports.

Stuttgart, 12 August 2019

KPMG AG

Wirtschaftsprüfungsgesellschaft

signed Pfeiffer

Wirtschaftsprufer

signed Kühn

Wirtschaftsprufer

Note regarding forward-looking statements

This half-yearly financial report contains forward-looking statements. Forward-looking statements are identified by the use of words such as »expect«, »intend«, »anticipate«, »plan«, »believe«, »assume«, »aim«, »estimate«, »will«, »shall«, »forecast« and similar expressions. These statements are based on the current estimates and forecasts by the Board of Managing Directors and on currently available information. Forward-looking statements are not deemed to be guarantees of the future developments and results set out therein and involve a number of risks and uncertainties. If any of these or other risks or uncertainties occur, or if the assumptions underlying any of these statements prove incorrect, the actual results may differ materially from those expressed or implied by such statements.

The LBBW Group assumes no obligation to continuously update any forward-looking statements, as these are based solely on the circumstances valid on the day of publication.



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