

LB  BW

Breaking new ground

The annual report 2019



Key figures of the LBBW Group

Income Statement (EUR million)	01/01 - 31/12/2019	01/01 - 31/12/2018 ¹
Net interest income	1,676	1,558
Net fee and commission income	558	513
Net gains/losses on remeasurement and disposal	169	213
of which allowances for losses on loans and securities	- 151	- 141
Other operating income/expenses	148	140
Total operating income/expenses	2,551	2,424
Administrative expenses	- 1,806	- 1,773
Expenses for bank levy and deposit guarantee system	- 102	- 89
Net income/expenses from restructuring	- 31	- 12
Consolidated profit/loss before tax	612	549
Income taxes	- 167	- 136
Net consolidated profit/loss	444	413
Key figures in %	01/01 - 31/12/2019	01/01 - 31/12/2018 ¹
Return on equity (RoE)	4.6	4.3
Cost/income ratio (CIR)	71.8	73.1
Balance sheet figures (EUR billion)	31/12/2019	31/12/2018 ¹
Total assets	256.6	241.2
Equity	13.9	13.2
Ratios in accordance with CRR/CRD IV (after full implementation)	31/12/2019	31/12/2018
Risk-weighted assets (EUR billion)	80.5	80.3
Common equity tier 1 (CET 1) capital ratio (in %)	14.6	15.1
Total capital ratio (in %)	22.9	21.9
Employees	31/12/2019	31/12/2018
Group	10,005	10,017

¹ Restatement of prior year amounts (see Note 2).
Differences are due to rounding effects

Rating (26 March 2020)

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- ²
Senior Unsecured Bank Debt	Aa3, stable	Long-term Senior Preferred Debt Rating	A- ²
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	-

² Under Criteria Observation (possible upgrade)

Key figures of the LBBW Group

01

Foreword by the Board of Managing Directors
Report of the Supervisory Board
Corporate governance at LBBW
Remuneration report
Report on gender equality and equal pay

Foreword and Reports

Page 4 →

03

Income statement
Statement of comprehensive income
Balance sheet
Statement of changes in equity
Cash flow statement
Notes to the consolidated financial statements

Consolidated Financial Statements

Page 123 →

02

Group overview
Business report for the Group
Risk report
ICS with regard to the accounting process
Forecast and opportunity report
Explanatory notes on the annual financial statements
of LBBW (Bank)
Non-financial statement

Combined Management Report

Page 26 →

04

Responsibility statement
Independent Auditor's report
Limited assurance report of the independent auditor
regarding the combined non-financial statement
Note regarding forward-looking statements

Further Information

Page 301 →

01

Foreword and Reports



Foreword by the Board of Managing Directors

Dear Readers,

Our customer-oriented business model of a Mittelstand-minded universal bank proved its value in the 2019 financial year. In a challenging environment, we recorded profitable growth and at the same time made marked progress in implementing our strategic agenda.

We boosted net consolidated profit before tax by a good 11% to EUR 612 million, a good result in light of stiff competition, low interest rates and the economic slowdown. We increased our financing volume in business with corporate customers, including in our new strategic core sectors. At the same time, we expanded cross-selling, for example in the area of corporate finance. We also saw buoyant and highly profitable new business in real estate financing. Our Capital Markets Business performed well under challenging market conditions. We expanded the financing and deposit volume in retail banking. In addition, we also continued to invest in growing our digital offers and improving personal service for our customers.

At Group level, the upturn in income combined with only a minor rise in costs boosted the cost/income ratio to 71.8%. Despite the weaker economic climate, allowances for losses on loans and advances rose only moderately and remain at a very acceptable level, underscoring the high quality of our portfolio. With the common equity Tier 1 (CET 1) capital ratio at 14.6%, we continue to enjoy solid capitalization. We also further optimized our capital structure by successfully issuing an AT-1 bond of EUR 750 million.

In strategic terms, we continued to focus on our four cornerstones of business focus, digitalization, sustainability and agility in 2019. We took a key step in our goal of becoming one of the most sustainable banks in Europe when we signed the United Nations' »Principles for Responsible Banking«. We still hold top positions in sustainability rankings by relevant agencies. In customer business, we supported various green finance transactions by companies and expanded our portfolio of sustainable investment products. One example of true innovation in this area was the first step-up bonds for private investors with sustainable use of funds. Moreover, we are increasingly shifting the focus of our own funding to large-volume green bonds. We also placed a social bond for the first time.

We see the digitalization of our processes as another key factor for safeguarding our bank's future. For example, last year we launched a digital platform offering guarantee management for our customers. Our digital Schuldschein platform DEBTVISION recorded strong growth and now has over 300 investors. In terms of blockchain technology, we successfully processed further trade financing transactions and transactions with commercial papers.

The encouraging results in the 2019 financial year reflect the outstanding efforts and dedication of our employees. We would like to sincerely thank them for their great commitment.

Our goal for 2020 is continue our path of profitable and capital-efficient growth. We will stand by our conservative risk policy and strict cost discipline. At the same time, we will keep steadily developing our corporate culture in order to align our organization to customer needs and to retain our status as an attractive employer moving ahead, especially for young talent. An essential element of this is training our executives and employees in agile project methods.

In addition, 2020 is likely to be significantly affected by developments relating to Covid-19. Signs of massive disruptions to overall economic development are becoming apparent, although it is still difficult to gauge the scope of this at present. This will likely also have an impact on our bank's results.

Finally, we would like to sincerely thank our customers, business partners and owners for their trust and excellent cooperation. Your appreciation both affirms our approach and spurs us on. We will do our utmost to continue meeting your expectations in future!

Sincerely,

The Board of Managing Directors



RAINER NESKE
Chairman



MICHAEL HORN
Deputy Chairman



KARL MANFRED LOCHNER



DR CHRISTIAN RICKEN



THORSTEN SCHÖNENBERGER



VOLKER WIRTH



Report of the Supervisory Board

Ladies and gentlemen,

During the past financial year, we advised the Board of Managing Directors on the management of the company and regularly monitored the management of LBBW. The Board of Managing Directors provided us with regular, timely, and comprehensive information concerning key developments at the Bank and the Group in 2019. The economic situation of the individual business units and the business situation of the LBBW Group were the subject of intense discussion. The Board of Managing Directors informed us on the risk, liquidity and capital management of the Bank, as well as of transactions and events of considerable importance for the Bank, and took advice from us on these matters. The Supervisory Board was involved in decisions of major importance for LBBW and, when required, granted its approval after extensive consultation and examination. We also exchanged ideas with the Board of Managing Directors on significant developments in domestic and European banking supervisory legislation, while critically scrutinizing and monitoring LBBW's management and corporate planning. Between the meetings, I, in my capacity as Chairman of the Supervisory Board, maintained close contact with the Chairman of the Board of Managing Directors.

With its balanced business model, LBBW has developed successfully in a challenging environment. The strategic agenda, with its four cornerstones of business focus, digitalization, sustainability and agility, made good progress.

Supervisory Board meetings

In the year under review, the Supervisory Board held five ordinary and two extraordinary meetings, which were attended by representatives of the competent statutory and regulatory authorities, too.

In all the ordinary Supervisory Board meetings, the Board of Managing Directors reported on the ongoing situation and particularly on the development of income, expenditure, risks and capital ratios. Questions from the Supervisory Board were answered promptly and to our satisfaction. When necessary, we examined matters relating to the Board of Managing Directors and legal issues. In addition, we continuously discussed the statutory, regulatory and supervisory law frameworks.

In our first ordinary meeting of the year on 25 February 2019, we discussed the preliminary results for the 2018 financial year and other current issues. Implementing the ESMA/EBA guidelines on the suitability assessment of management body members, we also introduced a policy to assess the suitability of the Board of Managing Directors and the Supervisory Board. At the meeting, the Board of Managing Directors also informed us of the bank's IT strategy and the current status with regard to implementing measures relating to the ECB audits on IT risk management. We also took note of the result of the 2019 risk taker selection.

The focus of the 1 April 2019 meeting was the 2018 annual financial statements. The Board of Managing Directors and the statutory auditor reported extensively on the previous financial year. Based on the recommendation of the Audit Committee we adopted the 2018 annual financial statements and approved the consolidated financial statements. Additionally, we accepted the proposal made by the Audit Committee and recommended to the annual general meeting that KPMG again be appointed as statutory auditor in accordance with Section 89 of the German Securities Trading Act (Wertpapierhandelsgesetz, WpHG) for the 2019 financial year. Furthermore, we discussed LBBW's international presence and the

required update of LBBW's restructuring plan. We also agreed on total variable remuneration for the bank for the 2018 financial year and set the variable remuneration for the Board of Managing Directors for the 2018 financial year.

On 8 July 2019, we focused our attention in developments in international business and the conversion of the Shanghai representative office into a branch. We also received an update regarding the status of measures implemented relating to the ECB audits on IT risk management.

At the meeting held on 25 September 2019, we dealt with the remuneration structure report for the 2018 financial year and the 2019 remuneration control report, as well as with the appointment of the Remuneration Officer and his Deputy from 1 January 2020 onwards, on which we were consulted. We also discussed LBBW Immobilien as the real estate competence center in the LBBW Group. Assessing the annual evaluation of the Board of Managing Directors and Supervisory Board was also on the agenda at this meeting. The Board of Managing Directors also briefed us on the implementation of the ESMA/EBA suitability guidelines at LBBW Group level.

On 16 December 2019, we approved the business plan for the 2020 financial year and took note of the medium-term planning. The meeting also looked at the 2020 business strategy. In addition, we discussed the update of the restructuring plan which is required by the regulatory authorities at regular intervals.

At two extraordinary meetings on 6 February 2019 and 28 June 2019, we focused on the current situation at Nord/LB and the conclusion of various legal issues.

Supervisory Board committees

The Supervisory Board established a total of four committees from among its members: the Risk Committee, Audit Committee, Compensation Control Committee and Executive Committee, with the latter assuming the statutory duties of the Nomination Committee. The current membership of the committees is printed on page 12 and 13 of this Annual Report.

The Executive Committee met five times in the period under review. Its deliberations centered on preparing the meetings of the full Supervisory Board, especially personnel matters and legal issues. The Executive Committee also discussed the evaluation of the Board of Managing Directors and the Supervisory Board in 2019 in accordance with KWG and the implementation of the ESMA/EBA guidelines on the suitability assessment of management body members and initial suitability. Furthermore, the Executive Committee approved the mandates of the Board of Managing Directors, discussed long-term succession planning and reviewed the Board of Managing Directors' principles for the appointment of senior management. The Executive Committee also addressed the current status with regard to the presence of women on the Supervisory Board.

The Compensation Control Committee fulfilled its statutory responsibilities in a total of four meetings. In particular, it reviewed LBBW's remuneration systems according to the requirements of the Remuneration Ordinance for Institutions. The Head of Human Resources provided extensive information on the Bank's remuneration structure. The Remuneration Officer participated regularly in the committee meetings and produced a comprehensive annual report on activities undertaken. The Committee was also consulted on the appointment of the Remuneration Officer and his Deputy on 1 January 2020. Moreover, in fulfilling its primary responsibility the Compensation Control Committee deliberated on questions relating to the remuneration of the Board of Managing Directors and prepared decisions to be taken by the Supervisory Board.

The Audit Committee held a total of four meetings in 2019. It discussed the annual financial statements and the consolidated financial statements of LBBW as well as the audit reports of the statutory auditor. It requested the auditor's declaration of independence and prepared the Supervisory Board's recommendation to the annual general meeting concerning the reappointment of KPMG. The Audit

Committee also agreed on the main points of the audit and the statutory auditor's fee. The Audit Committee received regular reports on the current status and results of the audit of annual financial statements and monitored the implementation of the audit. It also discussed mandates for the statutory auditor within the scope of non-audit services. Furthermore, the Audit Committee discussed the half-yearly financial report with the Board of Managing Directors and the statutory auditor as well as the non-financial statement. As well as this, it satisfied itself of the efficacy of internal control, risk management, auditing and compliance systems, and monitored the accounting process. The Committee also took note of the annual report by the Anti Money Laundering Officer and the annual report on the organization of the internal control system. In every meeting, the management of the Group Auditing departments also reported on its work.

In a total of eleven meetings, the Risk Committee held in-depth discussions on the Bank's risk situation and risk management as well as its exposure for which reporting duties apply in accordance with the law, the articles of association and the bylaws, granting its approval where this was required in individual cases. Within the framework of regular risk reporting of the Board of Managing Directors, the Risk Committee deliberated in depth the Bank's risk-bearing capacity and the Bank's main types of risk. The Risk Committee also discussed the Group risk strategy as derived from the business strategy, as well as the Bank's credit, market-price, liquidity, real estate, development and investment risk and operational risk strategies with the Board of Managing Directors. The Risk Committee also examined whether the Bank's remuneration system took adequate account of the Bank's risk, capital and liquidity structure. In addition, it took note of the annual report on country limits and utilization, the updates of the restructuring plan, the current status of implementation in relation to the requirements of BCBS 239 and the status of an audit by the regulatory authorities. The Risk Committee also regularly discussed other current topics and business areas. These included e-mobility and the impact of this on the supplier industry, managing regulatory risk in project financing, airplane financing, the development of the bank's LCR portfolio, rating procedures and risk drivers.

The committee chairpersons regularly reported on the work of the committees to the full Supervisory Board.

All members of the Supervisory Board attended the meetings of the Supervisory Board and the committees in 2019, with only a few exceptions (average attendance 92%).

Training and development measures

The members of the Supervisory Board assumed responsibility for taking part in the training and development measures which they required to perform their duties. They were given appropriate support for this by LBBW. In addition to individual training measures, the Supervisory Board received training on key management metrics for the banking industry on 25 February 2019 and on IT, blockchain and cryptocurrencies on 25 September 2019.

Annual and consolidated financial statements

The statutory auditor KPMG audited the annual financial statements and the consolidated financial statements of LBBW for 2019 including the management report, issuing an unqualified auditor's certificate. The annual financial statements were prepared in accordance with the provisions of the German Commercial Code (Handelsgesetzbuch, HGB) and the consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS). The documentation relating to the financial statements and the principal auditor's reports were forwarded to all members of the Supervisory Board in good time. Furthermore, the members of the Audit Committee received all the relevant audit reports. The statutory auditor attended the committee meetings pertaining to the annual financial statements, elaborated on the main results of the audit and was available to answer any questions. At its balance sheet meeting on 20 March 2020, the Audit Committee discussed the documentation relating to the financial statements in detail with the Board of Managing Directors and the statutory auditor.

At its meeting on 30 March 2020, following an assessment of the reports and an in-depth discussion, the Supervisory Board adopted the annual financial statements drawn up as at 31 December 2019 and approved the consolidated financial statements for 2019.

Conflicts of interest

The Risk Committee dealt with the credit approvals stipulated by Section 15 of the German Banking Act (Kreditwesengesetz, KWG) and in accordance with its bylaws. Those members of the Supervisory Board who at the time at which the resolutions were passed were members of the decision-making bodies of the borrowers concerned or were exposed to a possible conflict of interests for any other reasons did not participate in the deliberations and voting. To that extent the provisions governing the handling of conflicts of interest set out in the Municipal Code for Baden-Württemberg apply accordingly to the Supervisory Board.

Legal matters

The Supervisory Board and the individual committees continuously obtained detailed information on any significant legal matters. Where necessary, we consulted with external specialists.

Personnel changes in the Board of Managing Directors and the Supervisory Board

Dr. Thamm resigned from LBBW'S Supervisory Board as at 31 January 2019. She was replaced by Mr. Marc Oliver Kiefer as an employee representative on the Supervisory Board. Mr. Klaus-Peter Murawski left the Supervisory Board and thus his position as Deputy Chairman of the Audit Committee on 11 April 2019. He was replaced on 17 May 2019 by Professor Wolfgang Reinhart, MdL, who was elected to the Audit Committee by the Supervisory Board on 8 July 2019 and appointed new Deputy Chairman of the Audit Committee by the Audit Committee on 13 September 2019. In 2019, we also resolved to extend Dr. Christian Ricken's contract as a member of the Board of Managing Directors and, subject to approval by banking regulatory authorities, made Mr. Andreas Götz a member of the Board of Managing Directors. He will initially act as a chief representative for LBBW starting on 1 July 2020.

On behalf of the members of the Supervisory Board I would like to thank the Board of Managing Directors as well as the staff for their great personal dedication and performance in the 2019 financial year.

For the Supervisory Board



CHRISTIAN BRAND

Chairman

Supervisory Board of LBBW

Chairman

CHRISTIAN BRAND
Former chairman of the Board of Management of L-Bank

Deputy Chairperson

EDITH SITZMANN MDL
Minister of Finance of the State of Baden-Württemberg

Members

WOLFGANG DIETZ
Lord Mayor of the town of Weil am Rhein

UTA-MICHAELA DÜRIG
Corporate and foundation consultant

WALTER FRÖSCHLE
Employee representative of Landesbank Baden-Württemberg

HELMUT HIMMELSBACH
Lord Mayor (retired)

CHRISTIAN HIRSCH
Employee representative of Landesbank Baden-Württemberg

MARC OLIVER KIEFER
(since 1 February 2019)
Employee representative of Landesbank Baden-Württemberg

BETTINA KIES-HARTMANN
Employee representative of Landesbank Baden-Württemberg

FRITZ KUHN
Lord Mayor of the State Capital Stuttgart

SABINE LEHMANN
Employee representative of Landesbank Baden-Württemberg

KLAUS-PETER MURAWSKI
(until 11 April 2019)
State Secretary (retired)

DR. FRITZ OESTERLE
Attorney at law

MARTIN PETERS
Managing Partner of the Eberspächer group of companies

PROF. WOLFGANG REINHART MDL
(since 17 May 2019)
Chairman of parliamentary group, lawyer

CHRISTIAN ROGG
Employee representative of Landesbank Baden-Württemberg

CLAUS SCHMIEDEL
CEO of Critalog GmbH

B. JUTTA SCHNEIDER
Executive Vice President Global Services Delivery, SAP SE & Co. KG

PETER SCHNEIDER
President of the Sparkassenverband Baden-Württemberg (Savings Bank Association of Baden-Württemberg)

DR. JUTTA STUIBLE-TREDER
Managing Partner of EversheimStuible Treuberater GmbH

DR. BRIGITTE THAMM
(until 31 January 2019)
Employee representative of Landesbank Baden-Württemberg

BURKHARD WITTMACHER
Chairman of the Board of Managing Directors of Kreissparkasse Esslingen-Nürtingen

NORBERT ZIPF
Employee representative of Landesbank Baden-Württemberg

Executive Committee of LBBW

Chairman

CHRISTIAN BRAND
Former chairman of the Board of Management of L-Bank

Deputy Chairperson

EDITH SITZMANN MDL
Minister of Finance of the State of Baden-Württemberg

Members

FRITZ KUHN
Lord Mayor of the State Capital Stuttgart

PETER SCHNEIDER
President of the Sparkassenverband Baden-Württemberg (Savings Bank Association of Baden-Württemberg)

NORBERT ZIPF
Employee representative of Landesbank Baden-Württemberg

Compensation Control Committee of LBBW

Chairman

CHRISTIAN BRAND

Former chairman of the Board of Management of L-Bank

Deputy Chairperson

EDITH SITZMANN MDL

Minister of Finance of the State of Baden-Württemberg

Members

FRITZ KUHN

Lord Mayor of the State Capital Stuttgart

MARTIN PETERS

Managing Partner of the Eberspächer group of companies

B. JUTTA SCHNEIDER

Executive Vice President Global Services Delivery, SAP SE & Co. KG

PETER SCHNEIDER

President of the Sparkassenverband Baden-Württemberg (Savings Bank Association of Baden-Württemberg)

NORBERT ZIPF

Employee representative of Landesbank Baden-Württemberg

Audit Committee of LBBW

Chairman

BURKHARD WITTMACHER

Chairman of the Board of Managing Directors of Kreissparkasse Esslingen-Nürtingen

Deputy Chairman

KLAUS-PETER MURAWSKI

(until 11 April 2019)
State Secretary (retired)

PROF. WOLFGANG REINHART MDL

(since 8 July 2019, Deputy Chairman since 13 September 2019)
Chairman of parliamentary group, lawyer

Members

UTA-MICAELA DÜRIG

Corporate and foundation consultant

HELMUT HIMMELSBACH

Lord Mayor (retired)

SABINE LEHMANN

Employee representative of Landesbank Baden-Württemberg

B. JUTTA SCHNEIDER

Executive Vice President Global Services Delivery, SAP SE & Co. KG

PETER SCHNEIDER

President of the Sparkassenverband Baden-Württemberg (Savings Bank Association of Baden-Württemberg)

DR. JUTTA STUIBLE-TREDER

Managing Partner of EversheimStuible Treuberater GmbH

Guest

CHRISTIAN BRAND

Former chairman of the Board of Management of L-Bank

Risk Committee of LBBW

Chairman

PETER SCHNEIDER

President of the Sparkassenverband Baden-Württemberg (Savings Bank Association of Baden-Württemberg)

Deputy Chairman

CHRISTIAN BRAND

Former chairman of the Board of Management of L-Bank

Members

WOLFGANG DIETZ

Lord Mayor of the town of Weil am Rhein

WALTER FRÖSCHLE

Employee representative of Landesbank Baden-Württemberg

DR. FRITZ OESTERLE

Attorney at law

CLAUS SCHMIEDEL

CEO of Critalog GmbH

B. JUTTA SCHNEIDER

Executive Vice President Global Services Delivery, SAP SE & Co. KG

BURKHARD WITTMACHER

Chairman of the Board of Managing Directors of Kreissparkasse Esslingen-Nürtingen

Corporate governance at LBBW

LBBW takes account of the fundamental aspects of the German Corporate Governance Code. This is a set of essential legal regulations governing the management and monitoring of German listed companies and contains nationally and internationally recognized standards for good and responsible corporate governance – including in the form of recommendations.

As the Code is geared towards listed joint-stock companies, not all points of it are applicable to Landesbank Baden-Württemberg, since LBBW is a non-listed credit institution incorporated under public law (Anstalt des öffentlichen Rechts). For this reason, several provisions of the German Corporate Governance Code can only be transferred analogously to Landesbank Baden-Württemberg. In terms of content, LBBW's corporate governance is oriented very closely to the spirit of the German Corporate Governance Code. For a large number of recommendations of the German Corporate Governance Code there are therefore special regulations in the legislation governing LBBW, in the articles of association and bylaws of the executive bodies and further committees. Furthermore, there are special provisions for corporate governance in the banking supervisory legislation that are not included in the Code, but do apply to LBBW.

At LBBW, management and supervisory rules applicable to corporations are practiced. For instance, the tasks of LBBW's annual general meeting and Supervisory Board are regulated as for a joint-stock company although this is not the legal form of LBBW. The members of the LBBW Board of Managing Directors make their decisions independently of any external instructions. At the same time, it is ensured that independent expertise is drawn on through the supervisory bodies. The Supervisory Board of LBBW has eight independent members, including the Chairman of the Supervisory Board.

Corporate governance, as practiced at LBBW, is presented below. The structure of the report is based on the standards of the German Corporate Governance Code, which is voluntary and not mandatory for LBBW on account of its legal form, as amended on 7 February 2017.

Shareholders and annual general meeting

Shareholders

As an institution incorporated under public law, LBBW has not securitized any equities. The shareholders are therefore described as owners (Träger) and not as shareholders.

Landesbank Baden-Württemberg's owners are:

- Sparkassenverband Baden-Württemberg (Savings Bank Association of Baden-Württemberg) with a 40.534118% stake in the share capital,
- State of Baden-Württemberg (state) with a 24.988379% stake in the share capital,
- State Capital of Stuttgart (city) with a 18.931764% stake in the share capital,
- Landesbeteiligungen Baden-Württemberg GmbH (Landesbeteiligungen BW) with a 15.545739% stake in the share capital.

The owners of LBBW assume their rights before or during the annual general meeting within the scope of the opportunities offered by the articles of association and thereby exercise their voting rights. The voting rights of the owners are based on the size of their stake in the share capital, with each euro granting one vote.

Annual General Meeting

At the annual general meeting, the owners exercise their rights over the affairs of LBBW in the absence of any stipulations to the contrary in the legislation governing Landesbank Baden-Württemberg or the articles of association of LBBW. The owners are represented at the annual general meeting by one or several people.

The powers of the annual general meeting encompass the typical tasks of an annual general meeting based on joint-stock companies legislation, for example, voting on the appropriation of net profit, or granting discharge to the members of the Supervisory Board and the Board of Managing Directors. The annual general meeting also makes decisions about the content of the articles of association and any changes thereto, and about key structural measures, such as corporate agreements, setting and changes to the share capital, the issue of profit participation rights and granting of silent partners' contributions. The Supervisory Board decides whether to change the principles of business policy.

The functions of supervising and monitoring the Board of Managing Directors, including the appointment and dismissal of members of this board, lie with the Supervisory Board. The Board of Managing Directors submits the audited annual financial statements to the Supervisory Board for approval in line with LBBW's articles of association.

LBBW's share capital can be increased or decreased by a resolution passed at the annual general meeting. LBBW can accept capital generated from profit-participation rights, silent partners' contributions as well as subordinated guarantee capital, and other forms of capital as provided for in the German Banking Act (Kreditwesengesetz, KWG) from its owners and third parties.

Each owner with a share in the share capital is entitled to a share in the new share capital based on their shareholding in the event of increases. If one owner fails to exercise their subscription right, this right will accrue to the other owners for a corresponding consideration in a proportion to their share in the share capital, unless they have reached an agreement to the contrary among themselves.

The ordinary general meeting takes place within the first eight months of the year. Further general meetings are called if the good of LBBW so requires and also when the Supervisory Board or an owner makes an application detailing the agenda items. The internal regulations of the annual general meeting provide more details in this respect, particularly as regards the form and deadline for requests that a meeting be held and for the calling of a meeting.

In contrast to a joint-stock company, LBBW provides its owners with the documents required for the annual general meeting, such as the convocation documents for the annual general meeting, directly by e-mail or by mail rather than via its website, in view of the small number of owners.

Interoperation between the Board of Managing Directors and the Supervisory Board

The Board of Managing Directors and the Supervisory Board work closely together for the good of the Company. The Board of Managing Directors agrees the strategic direction of the Company with the Supervisory Board and they discuss the status of strategy implementation at regular intervals. For business of fundamental importance, the articles of association or the Supervisory Board, the latter also in individual cases, stipulate that the consent of the Supervisory Board is required. Examples include decisions or measures that fundamentally change the Company's net assets, financial position or results of operations.

It is the duty of the Board of Managing Directors to supply the Supervisory Board with information although the Supervisory Board for its part needs to make sure that it is adequately informed. For this purpose, the Supervisory Board sets out the Board of Managing Director's duties of information and reporting in detail. The Board of Managing Directors provides the Supervisory Board with regular, prompt and comprehensive information about all relevant questions relating to planning, business performance, the risk situation, effectiveness of the internal control system, the internal auditing system and compliance. It examines deviations in the business development from the plans and targets drawn up and gives reasons for such deviations.

Reporting by the Board of Managing Directors to the Supervisory Board is generally carried out in written form. Documents required for a decision are generally forwarded to members of the Supervisory Board in good time before the meeting.

The Chairman of the Board of Managing Directors informs the Chairman of the Supervisory Board and his Deputy about important events, including between the individual meeting dates.

Based on LBBW's and its owners' understanding, good corporate governance requires open discussion between the Board of Managing Directors and the Supervisory Board and internally within the Board of Managing Directors and the Supervisory Board. Full and comprehensive confidentiality is of decisive importance. The members of the Supervisory Board and the Board of Managing Directors are therefore bound to secrecy. This obligation remains even after the end of their activity within the executive bodies of the Landesbank. All members of the executive bodies ensure that employees asked by them to provide support observe the same obligation to secrecy.

The Board of Managing Directors and the Supervisory Board observe the rules of proper corporate governance. Should they culpably breach the due diligence expected of a prudent and conscientious director or Supervisory Board member, they are liable to pay damages to LBBW. There is no breach of obligations for business decisions if the member of the Board of Managing Directors or Supervisory Board may reasonably have assumed that they were acting for the good of the Company on the basis of fair information (business judgment rule).

With regard to the D&O insurance taken out for the Board of Managing Directors, a deductible has been agreed of 10% of the loss up to one and a half times the Board member's annual fixed compensation. A corresponding deductible was also agreed when the D&O insurance was taken out for the members of the Supervisory Board.

Decisions about granting loans to members of the Board of Managing Directors and the Supervisory Board and related parties are made by the Risk Committee in accordance with Section 15 German Banking Act (Kreditwesengesetz, KWG). The fact that the Risk Committee is a Supervisory Board committee ensures that the Supervisory Board is involved in the aforesaid lending decisions.

LBBW has been reporting on its corporate governance in a report on corporate governance forming part of the annual report since the 2010 financial year.

Board of Managing Directors

Duties and responsibilities

The Board of Managing Directors manages the business of LBBW under its own responsibility pursuant to the law and in the Company's interest, i.e. by taking the needs of the owners, its employees and other groups (stakeholders) affiliated to the Company into account, with the aim of achieving sustainable added value. In accordance with the legal principles of LBBW, it is responsible for any LBBW matters that do not fall within the remit of another authority based on the legislation governing Landesbank Baden-Württemberg or the articles of association of LBBW. In managing the business, the members of the Board of Managing Directors exercise the due diligence of a prudent and conscientious business manager. In so doing, the Board of Managing Directors develops the strategic direction of the Company, agrees it with the Supervisory Board and ensures it is implemented. Furthermore, the Board of Managing Directors ensures compliance with the statutory regulations and the Company's internal rules and works toward ensuring that they are observed by LBBW Group companies. The Board of Managing Directors further ensures a reasonable risk management and risk controlling within the Group.

The Board of Managing Directors is the line superior for all employees of LBBW, including its subsidiaries, branches, stock market offices, representative offices and legally dependent institutions under public law. The Board of Managing Directors strives for diversity and therefore a reasonable inclusion of women, in particular, when filling management positions within the Bank.

Members of the Board of Managing Directors

The Board of Managing Directors consists of several members. The members of the Board of Managing Directors, the Chairman and his deputy or deputies are determined and appointed by the Supervisory Board. In filling positions on the Board of Managing Directors, the Supervisory Board strives for diversity.

To ensure maximum flexibility, LBBW has refrained from fixing an allocation of competences for the members of the Board of Managing Directors in the bylaws. A schedule of responsibilities governs the departmental responsibilities of individual board members. The Supervisory Board makes decisions about the bylaws of the Board of Managing Directors and about the approval of the proposed allocation of responsibilities.

Remuneration

Details on the remuneration of the Board of Managing Directors can be found in the remuneration report.

Conflicts of interest

Members of the Board of Managing Directors are obliged to act in the interests of the Bank. Members of the Board must not pursue personal interests when making their decisions. They are bound by a comprehensive non-compete clause while working for LBBW and must not exploit business opportunities open to the Bank for their own ends. Members of the Board of Managing Directors and employees must not seek or accept undue advantages from third parties in connection with their activities, neither for themselves nor for other persons, or grant undue advantages to third parties.

Every member of the board should disclose any possible conflicts of interest to the Supervisory Board immediately and inform the other board members. All business between LBBW, on the one hand, and the members of the Board of Managing Directors or persons or enterprises closely associated with them, on the other, must satisfy industry standards. Important business requires the consent of the Supervisory Board.

Members of the Board of Managing Directors may only accept secondary activities, in particular appointments to supervisory boards outside the LBBW Group, with the consent of the Executive Committee. The Executive Committee consists of the Chairman of the Supervisory Board, the Deputy Chairman and three members of the Supervisory Board. This ensures that the Supervisory Board is involved in the decision about secondary activities of the Board of Managing Directors.

In the event of a conflict of interests, the member concerned will not take part in the deliberations and voting on the item in question by the Board of Managing Directors. Section 18 paragraphs 1 - 3 and 5 of the Municipal Code for Baden-Württemberg applies accordingly to the members of the Board of Managing Directors in this regard.

Supervisory Board

Duties and responsibilities

It is the duty of the Supervisory Board to offer regular advice and oversee the Board of Managing Directors' management of LBBW. It is involved in decisions of key importance to the Company. It is responsible for the appointment and dismissal of the members of the Board of Managing Directors and of the Chairman and Deputy Chairmen of the Board and for setting the remuneration of the Board of Managing Directors. The Supervisory Board is able to appoint deputy members of the Board of Managing Directors, who have the same rights and obligations as the members of the Board of Managing Directors. The Supervisory Board has set itself its own bylaws. The Supervisory Board has a Chairman and a Deputy Chairman. The Chairman and Deputy Chairman of the Supervisory Board are elected from the Supervisory Board's own number on the basis of a proposal made by the shareholders' meeting in the absence of any requirements to the contrary in the Landesbank Baden-Württemberg Act.

Tasks and powers of the Supervisory Board Chairman

The Chairman of the Supervisory Board calls a meeting of the Supervisory Board as required, but no less than four times a year, and chairs its meetings. The bylaws for the Supervisory Board set out further details, in particular, the format and deadlines for the calling of meetings. The Chairman coordinates the work in the Supervisory Board, chairs its meetings and attends to the affairs of the Supervisory Board in dealings with outside parties.

The Chairman of the Supervisory Board takes part in the meetings of the Audit Committee as a permanent guest.

The Chairman of the Supervisory Board is in regular contact with the Board of Managing Directors, in particular with its Chairman, and discusses with the latter strategy, business development and risk management at LBBW. The Chairman of the Supervisory Board is informed immediately by the Chairman of the Board of Managing Directors about important events that are of key importance in the assessment of the position and development of the Company and its management. The Chairman of the Supervisory Board then notifies the Supervisory Board and calls an extraordinary meeting of the Supervisory Board if required.

Formation of committees

Due to the specific circumstances of LBBW and the number of its members, the Supervisory Board has formed four well-qualified committees in the shape of the Executive Committee, the Compensation Control Committee, the Audit Committee and the Risk Committee. The respective committee chairpersons regularly report on the work of the committees to the Supervisory Board.

The Executive Committee performs the statutory duties of the Nomination Committee; in the absence of anything to the contrary in the Landesbank Baden-Württemberg Act, the proposals for the election of members of the Supervisory Board that are submitted to the annual general meeting are prepared solely by the representatives of the owners.

The Audit Committee deals, in particular, with the effectiveness of the internal control system and internal auditing, as well as issues relating to accounting, risk management and compliance. It also monitors the audit of the annual and consolidated financial statements. The Audit Committee submits a substantiated proposal for a statutory auditor to the Supervisory Board. If a different auditor is recommended than the previous one, a selection of at least two candidates is to be proposed. The Audit Committee monitors the independence of the statutory auditor and handles additional services provided by the auditor, issues the audit assignment to the auditor and determines focal areas of the audit and the auditor's fee. The Chairman of the Audit Committee has specific knowledge and experience of the application of accounting standards and internal control procedures. The Chairman of the Audit Committee is not a former member of LBBW's Board of Managing Directors.

Members of the Supervisory Board

The members of the Supervisory Board are elected by the shareholders' meeting unless they are required to be elected by the employees and in the absence of any requirements to the contrary in the Landesbank Baden-Württemberg Act. Eight of the members of the Supervisory Board elected by the annual general meeting, including the chairman, are independent. Each owner has the right to submit proposals for election.

The composition of the Supervisory Board is such that its members collectively possess the requisite knowledge, skills and technical experience to assume their tasks in due form.

The members of the Supervisory Board assume responsibility for taking part in the training and development measures which they require to perform their duties. They receive reasonable support for this from LBBW, e.g. through the designation of specific seminars and the availability of corresponding lectures. In 2019, two specialist seminars were organized especially for the Supervisory Board.

To enable the Supervisory Board to provide independent advice and oversee the Board of Managing Directors independently, the Supervisory Board includes independent members, the number of which is set out in LBBW's rules and regulations. Supervisory Board members are seen as independent if they have no business or personal relationship with the Company, its Board of Managing Directors or the owners that could constitute the basis for a conflict of interests. There are no former members of the Board of Managing Directors on the Supervisory Board. Each Supervisory Board member takes care that they have sufficient time to fulfill their role.

If a member of the Supervisory Board has attended half or fewer than half of the meetings of the Supervisory Board or the committees of which he or she is a member in the course of a financial year, a note to that effect is included in the Supervisory Board's report. Attendance is also deemed to include participation via a conference call or video link although this should not be the rule.

Remuneration

Details on the remuneration of the Supervisory Board can be found in the remuneration report.

Conflicts of interest

Every member of the Supervisory Board is obliged to act in the interests of the Bank. They may not pursue any personal interests in their decisions, nor use any business opportunities open to the Company for their own advantage. Any conflicts of interest, in particular those that may arise because of an advisory or executive function exercised for customers, suppliers, lenders or other business partners must be disclosed to the Supervisory Board. In the event of a conflict of interests, the member concerned does not participate in the deliberations and voting of the Supervisory Board on the issue in question. Section 18 paragraphs 1 to 3 and 5 of the Municipal Code for Baden-Württemberg applies to the members of the Supervisory Board accordingly in this regard.

Any material conflicts of interest of a non-temporary nature existing in the person of a Supervisory Board member will lead to a member's appointment being terminated. Furthermore, any consulting, other service or employment contracts of a Supervisory Board member with the Company require the Supervisory Board's approval.

The Supervisory Board regularly checks the efficiency of its activities and at least once a year evaluates its structure, size, composition and performance as well as the knowledge, skills and experience both of individual members and of the executive body as a whole.

Transparency

LBBW deals with its owners equally and without distinction in matters of information.

LBBW supports good contact with its owners. It is the view of LBBW that publication of a financial calendar would not offer any added value. Such a calendar is therefore not provided.

Accounting and audit of the annual accounts

Accounting

The owners and third parties are provided with information primarily via the consolidated financial statements. They also receive information during the financial year through the half-yearly financial report. The consolidated financial statements and the abbreviated consolidated financial statements of the half-yearly financial report are compiled in accordance with the relevant international accounting standards.

The consolidated financial statements are compiled by the Board of Managing Directors and audited by the auditor and the Supervisory Board. The Audit Committee, as a Supervisory Board committee, discusses the half-yearly financial reports with the Board of Managing Directors. In addition, the German Financial Reporting Enforcement Panel (Deutsche Prüfstelle für Rechnungslegung) is authorized to check that the consolidated financial statements comply with the applicable accounting standards (enforcement). As a company not listed on the stock market, LBBW publishes its consolidated financial statements and its half-yearly financial reports within the timescale required by the German Securities Trading Act (Wertpapierhandelsgesetz - WpHG). The annual report is published at the latest four months after the end of each financial year (Section 114 WpHG) and the half-yearly financial report three months following the end of the reporting period at the latest (Section 115 WpHG).

In its consolidated financial statements LBBW explains the relationships with representatives of the owners who are considered as related parties within the meaning of the applicable accounting standards.

Audit of the annual accounts

Prior to submitting the proposal to the annual general meeting for the appointment of the auditor, the Supervisory Board or the Audit Committee obtains a declaration from the proposed auditor stating whether any and, if applicable, which, business, financial and personal or other relationships exist between the auditor and its executive bodies and audit managers, on the one hand, and LBBW and the members of its executive bodies, on the other, which may give reason to doubt the auditor's independence. The declaration also states the extent to which other services were provided for LBBW over the past financial year, in particular in terms of consultancy, and have been contractually agreed for the following financial year.

The Supervisory Board or its Audit Committee commissions the auditor and reaches an agreement with the latter about the fee.

The auditor notifies the Chairman of the Supervisory Board and/or the Chairman of the Audit Committee immediately of any grounds for disqualification or partiality that may emerge during the course of an audit, unless they are rectified immediately.

The Supervisory Board has also stipulated that the auditor will immediately report on all events and findings of importance to the Supervisory Board's duties that may arise while carrying out the audit. The auditor takes part in the deliberations of the Supervisory Board and the Audit Committee relating to the annual financial statements and the consolidated financial statements and reports on the key results of its audit.

Remuneration report

Board of Managing Directors

Principles of the remuneration system

Responsibility

The Supervisory Board makes decisions on the remuneration system for the members of the Board of Managing Directors, fixes the remuneration payable to them and regularly reviews its appropriateness. The Compensation Control Committee assumes an important advisory role in this respect and prepares the resolutions of the Supervisory Board.

Principles of the remuneration system

The remuneration parameters that determine variable remuneration are geared toward achieving the targets derived from the Bank's strategy on a sustained basis and support it in reaching its strategic company targets.¹ The variable performance-based remuneration for the members of the Board of Managing Directors in 2019 was guided by the Group's sustained overall success over a period of three years, accounting for 50%, and on the individual Board members' contribution to profit in the year under review, accounting for 50%. The individual performance contribution is tied to target achievement agreements based on the business strategy and business plan. Final calculation of the variable performance-based remuneration is based on the overall target achievement as determined in a resolution passed by the Supervisory Board in the following year.

Alongside sustainability in the decision on performance, sustainability in the payout of the variable remuneration constitutes a key element for the remuneration for members of the Board of Managing Directors. Significant parts of the variable remuneration are based on sustained business success. For this reason, 60% of the variable remuneration granted for 2019, the year under review, will be deferred over a five-year period and paid out on a pro rata temporis basis (deferral); negative performance contributions can reduce the deferral, lead to its expiry (malus) or result in a clawback. 60% of the deferred proportion of the variable remuneration granted for 2019, the year under review, is subject to a blocking period of one year and guided by sustained performance (i.e. subject to an appreciation right). LBBW's sustained performance is measured by the change in the adjusted aggregate risk cover², taking into account the risk situation (risk protection). To this end, the aggregate risk cover performance in each respective payout year is determined in a comparison with the base year (awarding of variable performance-based remuneration). The current risk situation is evaluated in line with the risk assessment in the overall risk report. Of the non-deferred portion (40%), 40% of the variable remuneration calculated is paid out immediately. The other 60% of the non-deferred portion of variable remuneration is frozen for one year and during this period is also aligned to any changes in the sustained performance.

Following the expiry of the deferral period, the malus/clawback is reviewed using the criteria set out in the Board remuneration model at Group level and at individual level prior to payment. In addition, a review is performed prior to payment to establish that the additional conditions (positive overall performance of the Group, no risk to appropriate capital backing, sufficient liquidity on the part of the Bank and compliance with the combined capital buffer requirements) have been satisfied.

¹ Business focus, digitalization, sustainability and agility.

² The basis is the aggregate risk cover anchored in the Bank's risk management, adjusted by certain items.

The retirement benefits are essentially designed as defined-contribution benefits. Some members of the Board of Managing Directors have an arrangement taking the form of a final salary scheme, the amount of which is calculated according to the length of their service on the Board of Managing Directors.

Remuneration 2019

In 2019, remuneration of members of LBBW's Board of Managing Directors consisted of fixed, non-performance-based remuneration and a performance-based variable component. In addition to the contractually agreed fixed salary, the fixed remuneration includes payments into the company pension scheme and all other benefits (essentially the use of a company car).

During the 2019 financial year, the members of the Board of Managing Directors received fixed contractually agreed remuneration totaling EUR 5.2 million for the performance of their duties on the Board. The other benefits amounted to EUR 0.1 million. In addition, variable performance-based remuneration totaling EUR 1.4 million was paid out (inflow). This amount includes percentages of deferred variable remuneration from previous years.

In 2019, EUR 1.1 million was transferred to the pension obligations for serving members of the Board of Managing Directors as an element of the fixed remuneration according to IFRS and recognized in the income statement. As at 31 December 2019, pension obligations according to IFRS for serving members of LBBW's Board of Managing Directors as at the reporting date totaled EUR 21.0 million.

Supervisory Board

Principles of remuneration for Supervisory Board members

The annual general meeting on 22 July 2011 decided on the remuneration of Supervisory Board members as follows:

- The members of the Supervisory Board receive a fixed remuneration of EUR 25,000 for the respective financial year. The Chairman of the Supervisory Board receives twice and the Deputy Chairman one and a half times the fixed remuneration of a Supervisory Board member.
- Supervisory Board members who hold a seat on a committee receive further fixed remuneration of EUR 10,000 per committee. The Chairman of a committee receives twice and the Deputy Chairman one and a half times the further fixed remuneration.
- Each Supervisory Board member receives an attendance allowance of EUR 200 to attend a meeting of the Supervisory Board or one of its committees.
- The Supervisory Board members are further reimbursed for the expenditure that they incur in connection with performing their duties as members of the Supervisory Board (travel expenses, individual bank-specific further training etc.).
- The Supervisory Board members are reimbursed for the value-added tax incurred that they have to pay as a result of their activity as a member of the Supervisory Board or a committee.

The employee representatives on the Supervisory Board employed at LBBW also receive their salary as employees.

The remuneration of Supervisory Board members who are not part of the Supervisory Board for a complete financial year is paid pro rata for their term in office.

Remuneration 2019

For the 2019 financial year, a total of EUR 0.96 million was paid in salaries and EUR 0.06 million in attendance allowances to the members of the Supervisory Board.

Other information

There is also pecuniary loss liability insurance for members of the Board of Managing Directors and Supervisory Board (>D&O<). The deductible is 10% of the loss up to a maximum of 1.5 times the fixed annual remuneration.

Landesbank Baden-Württemberg

The Supervisory Board

The Board of Managing Directors

Report on gender equality and equal pay

Landesbank Baden-Württemberg (LBBW) has a duty to draw up and publish a report on gender equality and equal pay, according to Sections 21 et seqq. of the Act to Promote Transparency in Pay Structures (EntgTranspG). The report relates solely to LBBW (Bank).

Promoting diversity and equality of opportunity is firmly established in LBBW's sustainability targets and in the human resources policy guidelines, particularly in the »equal opportunity and diversity« principles. As early as 2008, by becoming a member of the »Diversity as Opportunity – German Corporate Diversity Charter« initiative (www.charta-der-vielfalt.de), LBBW committed itself to creating a workplace free of prejudice for all employees. A Diversity Officer is assigned to supervise and support diversity and equal opportunity efforts at LBBW. The topics »work-life balance« and »active promotion of women« take center stage, with the aim of ensuring equal opportunities for men and women at LBBW. For example, LBBW introduced a key performance indicator (KPI) entitled »Women in leadership« in 2019. LBBW was also successfully reaudited and received the »Audit berufundfamilie« certificate from the Hertie Foundation. In addition, it created a pool for female senior management candidates with the primary goal of moving women into top management positions. A program was also launched for young female top performers in the Private Customers / Savings Banks segment as a way of boosting the number of women in demanding sales positions. Successful past programs such as mentoring and seminars for women were continued.

Measures designed to bring about equal pay for men and women are anchored in LBBW's remuneration systems in the sense that they are guided by performance, results and the market. Fixed remuneration is essentially based on the function exercised and its significance in accordance with applicable collective agreements or, for positions not covered by such agreements, market conditions. The duties and requirements of the position, the qualifications and skills required of the employees and sustained individual performance are among the factors relevant for determining remuneration.

Generally speaking, a review of fixed salaries takes place once a year, when the performance-related variable remuneration (bonus) is also determined. The decision as to which employee receives an individual increase and/or a bonus is made by the responsible manager. The percentage of women and men with measures and their average size are made transparent to executives to help them in their decision-making.

Gender-specific remuneration is additionally disclosed in internal and external reports, for example in the sustainability report, which is published once a year.

The following table sets out the gender distribution of part-time and full-time positions.

Human resources indicators for LBBW (Bank) – average total for 2019 (pre-year figures in brackets).

	Total		of which women		of which men	
Employees	8,171	(8,335)	4,270	(4,373)	3,900	(3,962)
Full-time employees	5,696	(5,872)	2,033	(2,129)	3,662	(3,743)
Part-time employees	2,475	(2,463)	2,237	(2,244)	238	(219)

02

Combined Management Report



Group overview

This annual report published by Landesbank Baden-Württemberg comprises the combined management report and the consolidated financial statements (IFRS). The management report of LBBW (Bank) and the group management report are combined in accordance with German Accounting Standard (DRS) 20. The report thus comprises both the Group and LBBW (Bank) as a single entity, with notes based on the German Commercial Code. The LBBW (Bank) annual financial statements according to the German Commercial Code (HGB) and the combined management report are published simultaneously in the German Federal Gazette (Bundesanzeiger).

The consolidated financial statements (IFRS) and the combined management report were prepared on 3 March 2020. Given the latest developments regarding the spread of coronavirus and the associated, as yet unpredictable impact on global economic performance, the Board of Managing Directors amended and re-issued the risk report and the forecast and opportunity report in the combined management report, as well as the events after the balance sheet date section of the notes, on 26 March 2020.

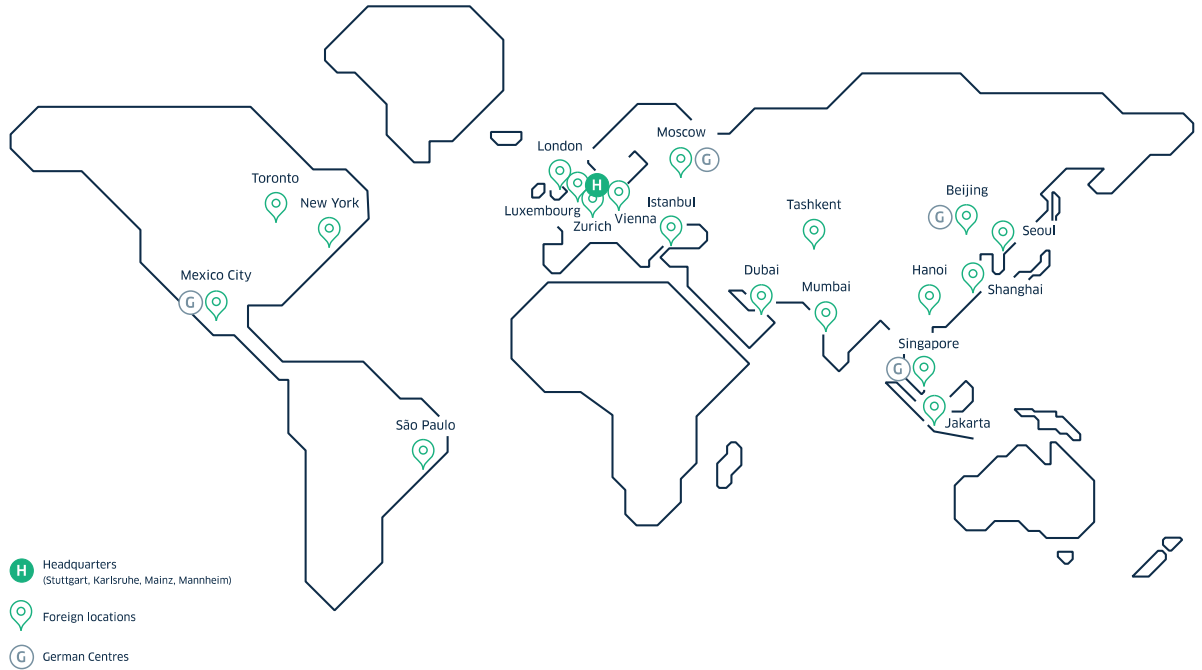
Structure and business model

The Landesbank Baden-Württemberg (LBBW) Group predominantly comprises the single entity Landesbank Baden-Württemberg, which is referred to below as LBBW (Bank). LBBW (Bank) is the parent company of the LBBW Group.

LBBW (Bank) is an institution incorporated under public law. It has four registered offices in Stuttgart, Karlsruhe, Mannheim and Mainz. Its owners are the Savings Bank Association of Baden-Württemberg (Sparkassenverband Baden-Württemberg) with 40.53%, the state capital Stuttgart with 18.93% and the State of Baden-Württemberg with 40.53% of the share capital. The State of Baden-Württemberg holds its share directly and indirectly through Landesbeteiligungen Baden-Württemberg GmbH.

As a universal bank, the LBBW Group offers a comprehensive range of products and services. The Group's business model focuses on customer business as reflected by its segments of Corporate Customers, Real Estate/Project Finance, Capital Markets Business and Private Customers/Savings Banks. The LBBW Group operates locally in its regional core markets of Baden-Württemberg, Rhineland-Palatinate and Saxony and selectively takes advantage of growth opportunities in attractive economic areas such as North-Rhine Westphalia, Bavaria and the greater Hamburg area.

The LBBW Group's private customer business and private asset management as well as SME corporate customers business in Baden-Württemberg have operated under the name BW Bank since 2018. Outside Baden-Württemberg, the bank operates corporate customer business under the LBBW brand. Group companies for special products (leasing, factoring, asset management, real estate and equity investment finance) supplement the LBBW Group's portfolio of services. A global network of international locations and German Centres is also available to support customers with country-specific expertise and financial solutions as well as with market entry solutions.



LBBW, a mittelstand-minded universal bank, provides broad diversification in various business areas. In light of the many and varied challenges posed in the areas of economic performance, customer requirements, market trends as well as society and the environment, the Bank sees itself to be well-positioned with its four strategic priorities:

- **Business focus:** A strong focus on customer business takes center stage. LBBW aims for profitable and capital-efficient growth by selectively acquiring new customers and strengthening its existing client relationships. In addition, its specialized product expertise will be more heavily dovetailed with its customer segments. The requirements for success are efficiency improvements and an effective operating model.
- **Digitalization:** This strategic priority seeks to bring the Bank's competitive benefits into the digital age. In the first instance, central customer business procedures need to be digitalized and innovative products and solutions offered. On the other hand, it is necessary to achieve faster and leaner internal processes through process digitalization and modernization of the IT landscape.
- **Sustainability:** LBBW aims to gradually expand its portfolio of sustainable products and services and to help its customers navigate the way into the future in establishing sustainable business models. One critical step here is adjusting the lending policy to meet sustainability and risk criteria. The sustainability efforts are expected to be rounded off by building up talent management that is geared toward LBBW's strategic goals for the in-house development of suitable candidates at all levels.
- **Agility:** Quick, unbureaucratic decision-making channels, a stronger customer- and solution-oriented approach as well as autonomous cross-divisional cooperation constitute the core of embedding the agility aspect within LBBW.

Corporate Customers

In the Corporate Customers segment the focus is on traditional SMEs, companies in the upper SME segment with capital market orientation and groups with a capital market focus in the regional core markets and other attractive economic areas, such as North Rhine-Westphalia, Bavaria and the greater Hamburg area.

The LBBW Group implements its universal bank approach with a broad range of products and services, extending from international business to all forms of financing, payments, hedging transactions and asset management. Landesbank Baden-Württemberg partners with municipalities in its core markets and selectively throughout Germany.

Various subsidiaries such as SüdLeasing GmbH, MMV Bank GmbH, SüdFactoring GmbH and Süd Beteiligungen GmbH supplement this segment's offering.

Real Estate/Project Finance

The Real Estate/Project Finance segment serves professional investors, real estate investment trusts and housing companies as well as open and closed-end real estate funds in commercial real estate. Types of use include residential, office, retail and logistics, principally on the target markets of Germany, USA, UK and Canada and selectively in France. LBBW's syndication business focuses on structuring and arranging large-volume transactions. It also offers refinancing solutions for real estate lease transactions.

The Project Finance subsegment comprises financing of infrastructure and energy projects, aircraft and rail vehicles. A particular focus here is on financing projects aimed at generating renewable energies. Financing requires stable and predictable cash flows. Customers are project developers, investors, users and lessors. Geographically, project financing is concentrated in Europe (including Germany) and North America.

The subsidiary LBBW Immobilien Management GmbH is responsible for managing the entire real estate portfolio and offers supplementary real estate services.

Capital Markets Business

The Capital Markets Business segment is in charge of Savings Banks, institutional customers and banks. LBBW is the central bank for the savings banks in the core markets of Baden-Württemberg, Saxony and Rhineland-Palatinate. Together with the savings banks, it forms a service partnership and provides them with a wide range of products and services, both for savings banks' proprietary business and the market partner business. Services such as research or securities processing and administration are offered for further distribution to the customers of the savings banks. The Bank also selectively offers products and services to other savings banks beyond the core markets.

Furthermore, within this segment the customer-oriented capital market business with banks and institutional customers is bundled. The product range is aimed at the customer's requirements and comprises capital market investments, (capital market) financing, risk management products and financial services (including the custodian bank function), and research. Export-oriented customers are supported specifically through LBBW's tailor-made offers for foreign business and its international network. The product expertise in the Capital Markets Business segment will be provided for customers in the Corporate Customer segment as well.

LBBW's asset management business is pooled within the group subsidiary LBBW Asset Management Investmentgesellschaft mbH. The main business areas are the management of special funds and direct investment mandates for institutional investors, together with mutual funds for institutional and private investors.

Private Customers/Savings Banks

The Private Customers/Savings Banks segment comprises the classic and upscale private customer business, supporting business customers and the meta-and development lending banking sector with Savings Banks and their customers. BW-Bank is the Savings Bank of the state capital, Stuttgart. It offers its full range of services, while its complete scope of financial and other services guarantees citizens the full array of basic banking services.

In addition to the classic retail customer segment, the business model beyond Stuttgart is also orientated towards higher-income private customers in Baden-Württemberg, Rhineland-Palatinate and Saxony as well as other attractive economic regions such as Hamburg, Munich and Düsseldorf. BW Bank has combined its skills in financing and investment matters for business customers (health care practitioners, freelancers and tradespeople) into one business area. An integrated customer management approach creates close links between private and business financial topics.

The comprehensive range of products and services extends from classic checking accounts, credit card business and basic and commercial financing to securities management, asset management and pension savings solutions for those with a considerable portfolio of assets and complex asset structures.

LBBW furthermore offers savings banks the opportunity, by way of joint credits, to share credit risk, thus playing an important role when it comes to offering development loans to savings bank customers.

Segment allocation and coordination

The LBBW Group's customer-oriented business model is directly reflected in the segments Corporate Customers, Real Estate/Project Finance, Capital Markets Business and Private Customers/Savings Banks. LBBW's segment reporting also includes the Corporate Items segment, which comprises all further business activities.

Information on the segments and their development can be found in the segment report (IFRS) included in the notes.

Within this business model, LBBW's Board of Managing Directors manages the Bank as a whole by tracking a set of performance indicators along the strategic segments in the light of the Group's risk-bearing capacity. The information required for managing the LBBW is provided through comprehensive, target-oriented regular reports. The following financial performance indicators are of particular relevance to the management of the Group:

- consolidated profit/loss before tax (IFRS)
- return on equity¹
- cost/income ratio¹
- risk weighted assets (in accordance with CRR/CRD IV)
- common equity Tier 1 capital ratio (in accordance with CRR/CRD IV after full implementation)
- total capital ratio (in accordance with CRR/CRD IV after full implementation)
- consolidated total assets (IFRS)
- leverage ratio (in accordance with CRR/CRD IV after full implementation)
- utilization of the aggregate risk cover (Bank's own calculation pursuant to MaRisk)
- liquidity coverage ratio (in accordance with CRR/CRD IV in conjunction with Commission Delegated Regulation (EU) 2015/61)
- for information: net profit before tax (HGB) in the case of LBBW (Bank)

In addition, the integrated bank management will continue to focus on the net stable funding ratio (in accordance with CRR/CRD IV).

¹ The definitions are shown in the segment reporting.

Business report for the Group

Overall economic development

German economic development was very restrained in 2019, with economic output increasing by 0.6%. 2018 recorded growth of 1.5%. Nonetheless, there were major differences between different industries. While information from the German Federal Statistical Office shows that construction and service providers generated »predominantly strong growth«, economic output in the manufacturing sector (excluding construction) slumped. This reflects the difficult position of all sectors that rely heavily on exports. Exports increased by just 0.9% year on year in real terms in 2019. The last time exports saw a similar rate of growth was in 2013, at 1.0%, and the figure has occasionally been significantly higher in other years. Exports rose by 1.9% in 2019, also considerably less than in previous years. Lukewarm foreign trade can generally be ascribed to companies' cautious approach to investing in Germany and abroad, a trend that is rooted primarily in the US-China trade dispute and the uncertainties fueled by Brexit.

The eurozone saw GDP growth of 1.2% in 2019, down from 1.9% in 2018 but well above the pace of GDP growth in Germany. This reflects the fact that industry accounts for a higher share of Germany's gross value added (25.4%) than in the eurozone on average (19.7%). In other words, industry weakness has more of an impact in Germany than in the eurozone overall.

The economy also slowed in the US and China last year. GDP in the US increased by 2.3%, following growth of 2.9% in 2018. In China, economic output picked up by 6.1%, down on 6.6% in 2018. The IMF estimates total global GDP growth of 2.9%, down on 3.6% in 2018.

Given this drop-off in growth, the robust state of the German labor market was of note. Unemployment remained at around 5% throughout the entire year, with the number of persons in work reaching a record high of 45.3 million in 2019 in comparison to 44.9 million in 2018. Inflation was low in 2019, too. Prices as measured by the national consumer price index rose by 1.4% on average in 2019, down from 1.7% in the year prior. Inflation in the eurozone was even somewhat lower at 1.2% in 2019, whereas in 2018 it had been slightly higher than the rate in Germany at 1.8%.

In light of moderate inflation and the economic slowdown, expansive monetary policy measures were taken in the 2019 reporting period. Following the end of Mario Draghi's eight years in office in September, the ECB adopted a package that included reducing the deposit rate from -0.40% to -0.50% at the end of September, resuming net bond purchases of EUR 20 billion per month starting in November 2019, and new targeted long-term tenders (TLTRO-III) that incentivize lending to non-bank entities. Draghi's term in office ended in October 2019, when he was succeeded by former IMF director and previous French finance minister Christine Lagarde, who promised to continue her predecessor's monetary policy at the beginning of her term in office. In the US, the Fed raised its benchmark interest rate to between 2.25% and 2.50% in December 2018. By contrast, 2019 was a year of interest rate cuts. The first monetary policy easing came at the end of July, when the Fed lowered its benchmark interest rate to between 2.00% and 2.25%. The third and, so far, final interest rate cut followed at the end of October, with rates reduced to 1.50% to 1.75%.

On the bond market, the about-turn by leading central banks initially generated a lasting decline in yields. At the start of 2019, 10-year German government bonds recorded a yield of 0.25%. This fell to below -0.70% by the start of September 2019, before increasing again to -0.19% at the end of the year. The downturn in the yield on 10-year US Treasuries was even more pronounced, falling from just under 2.80% at the end of January 2019 to below 1.50% by September. By the end of 2019, the yield had risen again to 1.90%. For stock markets, 2019 was hallmarked by considerable price gains. Germany's benchmark index, the DAX, started 2019 at 10,558 points and closed out at 13,249 points. In the US, the S&P rose from 2,506 to 3,230 points in the reporting period. By contrast, there were very few changes on the currency market. The US dollar opened the year at an exchange rate of USD 1.14 to the euro and closed at a rate of USD 1.12 to the euro. These were not too far off the high reached in January of USD 1.15 to the euro and the low of USD 1.09 recorded in September.

On the real estate market, there is usually somewhat of a delay in identifying reliable market price developments. Nonetheless, the trend towards higher real estate prices in Germany continued in 2019. In its December monthly report, the German Bundesbank worked on the basis of a 5.3% rise in housing prices in 2019, down on 6.6 in 2018.

Lending business performance

Despite sustained geopolitical conflicts, the macroeconomic climate remained relatively stable in 2019, albeit with a slower pace of economic growth in both Germany and in the eurozone. This benefited the German lending business, although the sector environment remains challenging. Nonetheless, lending growth remains intact and demand is growing at a faster rate than in the eurozone. Although pressure on margins remains, good asset quality means that the need for impairment losses is low. For example, the latest data from the EBA puts the average ratio of non-performing loans at just 1.2% in September 2019. This contrasts with 2.9% at European financial institutions.

The comfortable liquidity enjoyed by German banks is also encouraging. According to the EBA, the short-term liquidity indicator LCR (liquidity coverage ratio) at the end of September 2019 averaged 144.9%, well above minimum of 100% required by supervisory authorities. Notwithstanding, the German banking market is intensely competitive. Figures from the ECB show that Germany's five largest banks accounted for just 29.1% of aggregate total assets in 2018. In comparison to other EU banking systems, this is fairly low. In addition, business models are undergoing a period of transition due to increasing digitalization and ongoing low interest rates are a particular source of strain for banks whose sources of income depend heavily on interest rates. The cost and income situation remains strained industry wide as regulatory conditions are also still challenging. Ultimately, all these factors mean that the German banking industry continues to face significant pressure to adjust.

Business performance at the LBBW Group. Results of operations, net assets and financial position

Business development in 2019

LBBW generated a good result overall in the 2019 financial year on the basis of essentially stable overall conditions. This was thanks to the Group's successful progress across the strategic cornerstones of business focus, digitalization, sustainability and agility. Improved results and lower costs since 2017 both show that the path taken is paying off.

Business performance centered on continuing the path of growth focused on profitability and capital efficiency by intensifying existing and gaining new client relationships, particularly in the new core sectors utilities and energy, pharmaceuticals and healthcare, telecommunication-media-technology and electronics/IT, in order to diversify the credit portfolio. Further evidence that the business focus has been strengthened was provided by strong new business in Corporate Customers and Real Estate/Project Finance. Cross selling was also expanded, particularly in corporate customers, with expenses being reduced at the same time. The financing and deposit volume with private customers also saw an upturn, especially with high-net-worth private clients.

Numerous digitalization initiatives continued to make good progress, including developing the DEBTVISION platform, which now has over 300 registered investors. 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. The international trade finance network Marco Polo demonstrated its suitability in another pilot transaction with two prestigious industry names. Automobile manufacturer Daimler AG and the machinery and plant manufacturer Dürr AG processed the data transfer for payment protection of a trading transaction digitally on the platform for the first time using the blockchain technology Corda. As a founding member of Marco Polo, LBBW assumed financing and the payment obligation for this business. An online portal was launched for corporate customers featuring a diverse range of ranking offers. For example, it can be used to digitally process guarantees.

LBBW also expanded its expertise in issues relating to sustainability. For example, LBBW again improved its ranking against its 2017 position in the latest sustainability rating from the agency Sustainalytics, confirming its second place ranking among German banks behind the development bank KfW. LBBW also occupies a top spot when it comes to sustainable cash investments: The PRI Association (»Principles for Responsible Investment«), an investor association initiated by the United Nations, awarded LBBW top marks in the overarching »Strategy and Governance« category. It was graded A+ in the segment »Asset Owner« and its subsidiary LBBW Asset Management (LBBW AM) was rated A in the »Investment Manager« segment. As part of this category, the PRI Association conducts annual checks on the extent to which its members are implementing general guidelines and objectives related to non-financial ESG factors (Environment, Social, Governance) and supporting their ongoing development.

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 substantially by EUR 63 million and came to EUR 612 million for the 2019 reporting year (previous year: EUR 549 million). With this, the result even slightly exceeded forecasts thanks primarily to net interest income coming in slightly above forecast and other operating income/expenses significantly outperforming expectations. Thanks to strict cost discipline, administrative expenses remained only marginally below planning, whereas net gains/losses on remeasurement and disposal were notably lower than planned due to methodological developments in calculating funding valuation adjustments.

The cost/income ratio (CIR) as at 31 December 2019 amounted to 71.8%. This represents a year-on-year improvement (previous year: 73.1%), chiefly a result of higher income, and means that the figure developed slightly better than expected. LBBW calculates its CIR as the ratio of total administrative expenses, expenses for the bank levy and deposit guarantee system and net income/expenses from restructuring to total net interest income, net fee and commission income, net gains/losses on remeasurement and disposal before allowances for losses and other operating income/expenses. **The return on equity (ROE)** also improved to 4.6% (previous year: 4.3%), in line with the target set at the end of the year. 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 grew by EUR 15.4 billion against the end of the previous year to EUR 256.6 billion thanks to expanding business with corporate customers and in real estate and project finance, growth in development loan business and purchases of debentures as part of treasury activities. The target for total assets as at the year-end was thus achieved.

Despite the increase in volumes described above, LBBW's **leverage ratio** was in line with target and the previous year's level at 4.6% (in accordance with CRR/CRD IV »fully loaded«), chiefly driven by the increase in Tier 1 capital from issuing an AT1 bond. This is significantly above the regulatory minimum of 3.0%.

As at the reporting date of 31 December 2019, LBBW's **minimum liquidity coverage ratio (LCR)** under the Commission Delegated Regulation (EU) 2015/61 pertaining to liquidity coverage ratios stood at 123.6% (previous year: 114.8%). This rise is largely due to lower net cash outflow, essentially a result of higher inflows from financials and secured lending. The increase in exceptionally high quality covered bonds through reverse repo volumes and level 1 government bonds also had a positive impact on the ratio. As previously, the statutory minimum for 2019 of 100% and the internal target at the year-end were substantially exceeded.

Despite expanding business, **risk weighted assets (RWA)** remained virtually on par with the previous year at EUR 80.5 billion (previous year: EUR 80.3 billion) and slightly below the forecast for the end of 2019.

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** came to 14.6% (previous year: 15.1%) and the **total capital ratio** to 22.9% (previous year: 21.9%), primarily due to issuing an AT1 bond to increase Tier 1 capital. This put both key indicators slightly above the bank's own targets.

European Central Bank (ECB) regulations also require LBBW to maintain a common equity Tier 1 capital ratio of 9.75% in 2020. This ratio includes the Pillar 2 capital requirement of 1.75%, the capital conservation buffer under Section 10c KWG of 2.5% and the 1.0% capital buffer for other systemically important institutions in accordance with Section 10g KWG. Furthermore, Section 10d KWG requires that a countercyclical capital buffer be maintained that covers only a small number of foreign receivables until 30 June 2020, but that is then extended to include German receivables starting from 1 July 2020. 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. *Utilization of aggregate risk cover* (ARC) stood at 58.8% as at the reporting date in 2019 and was thus up on the figure at the end of 2018 (42.4%), largely a result of lower aggregate risk cover. In particular, this decline is due to the ECB implementing its guidance for banks' internal processes for ensuring adequate capital, which in turn is primarily due to the fact that subordinated capital is no longer recognized by regulatory bodies in the aggregate risk cover. By contrast, subordinated liabilities together with the newly issued AT1 capital are still fully recognized as regulatory capital for the normative (regulatory) perspective. The risk situation, on the other hand, was virtually unchanged.

Overall the LBBW Group's central financial performance indicators showed an improving trend year-on-year at the end of the 2019 financial year.

Results of operations

LBBW's consolidated profit/loss before tax improved to EUR 612 million in the 2019 financial year, up EUR 63 million and significantly exceeding the previous year's figure of EUR 549 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):

	01/01/2019 –	01/01/2018 –	Change	
	31/12/2019	31/12/2018 ¹	EUR million	in %
Net interest income	1,676	1,558	117	7.5
Net fee and commission income	558	513	45	8.7
Net gains/losses on remeasurement and disposal	169	213	- 43	- 20.3
of which allowances for losses on loans and securities	- 151	- 141	- 10	7.2
Other operating income/expenses	148	140	8	5.9
Total operating income/expenses	2,551	2,424	127	5.2
Administrative expenses	- 1,806	- 1,773	- 33	1.8
Expenses for bank levy and deposit guarantee system	- 102	- 89	- 13	14.7
Net income/expenses from restructuring	- 31	- 12	- 19	>100
Consolidated profit/loss before tax	612	549	63	11.4
Income taxes	- 167	- 136	- 32	23.3
Net consolidated profit/loss	444	413	31	7.5

Figures may be subject to rounding differences. Percentages are based on the exact figures.
¹ Restatement of prior year amounts (see Note 2).

Net interest income rose by EUR 117 million to EUR 1,676 million (previous year: EUR 1,558 million), thanks primarily to business expansion and a rise in early termination fees resulting from early loan repayments. Expanding business with corporate customers and in the area of real estate and project financing particularly benefited this item. By contrast, ongoing historically low interest rates particularly strained the deposit business. Pressure on margins in the sector was high and was also compounded by the ECB lowering the deposit rate from -0.4% to -0.5%. The absence of the non-recurring effect seen in the previous year in connection with dissolving the Sealink portfolio, which bundled securities from the former Sachsen LB, also had a negative effect. After the sale of the final securities by the administrator and the repayment of loans extended by LBBW to Sealink Funding DAC, LBBW (Bank) booked a EUR 33 million share of the surplus as at 31 December 2018. The contribution from the ECB's targeted longer-term refinancing operations II (TLTRO II) also shrank by EUR 14 million to EUR 16 million (previous year: EUR 31 million).

Net fee and commission income increased moderately by EUR 45 million to EUR 558 million (previous year: EUR 513 million). Gains were made in almost all types of commission, especially in net fee and commission income from the securities and custody business which climbed to EUR 195 million (previous year: EUR 175 million). In particular, this rise reflects good performance in the securities and underwriting business as a result of issuing debt securities. In addition, net gains/losses from loans and guarantees also benefited from the operating performance in almost all areas of business, also increasingly significantly to EUR 120 million (previous year: EUR 108 million). High demand in real estate brokerage, insurance and for closed-end funds constituted the basis for slight growth in brokerage business, where the result improved to EUR 49 million (previous year: EUR 47 million). Net fee and commission income in the payments business also rose by EUR 8 million to EUR 106 million.

Net gains/losses on remeasurement and disposal fell noticeably by EUR 43 million to EUR 169 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 17 million to EUR 6 million, after being shaped in the previous year by reversals of write-downs to a higher fair value at an associate.

At EUR -142 million, **net gains/losses from financial assets measured at cost** remained at the previous year's level (also EUR -142 million). This mainly reflects allowances for losses on loans and securities, which rose moderately by EUR -9 million year on year to EUR -151 million. In particular, additions to allowances for losses on loans and advances increased somewhat, whereas reversals to allowances for losses on loans and advances remained unchanged on the previous year. The sale of loans and advances to customers also generated income of EUR 9 million (previous year: EUR 0 million). LBBW continues to enjoy good portfolio quality, as demonstrated by the very high exposure share in the investment grade range and a low default rate.

The decline in **net gains/losses from financial instruments measured at fair value through other comprehensive income** was caused in particular by lower contributions from the sale of debt instruments. These fell from EUR 38 million in the previous year to EUR 23 million.

Net gains/losses from financial instruments measured at fair value through profit or loss came to EUR 282 million, only slightly below the previous year's figure of EUR 293 million. Capital market activities contributed EUR 217 million to the result. The EUR 64 million year-on-year downturn (previous year: EUR 281 million) was mainly driven by methodological developments in calculating funding valuation adjustments (FVA) as part of measuring unsecured derivatives, which reduced the result by EUR 52 million. By contrast, the contribution from banking book management rose by EUR 53 million to EUR 65 million. This chiefly reflected the measurement of derivative financial instruments used as economic hedges but that cannot be included in hedge accounting, which improved by EUR 56 million.

Other operating income/expenses increased moderately by EUR 8 million to EUR 148 million (previous year: EUR 140 million). There were also opposing effects. The first-time consolidation of a subsidiary boosted net income from construction contracts by EUR 7 million (previous year: EUR 1 million). The sale of properties boosted the contribution to earnings by EUR 4 million to EUR 28 million. In addition, income from investment properties also increased by EUR 2 million to EUR 71 million, mostly by way of fair value adjustments. Other operating income/expenses, which includes many other individual effects, also rose by EUR 14 million to EUR 45 million. Countering this, net expenses related to legal issues picked up by EUR 19 million. This included net transfers to provisions of EUR 37 million (previous year: EUR 3 million).

Administrative expenses increased slightly year on year by EUR -33 million to EUR -1,806 million (previous year: EUR -1,773 million). The main reason behind this was the first-time consolidation of a subsidiary, which made a EUR -23 million contribution to the rise in administrative expenses. In particular, this caused staff costs at Group level to rise by a total of EUR -32 million to EUR -1,034 million (previous year: EUR -1,002 million). By contrast, other administrative expenses declined by EUR 35 million to EUR -632 million (previous year: EUR -667 million). As well as lower legal, consulting and building costs, this chiefly reflected 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 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 36 million to EUR -141 million. With investment for restructuring and modernization remaining high, IT expenses were up marginally on the previous year.

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.

A follow-up program to implement efficiency measures caused **net income/expenses from restructuring** to rise by EUR -19 million to EUR -31 million.

Consolidated profit/loss before tax improved substantially to EUR 612 million, up EUR 63 million on the previous year's figure of EUR 549 million.

Income tax expenses increased to EUR -167 million (previous year: EUR -136 million), mostly due to higher net profit/loss before tax.

Accordingly, **net consolidated profit/loss after tax** saw a slight rise to EUR 444 million (previous year: EUR 413 million).

Net assets and financial position

Assets	31/12/2019	31/12/2018 ¹	Change	
	EUR million	EUR million	EUR million	in %
Cash and cash equivalents	18,331	24,721	-6,390	-25.8
Financial assets measured at amortized cost	167,202	157,127	10,075	6.4
Financial assets measured at fair value through other comprehensive income	28,648	22,821	5,826	25.5
Financial assets designated at fair value	1,170	1,207	-37	-3.1
Financial assets mandatorily measured at fair value through profit or loss	34,610	29,779	4,831	16.2
Shares in investments accounted for using the equity method	265	266	-2	-0.6
Portfolio hedge adjustment attributable to assets	839	569	270	47.3
Non-current assets held for sale and disposal groups	65	24	41	>100
Intangible assets	198	224	-26	-11.6
Investment property	655	697	-43	-6.1
Property and equipment	814	463	351	75.8
Income tax assets	1,215	1,282	-67	-5.2
Other assets	2,619	2,017	603	29.9
Total assets	256,630	241,197	15,433	6.4

¹ Restatement of prior year amounts (see Note 2).

Equity and liabilities	31/12/2019	31/12/2018 ¹	Change	
	EUR million	EUR million	EUR million	in %
Financial liabilities measured at amortized cost	201,890	190,388	11,502	6.0
Financial liabilities designated at fair value	6,757	7,613	-856	-11.2
Financial liabilities mandatorily measured at fair value through profit or loss	26,959	24,478	2,481	10.1
Portfolio hedge adjustment attributable to liabilities	486	297	188	63.4
Provisions	4,410	3,916	494	12.6
Liabilities from disposal groups	4	0	4	100.0
Income tax liabilities	89	58	30	52.2
Other liabilities	2,113	1,283	830	64.7
Equity	13,923	13,163	761	5.8
Total equity and liabilities	256,630	241,197	15,433	6.4
Guarantee and surety obligations	7,777	7,583	194	2.6
Irrevocable loan commitments	28,961	25,476	3,486	13.7
Business volume	293,369	274,256	19,113	7.0

¹ Restatement of prior year amounts (see Note 2).

Consolidated total assets

As at 31 December 2019, **total assets** were up EUR 15.4 billion as against the end of 2018 at EUR 256.6 billion. The growth in total assets resulted both from growth in corporate customers and in real estate and project financing. Development loan business with savings banks also picked up. 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 293.4 billion, up EUR 19.1 billion on the figure as at 31 December 2018. In addition to the change in total assets, the increase in the reporting period was due to a rise in irrevocable loan commitments.

LBBW consistently worked on achieving its sustainability efforts in 2019. After already issuing numerous green bonds and covered bonds for institutional investors, in 2019 it issued its first step-up sustainability bonds which private investors can also use to make sustainable investments. LBBW's step-up sustainability bonds are the first structured bonds on the retail market featuring sustainable use of funds: the incoming funds go towards sustainable projects such as energy-efficient buildings or renewable energy.

In addition, LBBW also successfully placed its first social bond on the market. The senior non-preferred issue has a volume of EUR 500 million and matures in eight years. The bank will use the issue proceeds to fund social projects, such as in healthcare or social services. The money could also go towards funding nurseries, schools, vocational training or local infrastructure projects and services such as public transport or water supply.

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 IFRS 16 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 18.3 billion as at 31 December 2019, EUR 6.4 billion lower than the figure for the previous year (EUR 24.7 billion). This decline was essentially a result of lower central bank balances.

The item **Financial assets measured at amortized cost** rose moderately by EUR 10.1 billion to EUR 167.2 billion, attributable both to the increase in loans and advances to banks and to loans and advances to customers.

Loans and advances to banks rose by EUR 9.1 billion, bringing their total to EUR 55.8 billion at the end of the year. In particular, stronger development loan business with savings banks allowed public-sector loans to climb by EUR 3.8 billion. An upturn in business with major European banks led to a EUR 3.7 billion rise in securities repurchase business. Overnight and term deposits saw an increase of EUR 1.2 billion.

The portfolio of **loans and advances to customers** also enjoyed an upturn, rising by EUR 1.1 billion to EUR 110.3 billion. Other loans increased by EUR 3.9 billion thanks to successfully adopting the growth strategy by expanding financing business with corporate customers and real estate financiers. At the same time, the volume of *Schuldschein* loans also increased from EUR 6.3 billion to EUR 7.3 billion. This was offset by a EUR - 3.5 billion fall in securities repurchase transactions due to a reduction in business with clearing houses. Public-sector loans rose by EUR 0.8 billion.

Financial mandatorily assets measured at fair value through other comprehensive income saw a EUR 5.8 billion rise to EUR 28.6 billion. A substantial upsurge in business boosted bonds and debt securities by EUR 5.0 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 0.5 billion primarily as a result of market presence abroad.

Financial assets mandatorily measured at fair value through profit or loss increased by EUR 4.8 billion to EUR 34.6 billion. In addition to growth in the volume of new business, the sharp decline in interest rates caused positive fair values from derivatives to rise by EUR 4.4 billion. Purchases of debentures and other fixed-income securities resulted in an increase of EUR 0.8 billion. At the same time, positive fair values from derivative hedging instruments declined by EUR -0.6 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 11.5 billion to EUR 201.9 billion.

Deposits from banks climbed by EUR 3.0 billion to EUR 66.6 billion. This development was due to an increase in overnight and term deposits of EUR 2.3 billion in connection with new business with international banks and a EUR 1.8 billion upturn in transmitted loans due to expanding the business volume with development banks. At the same time, securities repurchase transactions declined by EUR -1.5 billion.

At EUR 90.3 billion, the item *deposits from customers* was up EUR 7.8 billion year-on-year. The volume of overnight and term deposits increased by EUR 4.9 billion, with current account liabilities rising by EUR 3.2 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 0.9 billion.

At EUR 38.8 billion, *securitized liabilities* were unchanged against the previous year. Sustainability is firmly established in LBBW's business model, both in strategic and operating terms, and so expertise was boosted in the sustainable investments market segment. One example of this is the successful placement of the bank's first social bond. LBBW also issued the first step-up sustainability bonds for private investors and additional green senior non-preferred bonds. This was countered by maturities and a decline in securitized money market transactions.

Subordinated capital rose by EUR 0.6 billion in the reporting period from EUR 5.5 billion to EUR 6.1 billion, entirely a result of issuing subordinated bonds.

Financial liabilities designated at fair value fell by EUR -0.9 billion to EUR 6.8 billion. This decrease can be attributed to a few large-volume floaters, which reached the end of their term in the second half of 2019.

As in the items under assets, *financial liabilities mandatorily measured at fair value through profit or loss* rose by EUR 2.5 billion to EUR 27.0 billion. As well as the expansion of new business, the sharp decline in interest rates in 2019 had an impact on the measurement of derivatives, resulting in a EUR 2.7 billion rise in negative fair values from derivatives. Securitized liabilities also increased by EUR 0.9 billion. On the other hand, delivery obligations from short sales of securities dropped by EUR -0.7 billion.

Provisions saw a EUR 0.5 billion increase to EUR 4.4 billion in the year under review. Current interest rate developments caused the interest rate for discounting pension obligations to fall again year on year, decreasing from 1.73% to 0.97% and resulting in a EUR 3.2 billion increase in pension provisions to EUR 3.7 billion.

Equity

LBBW's **equity** rose by EUR 0.8 billion year on year as at 31 December 2019 to EUR 13.9 billion, essentially pushed up by the issuing of an AT-1 bond with a volume of EUR 750 million. The subordinated bond meets the requirements for additional Tier 1 capital under the Capital Requirements Regulation (CRR).

Current net income of EUR 0.4 billion offset the distribution of dividends to shareholders of EUR -0.3 billion. Reducing the interest rate for discounting pension obligations resulted in net actuarial losses of EUR -0.3 billion.

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. LBBW still has sufficient liquidity at all times. 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. This came to 123.6% as at 31 December 2019.

Employees

LBBW is very demanding of itself and hence of its workforce. At the same time, it offers attractive workplaces with development potential for ambitious employees who relish in achievement and joint success.

Dedicated, motivated and efficient employees are central to the success of every company. This is particularly the case for the financial services sector, which is under significant pressure to change. In addition to integrity, excellent professional skills and in-depth customer orientation, a constant willingness to change and to be open to new market developments are factors becoming increasingly important as success criteria in competition.

In view of the advancing digitalization, considerable regulatory requirements and a long-lasting phase of low interest rates, LBBW and the entire industry is forced to renew its offerings and the underlying processes in ever faster cycles. Consistent customer-orientation, high adaptability and a willingness to work in a flexible manner will therefore continue to be of great importance for the success of the LBBW Group.

LBBW reports extensively on its offerings and benefits as an attractive employer in its non-financial statement, as a component of its combined management report.

Employee numbers

	LBBW (Bank)		LBBW	
	2019	2018	2019	2018
Employees (number)	8,230	8,232	10,005	10,017
Proportion of women	52.0%	52.2%	51.9%	52.2%
Proportion of men	48.0%	47.8%	48.1%	47.8%
Part-time employees (number)	30.4%	29.7%	28.7%	28.1%
Full-time employees (number)	69.6%	70.3%	71.3%	71.9%
Apprentices (including students at universities of cooperative education) (number)	282	260	304	278
Proportion of apprentices	3.4%	3.2%	3.0%	2.8%

As at 31 December 2019, the number of employees at LBBW fell slightly to 10,005 (previous year: 10,017). In turn, the staff fluctuation rate based on the Confederation of German Employers' Association's (BDA) formula declined to 5.1% for LBBW (Bank) in 2019, up from 6.3% in the previous year. Adjusted for restructuring-related early retirement and severance agreements (2.1%), the LBBW (Bank) rate was 3.0% (previous year: 3.4%).

At 45.5 years, the average age of employees at LBBW (Bank) in the year under review increased slightly over the previous year (45.3 years). The average length of service at the bank fell slightly to 19.3 years (previous year: 19.4 years), as did the proportion of female employees, which declined to 52.0% in 2019 (previous year: 52.2%). The proportion of part-time employment contracts, including reduced working hours due to partial retirement, in turn rose somewhat at LBBW from 28.1% to 28.7%.

Risk report

Risk-oriented integrated bank management

Risks are managed under LBBW's strategy, LBBW legislation and LBBW's articles of association. Risks and the associated opportunities for income and growth potential should be taken within the scope of a defined risk appetite, in a deliberate and controlled manner. Particular focus is given to capital and liquidity management.

Internal control processes with clearly defined organizational and operational organization, risk management and controlling processes structures, and process-independent internal auditing ensure that business operations are consistent with the strategy.

The processes, procedures and methods are regularly reviewed to ensure their adequacy and permanently further developed. These reviews also take account of the findings of the statutory auditor, the Group Auditing division and the SREP process of the European Central Bank (ECB) and these findings are implemented accordingly.

Material risk types

An annual Group risk inventory is used to identify all of LBBW's material risk types and thereby make it possible to manage and monitor these. The risk inventory is based on determining the »risk universe«, which covers all risk types which may apply to LBBW.

This is used to ascertain the overall risk profile of the LBBW Group, which is presented to the Board of Managing Directors in the form of a risk map for approval. Risk measurement of the principal subsidiaries from a risk point of view is based on the transparency principle; i.e. the types of risk identified as material in the respective companies are integrated in the Group-wide risk measurement of the respective type of risk. LBBW shows companies whose risks are regarded as immaterial in investment risk.

The following material risk types were identified:

Risk types

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.

Specific risk strategies are created for all risk types that the Group considers material. In addition, a concentration analysis is carried out for these risks to identify central vulnerabilities. In addition to the concentration effects within the respective risk type (»intra-risk concentrations«), this also takes into account effects between different risk types «inter-risk concentrations«).

Risk strategy and risk tolerance

The Board of Managing Directors and the Risk Committee of the Supervisory Board stipulate the principles of the risk management system for all risk types identified as material by defining risk strategies that are consistent with LBBW's business strategy.

Risk strategy guidelines are defined in the group risk strategy, which applies to the entire Group and across all risk types, in accordance with the Minimum Requirements for Risk Management (MaRisk) and the relevant European standards (including the European Banking Authority Guidelines).

In this context, the Group risk strategy defines specifications on risk appetite from both qualitative and quantitative points of view that are to be observed in all business activities.

In terms of capital, the quantitative part of risk appetite sets out concrete specifications in the form of thresholds for LBBW's material economic and regulatory steering parameters – specifications are set out for times of normal business operations as well as under stress conditions. There are processes in place to ensure that these requirements are met at all times, including escalation processes based on a traffic light system and regular stress tests. As part of the quantitative risk appetite, the strategic limit system operationalizes the requirements and objectives defined in the business strategy for all material risk types included in the risk inventory.

The liquidity risk tolerance caps the liquidity risk in the narrower meaning (i.e. it limits the risk of not meeting payment obligations). Further information can be found in the section on liquidity risks.

The risk guidelines form the qualitative element of risk appetite. They constitute the main strategic principles and rules of conduct that are used for weighing up risks and opportunities within the LBBW Group. They contribute to the creation of a uniform risk culture and form the framework for the precise organization of processes and methods of risk management. This qualitative element of risk appetite is completed with further guidelines – such as in the form of a Code of Conduct and Ethics which applies to all employees throughout the entire Group.

The sustainability policy of the LBBW Group must be observed. It is the LBBW Group's intention to act in the best and long-term interest of its customers and stakeholders. In order to implement the sustainability policy, the organizational unit defines sustainability and environment social governance standards for all business areas.

In addition, the specific risk strategies approved for each material risk type document the current and target risk profile of LBBW, specify customer-, product- and market-specific guidelines and thereby set out regulations on how to handle the identified risks in a deliberate and controlled manner in order to take advantage of the opportunities they present from a risk/return perspective. Additional information on the specific risk strategies is provided in the sections on the respective risk type.

Risk capital and liquidity management

The objective of this process is to ensure adequate capital and liquidity, both during normal business operations and under stress conditions, and thus to guarantee the permanent viability of the LBBW Group. Normal business operations focus on achieving the company targets while making adequate provisions for stress resistance under stress conditions.

Medium-term planning

Annual medium-term planning comprises the economic and regulatory considerations, brings these together and acts as a link between the strategic framework and integrated bank management throughout the year. The planning period covers five years.

The planning thus lays the groundwork for monitoring the targets set at all management levels. Within the management areas and dimensions, deviations from targets are analyzed, reported and, where necessary, measures to achieve the targets are agreed, implemented and monitored. This is carried out by those responsible/the committees within the steering groups.

In addition, compliance with the internal targets also in case of adverse developments over the same time horizon is ensured.

Economic view

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).

The internal monitoring of this risk-bearing capacity (RBC) using binding targets and tolerance levels ensures LBBW Group has adequate economic capital both in times of normal business operations as well as under stress conditions. Risks within the framework of the LBBW Group's risk-bearing capacity are described before possible measures to limit risks (so-called gross presentation).

At LBBW, aggregate risk cover (corresponds to risk coverage potential as per MaRisk) denotes the equity restricted according to economic criteria which is available to cover unexpected losses. In addition to equity (as per IFRS including revaluation reserves), the realized income statement gains/losses in accordance with IFRS are considered components of aggregate risk cover. Conservative deductible items are also included due to regulatory requirements; in particular, since 31 March 2019 subordinated capital has no longer been included in accordance with the requirements of the ECB's ICAAP guideline.

Economic capital is calculated as a uniform risk measure at the highest level. This is deemed to constitute the amount of capital necessary to cover the risk exposure resulting from LBBW's business activities. In contrast with the capital backing stipulated by regulatory bodies, it therefore represents the capital backing required from LBBW's point of view for economic purposes, which is calculated using its own risk models. It is quantified as value-at-risk (VaR) at a confidence level of 99.99% (until 31 March 2019: 99.93%) and a one-year holding period for counterparty, market price, real estate, development, investment and operational risks. Other risks (reputation, business, pension and model risks) are quantified either as value-at-risk or using simplified procedures.

The upper risk limit for economic capital (economic capital limit) as part of the quantitative risk tolerance represents the Group-wide overarching limit for all relevant quantified risk types. This limit reflects the maximum willingness of the LBBW Group to accept risk. In keeping with the conservative principle underlying risk tolerance, it is substantially below the aggregate risk cover and thus provides scope for risks arising from unforeseeable stress situations. On the basis of the upper economic capital limit, economic capital limits are defined for the various directly quantified risk types and for the other risks not quantified within a model approach.

By contrast, the liquidity risks (within the meaning of the risk of not meeting payment obligations) are managed and limited in accordance with the quantitative and procedural rules defined in the liquidity risk tolerance. Further information can be found in the section on liquidity risks. The model risks are managed entirely via the model risk management process and the corresponding tools described in the relevant section.

Regulatory view

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 internal regulatory capital and liquidity thresholds at all times. The ongoing monitoring process comprises frequent comparisons of target/actual data and a forecast process and ensures that company targets are met in the long-term (and thus also minimum regulatory requirements). The process is currently undergoing further development as part of the requirements of the ECB's ICAAP guideline.

Further details on this can be found in the notes.

Stress tests

In addition to risk measurement tools and statistical indicators based on historical data, various stress scenarios play an important part in risk assessment. They analyze in advance the impact of possible future economic volatility and market crises in order to establish whether LBBW is able to withstand extreme situations. Stress tests are therefore an integral part of LBBW's risk management.

The scenarios are designed using various criteria: LBBW's scenarios comprise adverse developments with moderate deviations (from the plan), stress scenarios with exceptional but plausible events of varying degrees of severity and exposure scenarios under which the existence of the Bank is threatened within the context of the recovery plan. The adverse scenarios develop over a period of several years, whereas the severe stress scenarios are defined either for a time frame of several years or of one year.

The scenarios are arranged in such a way that they take into account the impact on the economic and regulatory capital and liquidity situation. For this purpose, various methods ranging from a simple sensitivity analysis to complex macroeconomic scenarios addressing multiple risk types are applied, with the definition focusing in particular on LBBW's risk concentrations.

Medium-term planning accounts for adverse scenarios, both in top-down and in bottom-up planning. The scenarios are based on macroeconomic conditions and cover a five-year period. They also take into account the interdependency between the development of the real economy and the financial economy. The effects are modeled of both a bank-specific stress case and a market-wide crisis. The idiosyncratic scenarios specific to LBBW simulate a stress situation resulting from a rating downgrade. This aims to assess how feasible the medium-term planning is under adverse market conditions and to demonstrate a clear relationship between risk tolerance, business strategy and the capital and liquidity plan.

Stress scenarios are defined for a one-year time period in order to ensure risk-bearing capacity and observance of regulatory capital ratios even in the case of sudden and exceptional but plausible potential developments. These stress scenarios are geared towards economic scenarios with different types of risk. In addition to the analysis of the economic and regulatory capital in the status quo, the Group's resistance to stress is also monitored on the basis of these scenarios and using simulations of potential countermeasures. These also form the basis of the recovery plan pursuant to the German Recovery and Resolution Act (SAG).

Monitoring and escalation using tolerance and recovery thresholds

Effective monitoring of LBBW's capital and liquidity situation using defined parameters and timely escalation in the event of potential bottlenecks is based on appropriately defined thresholds, escalation procedures, and escalation routes for all key economic and regulatory parameters.

LBBW uses a multi-stage procedure that distinguishes between purely internal thresholds and restructuring thresholds. The limits and thresholds are applied to the actual value of the respective parameters as well as to the values under simulated stress conditions and in each case significantly exceed the regulatory minimum requirements. Monitoring takes place at Group level and at various subordinated management levels.

Risk management processes, organization and reporting

Risk management and monitoring

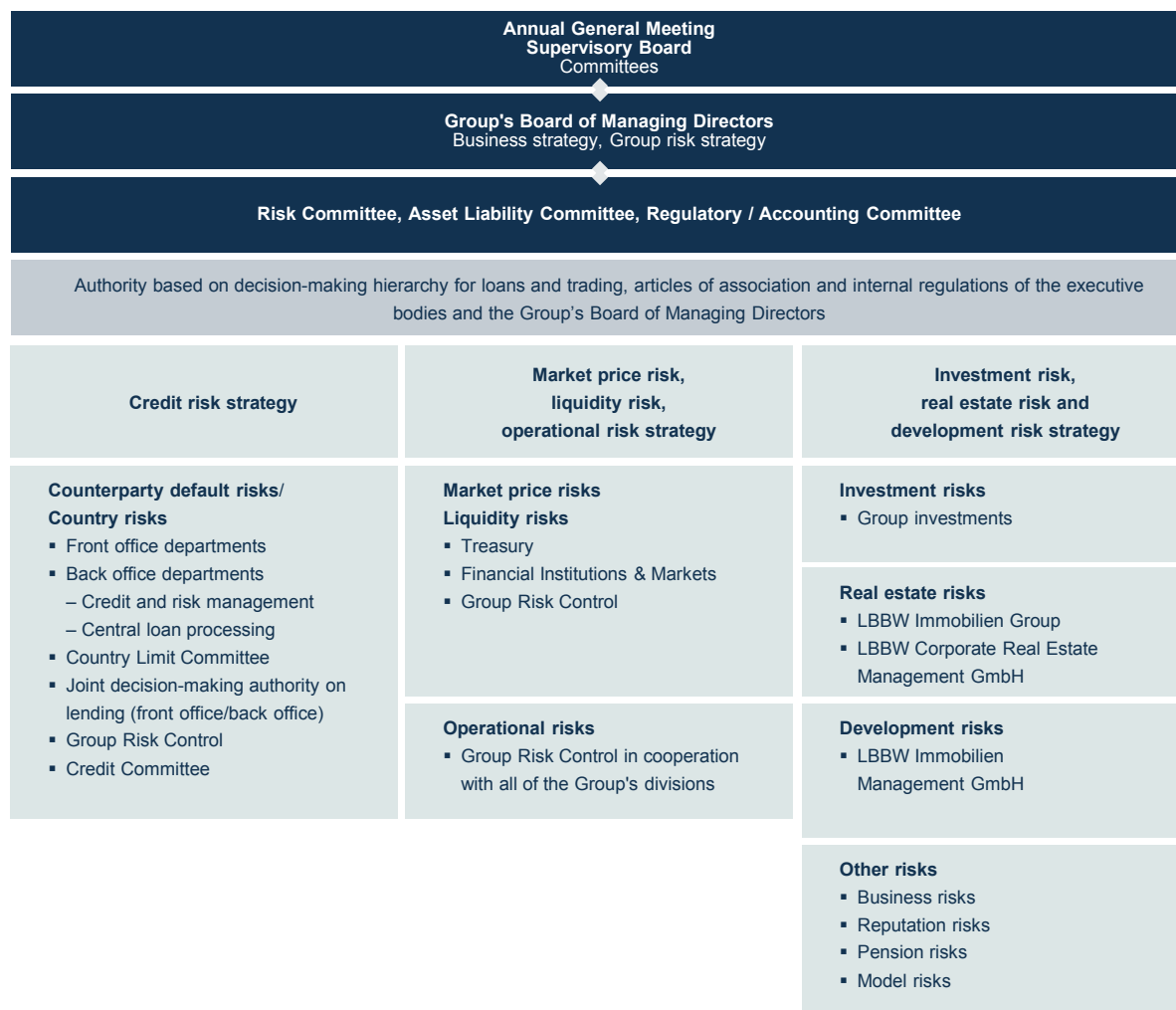
LBBW's risk management and monitoring is based on the guidelines of the risk strategy and the defined limits and approval powers.

At LBBW, transactions can only be entered into within clearly defined limits or approval powers and in accordance with the principles of the risk strategy. Within the defined framework, risk management decisions are made by the departments with portfolio responsibilities in the first line of defense, maintaining the separation of functions; these decisions are monitored by central Group Risk Controlling in the second line of defense. The risk controlling and risk management system set up for this purpose covers all material risks and the details specific to the risk types.

Potential concentration of risk receives particular attention. On the one hand, concentrations tend to arise as a result of the synchronization of risk positions within one risk type. On the other hand, they can also be produced as a result of common risk factors or interactions between various risk factors of different risk types. At LBBW, appropriate processes are used to identify and to deliberately manage risk concentration. Risks to the Group's going concern status must be excluded. Differentiated monitoring processes (e.g. report on risk concentrations, stress tests) and limits (e.g. sector and country limits) are available for the purpose of monitoring this strategic requirement.

An overview of the structure and individual elements of the risk management system of LBBW is given in the following chart. Additional information on this is provided in the sections on the respective risk type.

Risk management structure



Committees and reporting

The members of the Group's Board of Managing Directors with responsibility for managing risks are supported in their decision-making by corporate bodies and a comprehensive risk and subject-specific reporting system. The overall risk report and the report to the Asset Liability Committee (ALCo) thus form the reporting system relevant to risk within the context of the requirements of MaRisk.

The monitoring body, the Risk Committee, comprises the board members with responsibility for real estate and project finance, capital markets business and asset management/international business, risk management, compliance and auditing, the head of finance/strategy and divisional managers from Group Risk Controlling, Compliance, Finance Controlling, Treasury and Back Office. As an advisory committee, it prepares decisions for the Board of Managing Directors and supports it in risk monitoring, risk methodology and risk strategy for the Group as a whole. The monthly overall risk report and other reports prepared on specific issues as required form the basis for this.

The managing body, ALCo, also has an advisory role and works on preparing decisions for the Group's Board of Managing Directors. The focus of the ALCo is on strategic resource management for the Group as a whole. It supports the Board of Managing Directors, among other things in structuring the balance sheet, managing capital and liquidity as well as in funding and managing market price risks. The

committee comprises the board members with responsibility for capital markets business and asset management/international business, risk management, compliance and auditing, the head of finance/strategy and the divisional managers from Financial Controlling and Treasury. Group Risk Controlling and Finance also participate in the meetings.

The Regulatory/Accounting Committee evaluates at an early stage the requirements of the large number of provisions of banking supervisory law and accounting that are relevant for management purposes and takes the measures required. The committee comprises, among other areas, the board members with responsibility for capital markets business and asset management/international business, risk management/compliance and auditing and heads of information technology and finance/strategy, in addition to divisional managers from the Legal division, Group Risk Controlling, Compliance, Finance, Finance Controlling, Group Auditing, Treasury and Back Office.

Processes of adjustment

New types of trading and credit product at LBBW are subject to a New Product Process that ensures the product is included in LBBW's various systems, such as accounting or Group Risk Controlling. Any potential legal consequences are also outlined.

The main focus is on products from the capital markets business division. If it is not possible to fully integrate the products into the model immediately, a step-by-step approach is taken in which the products are initially traded only under very strict supervision.

In the case of material changes in the set-up and procedural organization and in the IT systems, LBBW analyzes the potential effects on control procedures and control intensity within the framework of a predefined standard process.

Process-independent monitoring

The Group Auditing division is a process-independent division that, as the third line of defense, monitors the operations and business work flows, risk management and controlling and the internal control system (ICS) with the aim of safeguarding LBBW's assets and boosting its operating performance. The Group Auditing division exercises its duties autonomously. The Board of Managing Directors is informed of the results of audits in written audit reports, which are discussed with the audited operating units. The Group Auditing division also monitors the measures taken in response to the audit findings.

The auditing activities of the Group Auditing division are generally based on an audit schedule, approved annually by the Board of Managing Directors, on the basis of a long-term risk-oriented plan, which records all the activities and processes of the LBBW Group, allowing for risk weighting in a reasonable period, but always within three years.

Regulatory developments

European Central Bank (ECB) supervisory work

All of LBBW's business activities are conducted in accordance with applicable supervisory law. LBBW has been supervised by the ECB since 2014 as part of the Single Supervisory Mechanism (SSM). LBBW is assigned to Directorate General I within the ECB's bank supervision. The ECB's core task is to carry out an independent assessment and review of banks' capital and liquidity resources, the business model and the governance and risk management function. The central tool used here is the Supervisory Review and Evaluation Process (SREP). In addition to workshops, audits, data queries and requests for information on various focus areas, stress tests are also an important supervisory tool. For example, a liquidity stress test was carried out in 2019, as was the annual Transparency Exercise, published on the EBA website.

On 7 October 2019, the ECB also stated its supervisory priorities in 2020 for all banks. The key issues essentially include continuing to restructure balance sheets and making banks more resilient. Despite progress that has already been made in restoring sound banking, attempts continue to be made in reducing the volume of non-performing loans and processing the findings of the TRIM reviews. In addition, trade risks and the measurement of assets are to be examined in more detail. The focus of supervisory work is increasingly shifting to banks' future resilience. As part of this, supervisory bodies review and monitor banks' profitability and business models as well as processes for ensuring adequate capital and liquidity (ICAAP/ILAAP), IT and cyber risks and, to an even greater degree, their governance framework and the quality of lending guidelines and exposures.

ICAAP/ILAAP guidelines

On 12 November 2018, the ECB released guidance relating to banks' internal processes for ensuring adequate capital and liquidity (ICAAP/ILAAP guidelines), which it has already taken 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. Various changes were made to methodology in 2019 in order to implement the guidelines. For example, this resulted in an increase in the utilization of aggregate risk cover in comparison to 31 December 2018.

Basel IV

In December 2017, the Basel Committee on Banking Supervision (BCBS) passed the last package of reforms (for now) to complete the Basel III framework as reaction to the financial crisis (»Basel IV«). This introduces a new output floor of 72.5%, which will limit the internal models in the regulatory capital requirements or link them to the results of the standard approaches set out by supervisory authorities. At the same time, the standards for calculating risk weighted assets were revised and are now far more sensitive to risk. These will include new provisions for the approach to credit risk, the own funds requirements for CVA and operational risks. The new rules, which will, in the final analysis, impact on the denominator of the solvency and equity ratios, are expected to be phased in internationally over a five-year period from 2022 on and still need to be transposed into European law.

LBBW participates regularly in the Basel impact studies, in order to quantify the RWAs and take them into account in the capital planning. Additionally, further steps will regularly be initiated to anticipate the impact and develop potential, strategic options for action.

Development of CRD/CRR in Europe

The CRD and CRR form the European framework for banks and financial services institutions. These must meet strict requirements concerning solvency, liquidity and special reporting obligations. CRD IV includes provisions on the authorization and supervision of banks and financial services institutions, fundamental rules on the banks' equity base, penalties in the event of breaches and rules on the institutions' corporate bodies and their supervision. The CRR governs the guidelines for the level of regulatory capital to be held, as well as for large exposures and liquidity requirements.

This regulatory framework has implications for business strategy, the strategic direction of the business units, management metrics and technical reporting capacity. The interdependencies between the regulatory framework and business strategy are analyzed constantly on an integrated basis and taken account of accordingly.

After almost two years of consulting and negotiating, an agreement to finalize the revised EU banking regulation CRR II/CRD V has been reached, which was published as part of the EU banking package in the Official Journal of the European Union on 7 June 2019. The revision aims to remove inconsistencies as well as implement international regulatory requirements. This includes guidelines for indebtedness, liquidity and liabilities. Furthermore, new trading book guidelines (»FRTB« - Fundamental review of the trading book) and provisions for counterparty risk of derivatives (»SA-CCR - standardized approach for measuring counterparty credit risk exposures«) will be introduced. These can be described informally as forming part of the Basel IV" reform package described above. The legislative package took effect on 27 June 2019, although it will not be applied to key issues until after a two-year transition period. Furthermore, the FRTB will be introduced in two stages. Initially, there will be only a reporting requirement from 31 March 2021 (as per EBA draft), before a binding capital requirement is introduced from 2023 onwards. The divisions and control units responsible at the Bank will ensure that the new requirements are met as part of an implementation project.

BCBS 239

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.

Outlook

The EBA/ECB stress test will form a key part of supervisory activities in 2020, with the results of this stress test - both qualitative and quantitative - being included in the 2020 SREP. The EU-wide stress test aims to assess banks' stability under adverse economic developments in order to reveal potential risks, identify any areas where banking supervisory authorities need to take action and to improve market discipline. For this, supervisory authorities have specified a standardized methodology and macroeconomic scenarios that banks must use to calculate/forecast the performance of their entire portfolios over three years. The results of the stress test will be published on the EBA website at the end of July 2020.

LBBW Group – risk situation

LBBW Group – Risk-bearing capacity

EUR million	31/12/2019		31/12/2018	
	Absolute ¹	Utilization	Absolute ¹	Utilization
Aggregate risk cover	12.116	59%	16.838	42%
Economic capital limit ²	10.000	71%	12.800	56%
Correlated total economic capital	7.126		7.146	
of which:	0		0	
Interrisk correlations	-483		-481	
Counterparty risk	3.692		4.086	
Market price risk	2.341		1.885	
Investment risk	43		40	
Operational risk	655		790	
Development risk	153		146	
Real estate risk	121		123	
Other risks ³	604		558	

¹ Confidence level 31 December 2019: 99.9%/one year, 31 December 2018: 99.93%/one year holding period.

² The individual risk types are capped by economic capital limits.

³ Other risks (particularly reputation, business, pension and model risks).

The economic capital commitment was almost unchanged compared to the end of 2018 at EUR 7.2 billion. 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 changes to methodology. The methodological changes aim to increase stability under stress conditions where there is a market price risk.

As a result of implementing the requirements under the ECB guidance for banks' internal processes for ensuring adequate capital, aggregate risk cover (ARC) declined significantly by EUR 4.7 billion to EUR 12.1 billion as at the end of 2019 in comparison to the end of 2018. This reduction reflects the fact that subordinated capital is no longer recognized by regulatory bodies in the ARC in accordance with the requirements of the ECB's ICAAP guidelines. By contrast, subordinated liabilities together with the newly issued AT1 capital are still fully recognized as regulatory capital for the normative (regulatory) perspective.

To sum up, it can be stated that the risk-bearing capacity of the LBBW Group was maintained at all times during the 2019 financial year as a whole, 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 59% as at 31 December 2019.

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 description of the LBBW Group's risk situation is based on the reporting date 31 December 2019 and does not include the impact of the coronavirus pandemic.

Based on the latest developments, LBBW expects the spread of the virus to hurt both German and global economic growth, at least for the first half of 2020.

The rapid growth of the outbreak means that only very limited exact forecasts can be made regarding the further impact on risk-bearing capacity. The negative impact on global economic growth and prevailing market uncertainty is likely to have a particular effect on the risk types counterparty risk and market price risks. In addition, it cannot be ruled out that the situation will also affect other material risk types.

An assessment of the situation regarding LBBW's liquidity can be found in the section on liquidity risks.

Risk types¹

Counterparty risk

Definition

The umbrella term counterparty risk describes the loss potential resulting from the fact that business partners may in future no longer be in a position to fulfill their contractually agreed payment obligations. A counterparty risk may occur both from direct contractual relationships (e.g. granting loans, buying a security) and indirectly, e.g. from hedging obligations (especially issuing guarantees, selling hedging via a credit derivative).

The main characteristics of this risk are defined and briefly explained below.

Credit risk

Here the term credit risk, often used synonymously with counterparty risk, describes the counterparty risk from the lending operation, i.e. from granting loans and hedging lending by third parties (e.g. via guarantees).

Issuer risk

The term issuer risk covers the counterparty risk resulting from securities. It covers both the direct securities portfolio and securities referenced via derivatives (especially via credit derivatives).

Counterparty credit risk

Counterparty credit risk describes the counterparty risk from financial transactions (especially derivatives transactions), resulting from the fact that the contracting party (counterparty) is no longer in a position to meet their obligations. In this situation, on the one hand, the position that becomes open upon closing may entail costs (so-called replacement risk), while on the other there is a risk that advance payments have been made to the counterparty without the counterparty being able to provide the corresponding counter-performance (so-called advance payment, performance and/or settlement risk).

Country risk

The term country risk designates the counterparty risk that arises because, due to critical political or economic developments in a country (or entire region), the transfer of foreign exchange is not possible or only possible to a limited extent (transfer risk).

Collateral risk

Collateral risk is not direct counterparty risk, but describes the potential that collateral received to reduce the counterparty risk loses value, especially if this happens systematically (e.g. due to turmoil on real estate markets).

Counterparty risk management

Management for limiting the counterparty risk is implemented as an integrated process at LBBW, and can be broken down into the three main components of risk measurement, risk monitoring and reporting as well as risk management:

¹ Information on correlated total economic capital for the individual risk types can be found in the section on the risk management systems/risk situation of the LBBW Group.

Components of counterparty risk management

<p>Risk measurement</p>	<ul style="list-style-type: none"> ▪ Risk classification procedures (PD) ▪ Evaluating collateral (LGD) ▪ Exposure at default (EaD) ▪ Expected Losses (EL), Value adjustment and Credit Value Adjustment (CVA) ▪ Credit Value at Risk (CVaR) ▪ Risk concentrations ▪ Stress tests
<p>Risk monitoring and reporting</p>	<ul style="list-style-type: none"> ▪ Individual transaction level <ul style="list-style-type: none"> – Counterparty credit limits – Early warning indicators – Intensive care of delinquent loans – Supervision of loans for restructuring and winding up by dedicated units of the Risk Management division ▪ Portfolio level <ul style="list-style-type: none"> – Economic capital and economic capital limit – Country and sector limits – Regular reports – Ad-hoc information on risk situation
<p>Risk management</p>	<ul style="list-style-type: none"> ▪ Individual transaction level <ul style="list-style-type: none"> – Guidelines of the credit risk strategy – Pricing in line with risk and equity ▪ Sub-portfolio level <ul style="list-style-type: none"> – Measures to observe various portfolio limits – Targets for credit risk strategy ▪ Total portfolio level <ul style="list-style-type: none"> – Allocation of economic capital to the sectors

Risk measurement

In order to measure risk, LBBW uses an extensive range of instruments involving quantitative measuring procedures. These are subject to ongoing quality control and undergo permanent development.

Risk classification procedures

LBBW uses specific rating and risk classification procedures for all relevant business activities. These procedures quantify the probability of default (PD) of the individual investments. For this purpose, the counterparty risk is calculated both including and excluding the transfer risk.

The quality of the risk classification procedures in use is reviewed regularly and the procedures are refined if necessary. These procedures are maintained and updated by LBBW on its own initiative or in cooperation with Rating Service Unit GmbH & Co. KG (an associated company of the Landesbanken) or Sparkassen Rating und Risikosysteme GmbH (a subsidiary of Deutscher Sparkassen- und Giroverband – DSGV).

Most of the portfolio is measured using internal rating procedures that have been approved for the Internal Ratings Based Approach (IRBA) by the banking regulator. The rating grades are not only used for internal management purposes but also to measure the regulatory capital requirements.

Evaluating collateral

Collateral is evaluated on the basis of its market value, which is reviewed regularly and on an ad hoc basis and adjusted in the event of any change in the relevant factors. Loss given default (LGD) is estimated on the basis of the valuation of the individual items of collateral. In this respect, differentiated estimates are calculated for liquidation rates (average proceeds expected from the liquidation of collateral) and for recovery rates (proportion of the proceeds from the unsecured portion of a receivable). The estimates are based on empirical values and pool data recorded by the Bank itself and in cooperation with savings banks and other Landesbanken.

Exposure at default

Whereas exposure is tied to a specific date (exposure at default, EaD) for reporting purposes, and potential future exposure is calculated to determine the CVaR and the utilization of internal limits, e.g. with derivatives. This is calculated for the most part on the basis of fair values and the corresponding add-ons. The add-on calculation takes account of the remaining maturity, product type and market factors (interest, currency etc.). Netting and collateral agreements are used for reducing risk. The capital charges for issuer risks held in the trading book take account of the settlement payments and actual fair value losses as a result of default (jump-to-default method). The (modified) nominals are used for issuer and reference debtor risks from securities and holdings in the banking book.

Expected losses, value adjustments and credit value adjustment

The expected loss (EL) – as an indicator that depends on customer creditworthiness, an estimation of the loss at default and the expected exposure at default – provides the basis for the level of the standard risk costs. In preliminary costing at the individual transaction level, these are included in the calculation of riskadequate loan terms. In addition, the concept of expected loss is key to calculating impairment. For more details, see the information on the impairment model in accordance with IFRS 9 under Note 2 (»Changes and estimates«). In the case of impairment losses for significant financial assets (stage 3), the present values of the expected cash flows (including proceeds from the liquidation of collateral) are calculated and allowances for losses on loans and advances are made on the basis of uniform standards applied throughout the Group.

The market price of the counterparty risk of OTC derivatives accounted for at fair value is measured using the so-called credit value adjustment (CVA). This is included in the income statement of LBBW as a valuation adjustment. The credit ratings of the counterparty and of LBBW are taken into consideration.

Credit value-at-risk

At LBBW, unexpected loss or credit value-at-risk (CVaR) represents the potential present value loss of a portfolio above its expected loss. A credit portfolio model that takes the defaults as well as rating migration into account is used to calculate this value. The borrowers are assigned corresponding default and migration probabilities, on the basis of their ratings. The CVaR is calculated using a Monte Carlo simulation approach and takes into consideration correlations between borrowers as well as borrower, sector and country concentrations.

CVaR is used as the parameter for economic capital used for counterparty risks in the risk-bearing capacity analysis and in LBBW's management. CVaR and economic capital are defined using the same high confidence level and time horizon of one year.

Risk concentrations

Risk concentration is measured using the CVaR, among other methods, and is limited using the LBBW Group's free aggregate risk cover. Group Risk Controlling proposes concentration risk thresholds and the concentration limit for individual borrowers as well as at sector level; these are set by the Board of Managing Directors. The thresholds and limits are reviewed regularly and adjusted if necessary, depending on the development of the loan portfolio and the risk-bearing capacity.

Stress tests

LBBW uses stress tests to evaluate the impact of adverse economic and political developments on key performance indicators in the lending portfolio (e.g. CVaR, impairment). The potential effects of crises are converted into negative changes to the key lending risk parameters (PD, LGD and correlations) of the transactions in the portfolio in question. A distinction is drawn between two types of stress tests for all risk types:

- Basis stress tests are defined by the Board of Managing Directors as part of risk tolerance and include events such as an economic crisis, a national crisis and a financial market crisis. They are conducted on a quarterly basis and serve to ensure stress resistance and meet regulatory requirements.
- Potential effects of current developments (e.g. Brexit) are quantified through ad-hoc stress tests. These create tailor-made scenarios that reflect LBBW's estimates regarding alternative future developments.

Risk monitoring and reporting

Individual transaction level

Risk management at the level of individual exposures is the duty of the back office divisions as part of the first line of defense. These are organized independently from the front office divisions, in line with the regulatory requirements. Clear responsibilities and appropriate experience and expertise are ensured in the back office divisions by a customer or sector-specific organizational structure. Credit decisions are made in a system of graded competencies, which are regulated in the Bank's decision-making systems.

As part of risk monitoring, the risk managers responsible continuously check compliance on the basis of systems with the limits granted as well as any changes in information of relevance for credit ratings. This includes monitoring any irregularities in account behavior, evaluating company news and observing macroeconomic and sector trends. In cases in which market data can be observed for a given company, a market data-based system is additionally used according to requirements.

A system is in place for the early detection of risks, comprising procedural regulations and system generated signals, whose goal it is to detect any deterioration in credit ratings at an early stage.

The early detection of any deterioration in credit ratings allows appropriate countermeasures, e.g. additional collateral or pre-emptive restructuring, to be taken in consultation with the customer. Depending on the level of risk, problem assets are classified as cases requiring intensified support, restructuring or liquidation and are dealt with by the departments responsible. LBBW aims to minimize losses through successful restructuring activities, in line with the Bank's own interests and those of its customers.

Portfolio level

Counterparty risk is monitored as part of the second line of defense at the portfolio level in the Group Risk Controlling division, which, from an organizational point of view, is separate from the front and operational back office divisions. The utilization of the economic capital limit and the exposure and CVaR limits set for sector risks is documented each month in the overall risk report. High limit utilizations are shown at an early stage using a traffic light system. Compliance with country limits is monitored on a

daily basis using the Bank's global limit system. If the country limit is almost fully utilized, the affected front and risk management units are notified.

An ad hoc reporting process is implemented for limit overdraft and extraordinary events for specific reporting to the decision-makers in charge.

The most important periodic reports are as follows:

- The overall risk report presented monthly in the Risk Committee, which includes details about the risk situation at the portfolio level, compliance with the material limits and rating distributions, size classes and risk concentration. Portfolio analyses additionally report on the risk situation of individual sectors, for example. Each quarter, these also include additional detailed information for each sector regarding the development of risk provisioning, compliance with the parameters of the credit risk strategy, new business and notable exposures.
- The half-yearly in-depth sector report with detailed information on the sector situation, portfolio structure and important customers in each sector.

Risk management

Counterparty risks are managed, in particular, through the requirements of the credit risk strategy, through the economic capital allocation to sub-portfolios with the aid of the CVaR, and by avoiding and reducing concentration risks at the level of sectors, countries and individual counterparties.

Individual transaction level

As a rule, the upper limits on the individual transaction level taking the concentration limit into account are set individually by the respective authorized person responsible for the front office or back office divisions. This upper limit is taken into account for all risk-relevant transactions by a customer or borrower unit or group of connected clients. A material part of managing individual transactions involves monitoring compliance with the quantitative and qualitative requirements defined in the credit risk strategy. This determines the underlying terms and conditions for LBBW's lending business on the basis of the business strategy and in the light of the Group risk strategy. Particular attention is paid to avoiding concentration risks.

From an economic point of view, the question of whether a transaction will produce an adequate profit on a risk-adjusted basis is a key consideration before entering into business; for this reason, preliminary costing of all individual transactions is compulsory. In addition to the historical interest rate and the bank levy, the components in the preliminary costing comprise cover for expected loss (risk margin), interest on equity to be held in case of unexpected losses (capital margin) and cover for liquidity and processing costs. The results form the basis of business management at customer level.

Sub-portfolio level

The risk management measures differ depending on the respective sub-portfolio level:

- Country limits are determined by the Board of Managing Directors, based on the proposals of the Country Limit Committee. In the case of a limit overdraft a ban on business is imposed. If the country credit rating deteriorates, limits are reduced and/or suspended.
- Sector limits are determined by the Board of Managing Directors (financials main sector as a whole, corporates differentiated). They are set on a sector-specific basis below absolute concentration limits. The limit system is based on a risk-oriented sector key designed specifically for this purpose, which combines sector segments that have high economic dependencies along the value chains. The limitation triggers controlling measures such as hedging transactions to reduce risk or a ban on new business etc. if certain thresholds are exceeded.

- At the business area or sub-business area level, risks are limited through measures to ensure adherence to the portfolio guidelines of the credit risk strategy with regard to upper limits, rating structures and the portfolio quality, among others.

Total portfolio level

In the management of the Group's credit portfolio, the limit in particular for the economic capital for counterparty risks based on the CVaR is allocated to the sectors. As well as risk parameters (in particular avoiding concentration risks), appropriate consideration is also given to LBBW's strategic targets for developing the lending portfolio when allocating economic capital and the resulting limits at sector level. Suitable measures are taken in the event of high limit utilization. In addition, the results of the stress tests provide indications of potentially dangerous risk situations, which may require measures to be taken.

Risk situation of the LBBW Group

Preliminary note

The quantitative information on the risk situation is based on the management approach. LBBW's risk situation is therefore reported on the basis of the figures used for the purpose of conducting internal risk management and reporting to the Board of Managing Directors and the corporate bodies. The management approach differs partially from balance sheet reporting. This can be put down to the presentation from risk aspects and deviations from the companies included for accounting purposes. In internal risk management, the SüdLeasing Group and – for the first time in 2019 – LBBW México SOFOM are included as consolidated subsidiary. The prior-year amounts shown were restated accordingly.

The differences between the figures used for internal risk management on the one hand and external accounting on the other can be quantified as follows:

Reconciliation of accounting approach to management approach

EUR million 31/12/2019	Balance sheet recognition	Reconciliation			Management approach
		Basis of consolidation	Measurement	Other	
Financial assets measured at fair value					
Trading assets	32.018	2	44.812	38	76.870
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	1.218	171	-25	0	1.364
Positive fair values from hedging derivatives	1.374	0	4.152	0	5.526
Financial assets designated at fair value	1.170	0	-211	0	959
Financial assets measured at fair value through other comprehensive income	28.648	1.374	-1.394	0	28.627
Non-current assets held for sale and disposal groups	0	0	0	0	0
Financial assets measured at amortized cost					
Cash and cash equivalents	18.331	-13	-15.197	0	3.121
Receivables	167.016	-4.865	16.142	-1.094	177.199
Debentures and other non-current assets and disposal groups	1.090	-7	-68	0	1.015
Non-current assets held for sale and disposal groups	0	0	0	0	0

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 47 (Counterparty risk) in accordance with the disclosure requirements under IFRS 7.

Exposure to counterparty risks in 2019 was always in accordance with the risk-bearing capacity of the LBBW Group.

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	31/12/2019	31/12/2018 ¹
Gross exposure	353,332	317,345
Netting/collateral	98,911	79,608
Credit derivatives (protection buy)	6,620	7,210
Classic credit collateral	41,776	41,547
Net exposure	206,025	188,980

¹ Restatement of prior year amounts.

Gross exposure amounts to EUR 353 billion as at the end of the reporting period, and is therefore around EUR 36 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 17 billion or 9% to EUR 206 billion.

The details given below on portfolio quality, sectors, regions and size classes provide an overview of the aspects which are relevant for LBBW's risk situation, with net exposure forming the basis.

Portfolio quality

Presenting the portfolio by internal rating class depicts how the portfolio quality has developed compared to 31 December 2018.

Portfolio quality

Net exposure	EUR million	in %	EUR million	in %
	31/12/2019	31/12/2019	31/12/2018 ¹	31/12/2018 ¹
1(AAAA)	26,886	13.1%	25,776	13.6%
1(AAA) - 1(A-)	103,326	50.2%	89,498	47.4%
2 - 5	53,873	26.1%	52,666	27.9%
6 - 8	14,876	7.2%	13,937	7.4%
9 - 10	2,791	1.4%	2,786	1.5%
11 - 15	1,558	0.8%	1,702	0.9%
16 - 18 (default) ²	949	0.5%	848	0.4%
Other ³	1,767	0.9%	1,767	0.9%
Total	206,025	100.0%	188,980	100.0%

¹ Restatement of prior year amounts.

² »Default« refers to exposure for which a default event as defined in Article 148 CRR has occurred, e.g. improbability of repayment or 90-day default. The net exposure is presented before impairment.

³ Includes non-rated transactions, in particular rating waivers.

The investment grade share (ratings of 1(AAAA) to 5) increased slightly to 89.4% (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 9.3% (previous year: 9.7%). The top rating class 1 (AAAA) mainly includes German non-central public-sector entities. The non-performing exposure accounts for 0.5% of the entire portfolio.

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 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.

¹ See section on the risk situation of the LBBW Group.

Sectors

EUR million	Net exposure 31 Dec. 2019	CVaR 31 Dec. 2019	Net exposure on default 31 Dec. 2019	Net exposure 31 Dec. 2018 ¹	CVaR 31 Dec. 2018 ¹	Net exposure on default 31 Dec. 2018 ¹
Financials	89,219	917	28	74,799	887	32
of which transactions under specific state liability ²	8,536	8	0	6,277	29	0
Corporates	79,846	1,807	863	77,956	2,178	727
Automotive	11,862	371	346	13,525	474	140
Construction	7,262	157	67	6,637	190	65
Chemicals and commodities	6,942	143	76	5,945	139	46
of which chemicals	3,185	64	0	2,963	69	5
of which commodities	3,757	79	76	2,981	71	40
Retail and consumer goods	12,812	299	157	13,038	366	149
of which consumer goods	8,950	178	31	9,363	233	70
of which durables	3,862	120	126	3,674	133	80
Industry	9,920	210	88	9,350	230	100
Pharmaceuticals and healthcare	4,468	82	8	4,139	105	9
TM and electronics/IT	6,541	127	22	6,168	145	60
Transport and logistics	5,790	134	10	5,862	167	7
Utilities and energy	8,060	199	42	7,644	244	96
of which utilities and disposal companies	4,375	90	35	4,148	114	37
of which renewable energies	3,685	109	8	3,496	130	59
Other	6,189	86	46	5,649	118	54
Real Estate	12,223	357	36	10,409	424	56
Commercial real estate (CRE)	8,883	296	31	7,005	339	36
Housing	3,340	61	6	3,404	85	20
Public sector	19,033	152	0	20,586	266	0
Private individuals	5,705	100	22	5,229	110	33
Total	206,025	3,332	949	188,980	3,866	848

¹ Restatement of prior year amounts.

² Item includes 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 89 billion as at the end of the reporting period. The increase of EUR 14 billion as against the end of 2018 is essentially due to the increased exposure to central banks, savings 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 chemicals and commodities, construction and industrial sectors contributed EUR 2 billion to net exposure, bringing the total to EUR 80 billion in 2019. Automotive is an important sector for the portfolio and is therefore be monitored closely in the interests of managing sector concentrations. The automotive portfolio was significantly reduced in 2019. The current economic position, 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. Growth in commercial real estate increased the net exposure in real estate as a whole by EUR 2 billion year-on-year to EUR 12 billion.

Public-sector net exposure was down approximately EUR 2 billion as against the end of 2018 at EUR 19 billion. There were reductions in the exposure to public-sector entities in Germany and outside Germany.

The portfolio of private individuals has a particularly high level of granularity and saw slight growth.

Regions

The following table shows the geographic breakdown by region in comparison to 31 December 2018.

Regions

Net exposure in %	Share 31 Dec. 2019	Share 31 Dec. 2018 ¹
Germany	67.7%	69.1%
Western Europe (excluding Germany)	22.3%	22.0%
North America	5.1%	3.9%
Asia/Pacific	2.9%	2.6%
Eastern Europe	0.9%	0.8%
Latin America	0.6%	0.7%
Africa	0.1%	0.1%
Other ²	0.5%	0.7%
Total	100.0%	100.0%

¹ Restatement of prior year amounts.

² Transactions not allocated to a particular country (e.g. transactions with supranational institutions).

The share of domestic business in the net exposure is 67.7%. The basic distribution by region is largely constant, although there were regional shifts in North America due chiefly 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 (especially non-EU countries), Latin America and Africa predominantly results from export finance and foreign trade financing. Their share of net exposure is of subordinate importance.

Trade conflicts, in particular the dispute between the US and China, ramped up in 2019 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 debt-ridden Italy or the UK, which is wrapped up in Brexit discussions. Uncertainty regarding how the UK will leave the EU was observed on markets and, even after the country's exit was confirmed following the parliamentary elections in December 2019, the country's future relations with the EU remain unclear. 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 valuations for the end of 2018 and 2019.

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

Net exposure	Number	Net exposure in %	Number	Net exposure in %
	31/12/2019	31/12/2019	31/12/2018 ¹	31/12/2018 ¹
Up to EUR 10 million	711,200	10.5%	708,635	11.4%
Up to EUR 50 million	1,204	13.0%	1,169	13.8%
Up to EUR 100 million	269	9.2%	272	10.1%
Up to EUR 500 million	313	32.7%	310	35.2%
Up to EUR 1 billion	50	17.2%	44	16.1%
Over EUR 1 billion	20	14.2%	14	11.4%
LBBW Group companies	95	3.3%	52	2.1%
Total	713,151	100.0%	710,496	100.0%

¹ Restatement of prior year amounts.

The size classes up to a net exposure of EUR 100 million account for 33% of the net exposure (previous year: 35%). The large number of customers is due in particular to the retail portfolio.

With shares of 95% and 99.5% 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 20 overall, driving their share of the portfolio up by three percentage points to 14%. This increase relates primarily to financials. Financials dominate this size class as at the reporting date 31 December 2019 with a share of 47%, while corporates account for a further 28% and the public sector (German non-central public sector entities) for 21%. These are 19 counterparties with exclusively very good ratings (minimum rating class 1 (A-) and one with the rating class 2).

Market price risks

Definition

LBBW defines market price risks as potential losses resulting from unfavorable changes in market prices or factors influencing prices. Market price risks are broken down into the categories equities, interest rates and currency/commodities.

The following characteristics of market price risks arise as a result of the nature of LBBW's business activities.

Equity risk

The equity risk results from changes in share and/or index prices as well as from share or index volatilities.

Interest rate risk

The interest rate risk is based on changes in market interest rates, interest spreads, credit spreads or interest rate volatilities. This also includes interest rate risks in the banking book (IRRBB) and the risk from pension obligations.

FX/commodity risk

FX/commodity risks are summarized and reported under the FX risk type in the LBBW Group. The FX risk relates to the development of exchange rates. The commodity risk relates to changes in the price of precious metals and commodities.

Market price risk management

<p>Risk measurement</p>	<ul style="list-style-type: none"> ▪ Internal risk model approved by the regulatory authority ▪ Daily value-at-risk measurement ▪ Stress tests, calculation of stressed-value-at-risk, backtesting analysis ▪ Sensitivities ▪ Monitoring of risk concentration
<p>Risk monitoring and reporting</p>	<ul style="list-style-type: none"> ▪ Monitoring and observance of the limits by persons who are responsible for the portfolios in Group Risk Control ▪ Daily, weekly and monthly reporting
<p>Risk management</p>	<ul style="list-style-type: none"> ▪ Specifications on the basis of market price risk strategy and portfolio descriptions ▪ VaR limit down to portfolio level ▪ Loss limit per portfolio via a loss-warning trigger ▪ Limiting of sensitivities

Risk measurement

Risk model

At LBBW, the market risk of the trading and banking book is represented by value-at-risk forecasts. The value-at-risk (VaR) can be determined using a stochastic-mathematical model. This model derives a

distribution of portfolio values from a distribution of market factors, the valuation based on and, if necessary, corresponding simplifications. The VaR is determined from this as the maximum potential loss at a given confidence level.

LBBW is using an in-house developed model based on a classic Monte Carlo simulation. In this simulation, market-induced movements in the value of complex transactions are partially approximated. In addition, historical time series for the last 250 days are weighted equally in the estimation of the covariance matrix. Backtesting analyses are used to ensure the quality of the applied VaR estimation procedures.

The risk model is used for general interest rate and equity risks to determine the regulatory capital requirements for market risks of the trading book¹ (CRR portfolio).

The model is also used to calculate economic capital as part of the risk-bearing capacity assessment. For this, the total risk in a significant stress period is scaled to a parameter set covering multiple risk types regarding the confidence level and holding period.

The following specific VaR parameters are used at LBBW:

- Internal management: confidence of 99% and one-day holding period
- Backtesting analyses: confidence level of 99% and one-day holding period
- Supervisory/regulatory purposes: confidence level of 99% and ten-day holding period
- Strategic management/economic capital/risk-bearing capacity: confidence level of 99.90% and 250-day holding period

The market price risks calculated in the model are determined consistently for both the trading portfolio and for the banking book positions.

Interest rate risks refer to potentially detrimental changes in market interest rates.

Credit spread risks of transactions that are sensitive to creditworthiness are mapped in a risk-oriented manner onto rating- and sector-dependent yield curves. In this way, general credit spread risks from bonds and *Schuldscheine* are also measured. In addition, the issuer-specific risk for securities is calculated using the spread of individual counterparties. Reference borrowers are allocated to CDS sector curves for credit spread risks from credit derivatives.

The calculations of VaR and sensitivities are completed with separate stress scenarios for the trading and the banking book on a weekly basis. Stress testing is used to examine how the value of the portfolio changes under extreme market conditions. LBBW uses both self-defined e.g. synthetic as well as historical market movements with a focus on altering specific movement of market price data i.e. curve trend or spread changes. Synthetic scenarios are based mostly on selected market factor groups, such as individual or combined interest rate or credit spread shifts. Historical scenarios were generated from the data analyses of market shocks. All scenarios serve the purpose of modeling extreme events on the financial markets that are not specifically included in VaR. The results are reported to the decision-makers both on a portfolio basis and with regard to their impact on the Group as a whole. The interest rate shock in accordance with EBA GL 2018/02 is calculated for the banking book on a monthly basis. The stress simulations are also integrated in the stress scenarios for multiple risk types and are therefore relevant for risk-bearing capacity.

In order to calculate the StressVaR, instead of the last 250 trading days, a period of observation is assumed that covers a significant stress period. The StressVaR is calculated on a weekly basis, taking into account the relevant observation period, for the trading book's capital backing in accordance with the

¹ Trading book excluding funds that cannot be represented transparently.

internal model. To determine the economic capital requirement for market price risks, the StressVaR is calculated each month during the periods relevant for the Group. The observation periods are determined on a quarterly basis for the portfolio of relevance for CRR and on an annual basis for the Group.

Risk concentration is monitored on a monthly basis using sensitivity analyses and VaR observations.

New products and further development of the risk model

In 2019, the product representation was refined in the model, in particular in terms of representation of equity derivatives, and changes in market conditions were also taken into account when modeling risk factors. These include the introduction of new market yield curves to optimize the treatment of collateralized bonds, improvements on the stress test regarding showing potential interest rate changes and to the process of selecting risk factors. In addition, the model for scaling the VaR for economic capital was revised in order to better reflect stressed market conditions.

Validation of the risk model

LBBW's market risk model is subject to an extensive validation program, in which the potential model risks are identified in the stochastics of the market factors (including distribution model, risk factor selection and mapping), in the implemented valuation procedures and in the relevant market data, and are measured in terms of their materiality using tailor-made validation analyses. The validation analyses are conducted within the Risk Controlling division by the model risk and validation group, which is organizationally independent from the model development. The validation analyses are guided by the materiality of the model risks and performed at regular intervals (at least once a year) and on an ad hoc basis in the event of material structural changes occurring in the model design, on the market or in the portfolio composition.

Particular importance is attached to the backtesting analysis within the validation program. This statistical backward comparison of the actual changes of the portfolios not only focuses on the VaR forecast using a binomial test, but is also based on the entire distribution forecast. According to regulatory requirements, backtesting is based on changes in portfolio value excluding commission, fees and credit, debit and additional valuation adjustments (dirty P&L) as well as on changes in portfolio value excluding value contributions from new and intraday trades and net interest income (clean P&L).

If the backtesting or validation analyses indicate material model risks, these are made transparent to model developers, model users and those who receive reports so that necessary model optimization measures can be initiated. Resolved amendments are made according to the model change policy and communicated to the regulatory authorities.

Risk monitoring and reporting

The utilization of limits and compliance with the detailed risk strategy defined in the portfolio descriptions, are monitored in Group Risk Controlling as part of the second line of defense and reported to the Group's Board of Managing Directors. Reporting comprises specifically:

- Daily report with overview of the P&L and risk development.
- Weekly stress test report comprising the effects of the stress scenarios.
- Overall risk report that is prepared monthly and contains detailed information about P&L and risk development, risk concentration, economic capital and monitoring of the economic capital limit.

Risk management

The fundamental management aim of the front office divisions as part of the first line of defense is to generate IFRS result. This aim is defined in detail by way of a comprehensive set of financial ratios, which are set by the Board of Managing Directors in the medium-term planning. They are broken down by business areas and form the basis for the reporting.

The market price risk strategy documents the strategic framework in the LBBW Group and is derived from the business strategy and the Group risk strategy. The Group risk strategy contains overarching requirements for taking market price risks, which are set out in the risk-taking principles. The requirements for active management of the material LBBW portfolios are documented in the portfolio descriptions, following from the market price risk strategy.

The Board of Managing Directors caps quantitative market price risk management in the LBBW Group by fixing the limit for economic capital for market price risks within the framework of risk-bearing-capacity. The loss-warning trigger acts as an indicator for losses of market value in the economic P&L and thus also entails a reduction of the aggregate risk bearing capacity. The loss-warning triggers at divisional and/or segment level are fixed by the Board of Managing Directors at least once a year taking into account the risk tolerance. Distribution among the portfolios below this level is effected by the authorized person responsible.

The relevant VaR amount is calculated for strategic management and monthly inclusion in the economic capital limit in the strategic limit system. If it is not possible to completely quantify the material risks, appropriate cushions or reserves are formed.

Differentiated VaR portfolio limits are connected with the economic capital limit. These limits plus the loss warning triggers and the sub-strategies together compose the risk taking guidelines for the divisions, departments and groups of Capital Markets Business and Asset Management/International Business, Corporate Customers as well as the subsidiaries. The persons responsible for managing market price risks in the LBBW Group are defined via the escalation policy.

Operational management (intraday and end of day) in LBBW's trading books is conducted using sensitivity and product limits. These are monitored by Group Risk Controlling and if necessary escalated to the Risk Committee or the Board of Managing Directors.

For operating risk management, internal transactions are completed between the trading units, which are included in the calculations of market price risk.

Risk situation of the LBBW Group

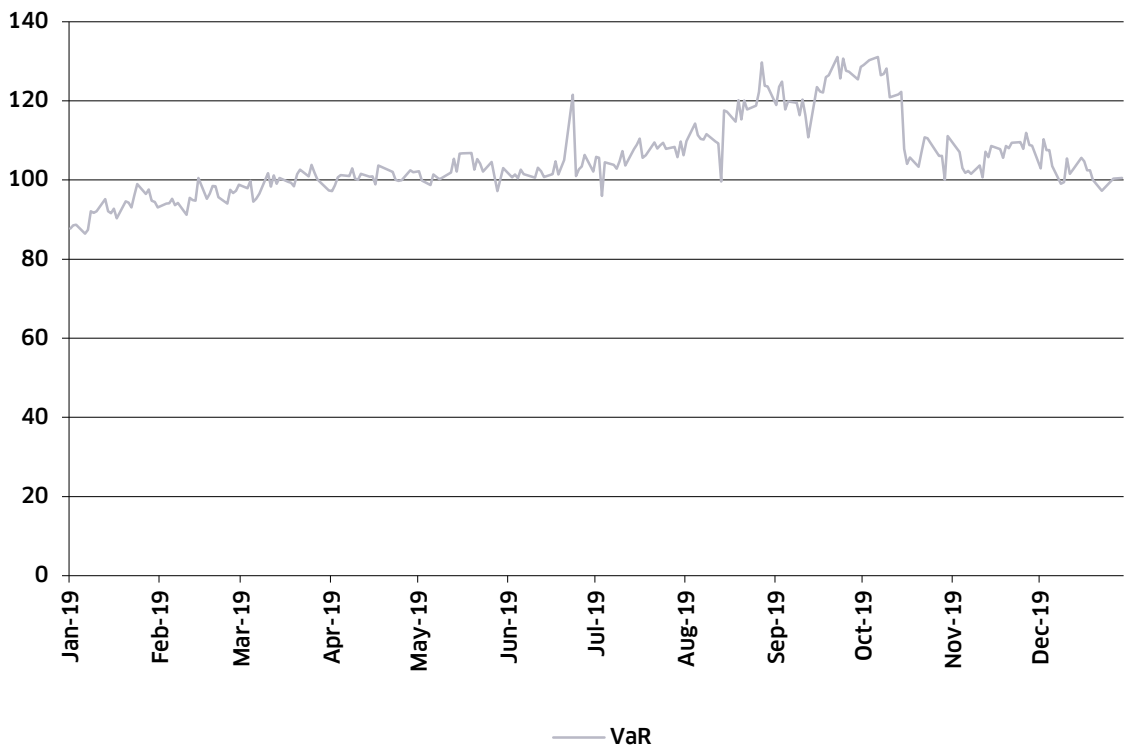
Development of market price risks

Exposure to market price risks in 2019 was always in accordance with the risk-bearing capacity of the LBBW Group. The risk limit was not exceeded in 2019 for the individual Group units either. The loss warning trigger was not breached for LBBW Group and the trading book in 2019.

LBBW's market price risks are generally characterized by interest rate and credit spread risks. Here, the overall risk is dominated by the positions in the banking book, which result from treasury activities and pension obligations. These are primarily credit spread risks from securities for liquidity management purposes and interest and credit spread risks of the present value of pension obligations. Equity risks, along with currency and commodity risks, are less significant for LBBW than interest rate and spread risks. Commodity risks also include risks from precious metals and notes and coins portfolios, which LBBW holds to only a limited degree.

The following chart illustrates LBBW Group's market price risks over the course of the year.

Development of the LBBW Group risk in EUR million (99%/10 days)



The risk mapping of collateralized bonds was improved in October, causing risks to decline.

VaR 99%/10 days

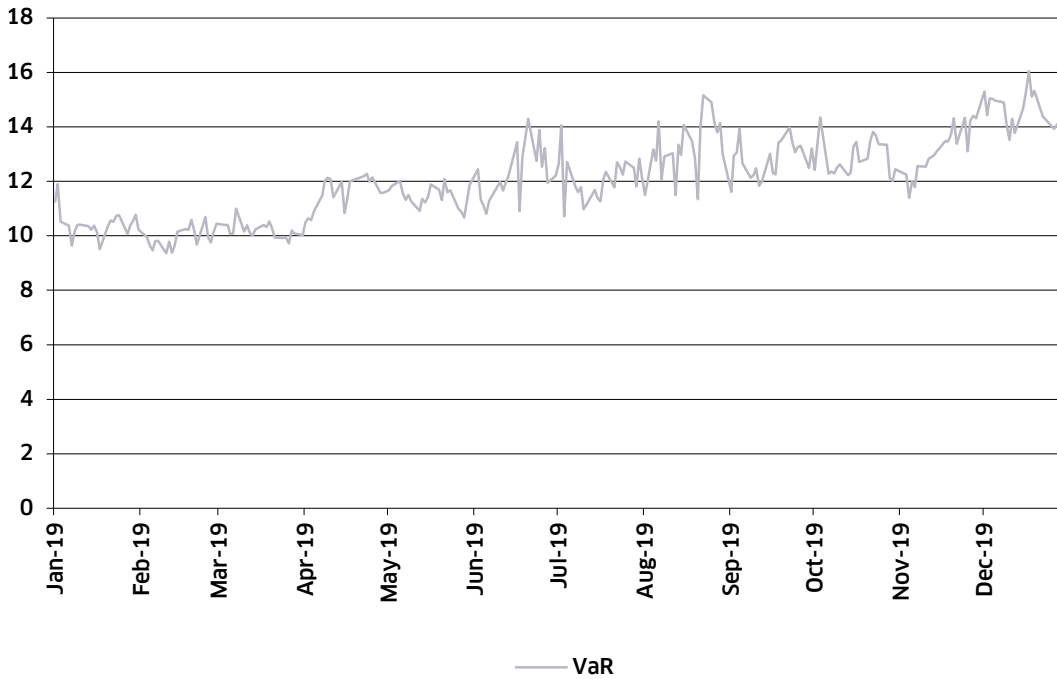
EUR million	Average	Maximum	Minimum	31/12/2019 ¹	31/12/2018
LBBW Group	105	131	86	100	88
Swap risk	51	70	35	54	49
Credit spread risk	93	122	78	80	78
Equity risks	6	10	3	9	7
Currency risks ²	1	4	0	1	1

1 The last reporting date in the 2019 financial year was 30 December 2019.
 2 Including commodity risks.

The VaR of the LBBW Group increased in 2019. This increase was due to an increase in securities exposures as a liquidity reserve, higher volatility of the euro yield curve and a substantial fall in interest rates.

For the trading book the VaR developed as follows in 2019:

Development of the trading book risk in EUR million (99%/10 days)



VaR 99%/10 days

EUR million	Average	Maximum	Minimum	31/12/2019 ¹	31/12/2018
LBBW (Bank) trading book	12	16	9	14	11
Swap risk	6	14	3	10	5
Credit spread risk	10	13	8	10	8
Equity risks	6	10	3	9	7
Currency risks ²	1	4	0	1	1

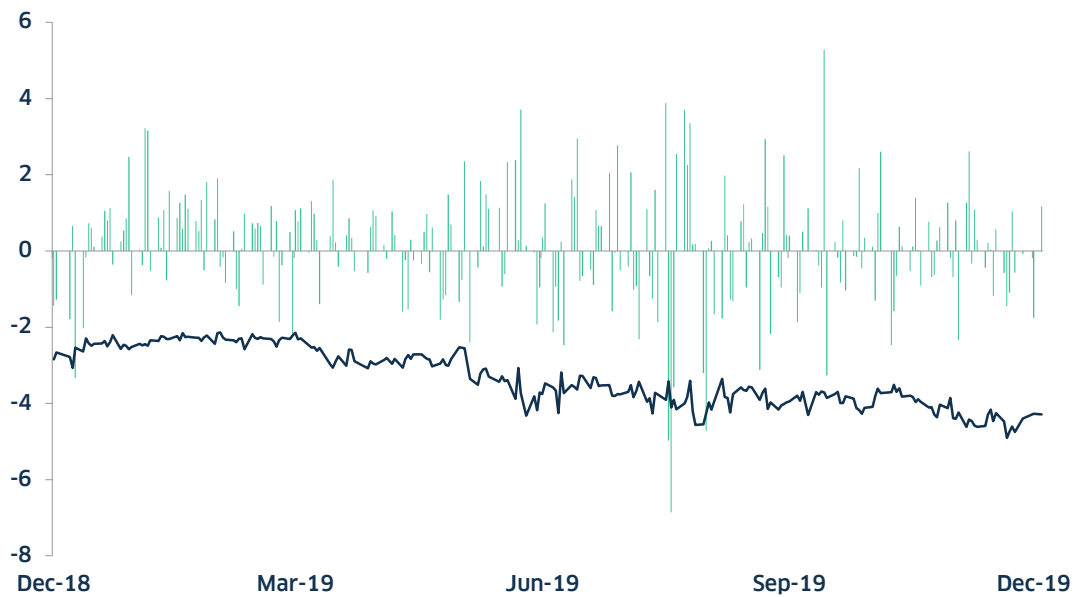
1 The last reporting date in the 2019 financial year was 30 December 2019.
2 Including commodity risks.

The LBBW trading book includes the positions of the segment Financial Markets and of Treasury, which are used for short-term interest rate and liquidity management. The risk in the trading book rose in 2019 but remains at a low level. The reason behind this increase in risk is the sharp decline in interest rates in the eurozone, combined with higher volatility.

Backtesting result

Clean backtesting CRR portfolio for the period 27 Dec. 2018 – 30 Dec. 2019 in EUR million

VaR parameters: 99% confidence level, 1-day holding period



█ Clean-P&L (equities + interest gen.)¹

— VaR (equities + interest gen.)

1 Change to P&L equities + interest gen. in December

Up to and including the last reporting date of 30 December 2019, the internal risk model shows five outliers for the Clean P/L for the preceding 250 trading days in the CRR portfolio, the portfolio relating to capital adequacy. All outliers are attributable to market events that caused the credit spread to shift significantly.

On the basis of the Dirty P/L, two outliers were recorded for the CRR-relevant portfolio in the preceding 250 trading days. The January 2019 outlier reflects a sharp decrease in USD interest rates. Very weak economic data had created visions of interest rate cuts. The second outlier occurred in December due to a change in methodology for a valuation adjustment for unsecured derivatives.

Stress test

LBBW frequently conducts diverse stress tests. The main adverse case scenario for the LBBW Group is currently the European Sovereign Debt Crisis and chiefly comprises changes to spread curves. The LBBW Group's stress test value declined by around 19% against the previous year.

The effects of an interest rate shock on the strategic bank position in accordance with EBA GL 2018/02 are calculated within the scope of conducting the stress test. The regulatory requirements stipulate that the result may not exceed a 20% share of liable equity. This limit was never breached in 2019.

Market liquidity risks

Market liquidity risk designates the risk that transactions cannot be closed out, or can only be closed out at a loss, due to inadequate market depth or market disruptions. For example, if a large volume were to be bought or sold quickly, then a corresponding market-price influence would be anticipated, potentially reducing the expected revenues.

Changes in the bid/ask price range are taken into account when determining the market liquidity risk depending on the size of the position.

As at 31 December 2019 the market liquidity risk calculated using this model stood at EUR 469 million. The market liquidity risk rose by EUR 124 million in the financial year, attributable to building up and reallocating positions.

Liquidity risks

Definition

LBBW's liquidity risk monitoring and management activities draw a distinction between short-term liquidity risk in the narrower sense, which represents the risk of insolvency due to an acute funding shortfall, and the funding (spread) risk, which describes the adverse effects on income resulting from a possible deterioration of funding spreads.

Liquidity risk management

Risk measurement	<ul style="list-style-type: none"> ▪ Analysis of the overall funding requirement and funding potential ▪ Continuous stress testing and calculation of the risk from funding spreads ▪ Liquidity flow analysis (assessment of structural liquidity as basis for the planning of funding) ▪ Analysis of the investor base for possible concentrations
Risk monitoring and reporting	<ul style="list-style-type: none"> ▪ Reports on day-specific liquidity gaps (for different locations and currencies) ▪ Monitoring of available liquidity reserves and of results from stochastic models for call risks ▪ Monitoring results from stress testing (from intraday up to a one year projection) ▪ Consolidated reports on the funding requirement and potential of the Group ▪ Reports and Analysis on liquidity and funding risks in the Board of Managing Director's risk and monitoring bodies ▪ Ongoing monitoring of LCR and NSFR
Risk management	<ul style="list-style-type: none"> ▪ Specifications on liquidity risk tolerance (limits, survival times and stress test specifications) ▪ Management of assets and liabilities of the balance sheet via funds transfer pricing ▪ Active management of euro intraday liquidity ▪ Return-based management of economic and regulatory key performance indicators

Risk measurement

Liquidity risk tolerance is primarily defined by reference to a survival period concept, i.e. time frames are specified by senior management over which LBBW is expected to remain at least solvent, even in the event of severely limited opportunities to borrow on the market, subject to different combinations of assumptions (development paths).

The assumptions to be made in the regular check of adherence to these parameters, especially within the framework of stress tests, are regularly checked to determine whether they are still adequate under the ongoing market conditions. If they need to be adjusted due to current developments, this is reported to senior management via the Risk Committee and, if approved, results in timely adjustments.

In addition, there is a limit system for the maximum funding requirements based on maturities from the business portfolio across various time frames and currencies, and utilization reviews that match the funding requirements with the potential funding capacity.

The following measures, amongst other things, are used for the early identification of new call risks or increased risk from known but previously immaterial call risks:

- Permanent analysis of the documented business operations (overall risk report, ALCo documents, New Product Processes) with regard to new or increasingly significant call risks.
- A liquidity group consisting of Treasury, Risk Controlling, Regulatory Reporting and Financial Controlling convenes regularly for an operational report on current liquidity issues.
- Monitoring intraday liquidity as part of the active liquidity management via the ECB account. Additional check to see if large cash flows occur that are not from transactions due or other familiar causes of payment flows.
- Reviews of models, assumptions and materiality classifications within the scope of the Group's risk inventory processes.

All key subsidiaries as defined in the risk inventory (Risk Management Group) and conduits are transferred via the liquidity risk strategy into a single framework for strategic specifications of the activities involving liquidity risks. This is achieved by, for example, determining requirements for structuring funding or reporting obligations. The liquidity risks for subsidiaries and affiliates are assessed using a regularly revised risk inventory and transferred to the Risk Management Group's regulatory framework, which essentially matches the regulatory framework in place at LBBW (Bank), according to their materiality.

Risk monitoring and reporting

The regular monitoring of liquidity risks in terms of economic and regulatory aspects is the responsibility of the LBBW Risk Committee. It prepares decisions for the Group's Board of Managing Directors. As part of the second line of defense, Liquidity Risk Controlling is responsible for daily monitoring at the operational level. All material aspects of liquidity risk are reported in detail in the Risk Committee via the monthly overall risk report, such as liquidity requirements, liquidity buffer and compliance with the specifications on liquidity risk tolerance including the results of the stress tests carried out and the intraday liquidity. Detailed reports are prepared daily as part of the continuous monitoring, which show the different partial aspects of liquidity and liquidity risk – such as disaggregation of the liquidity gaps by currency – and are distributed to recipients in Group Risk Controlling and Treasury. In addition, a daily stress test for intraday liquidity was embedded in the liquidity risk tolerance in the fourth quarter of 2019.

Risk management

The Asset Liability Committee (ALCo), which meets on a monthly basis, is the central body for managing liquidity and funding. The ALCo also draws up the funding strategy and planning on behalf of the Group's Board of Managing Directors, presents it to the Board for approval and monitors implementation of decisions.

As part of the first line of defense, Treasury implements all the decisions to be made by the Asset Liability Committee with the aim of active income and risk optimization while simultaneously ensuring solvency at all times and compliance with the regulatory requirements and the requirements with respect to liquidity risk tolerance. Regulatory liquidity requirements (LCR and, from 2021, NSFR) are already firmly embedded in operational management and are actively managed using forecasts and monitored on an ongoing basis. The strategic parameters in terms of liquidity risk tolerance are designed in such a way that the Group's solvency in EUR and foreign currency is secured for a sufficiently long period even in extreme market situations and in the event of a marked deterioration of LBBW's credit rating as perceived by market players. This also ensures that in the event of temporary adverse developments an adequate time window is available for adapting the business strategy and considering alternative business policies.

In cooperation with Risk Controlling, the Treasury further develops the methods used to determine internal funds transfer pricing. The ALCo is responsible for FTP policy, internal netting interest rates (opportunity interest rates), for monitoring the steering effects of the opportunity interest rates and pricing models on the business units and on the liquidity and funding situation of the Group. Group Risk Controlling oversees and reviews the risk adequacy of changes to methodology before these are approved by the Board of Managing Directors on the recommendation of the ALCo.

Treasury is also responsible for the operational management of market- and risk-adequate internal transfer prices that have to be adjusted continuously to market conditions, and is a fundamental component of the management of the assets and liabilities sides of the balance sheet.

The purpose of LBBW's funding strategy is to diversify product and investor groups. In 2019, savings banks, institutional investors and retail business again constituted the main sources of medium and long-term funding. The product range includes covered bonds, senior preferred, senior non-preferred, Tier 2 and Additional Tier 1 bonds in various currencies that are issued both via private placements and in the benchmark segment. Three of the nine benchmark issues were green bonds and one was a social bond.

Treasury is responsible for securing the intraday liquidity. If necessary it actively manages the daily payments via the Bundesbank account and calculates liquidity requirements up to the end of the day, while continuously taking into account euro payment inflows and outflows that only become known during the course of the day, as well as performing the central bank function for savings banks. Liquidity Risk Control evaluates the daily turnover in euro and monitors intraday liquidity using calculated key figures and a daily stress test.

An emergency plan is in place for securing liquidity in acute crisis situations. The provisions made include the formation of a crisis response team bringing in members of the Board of Managing Directors. The emergency plan is reviewed annually, tested as part of a liquidity shock exercise and resolved anew by the Board of Managing Directors.

Risk situation of the LBBW Group

The impact of continued excess liquidity in 2019 is also reflected in LBBW's extensive liquidity. The customer deposit business showed the steady performance that was desired 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.

As at the reporting date of 31 December 2019, the funding needs and the counterbalancing capacity were as follows:

Overview of funding requirements and counterbalancing capacity

EUR billion	3 months		12 months	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Funding requirement from the business portfolio (deterministic cash flow)	5.2	-1.3	-0.2	-6.9
Funding requirement from material call risks (stochastic cash flow)	16.7	16.3	33.8	31.8
Funding potential from free liquidity reserves	22.8	20.6	29.7	26.9
Counterbalancing capacity on the market	48.5	44.5	64.7	59.1
Overcollateralization	49.3	50.2	60.8	61.0

The funding requirement from the business portfolio in the 12-month forecast is negative as liquidity inflows exceed the outflows and thus de facto result in an investment requirement. After 2018 was still largely characterized by a continuous investment requirement, at the end of 2019 there is again an almost continuous funding requirement from the cash flow of the business portfolio. In particular, the cash flow structure consists of net inflows in EUR and of funding requirements in key foreign currencies at LBBW (USD and GBP). The funding potential was adequate to compensate for any short-term liquidity outflows and continues to ensure significant overcollateralization on a three month (approximately EUR 49 billion) and 12-month (approximately EUR 61 billion) horizon. The surplus from cover registers (Deckungsregister) not required to preserve the covered bond rating is applied towards the free liquidity reserves in the 12-month view. Funding potential in the market is approximated on the basis of historical data on the unsecured funds actually raised.

Results of the economic stress scenarios

EUR billion	Funding requirements (3 months)		Funding potential (3 months)	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Rating downgrade scenario	25.8	18.3	45.8	42.7
Financial market crisis scenario	26.6	18.9	58.8	54.8
Combined scenario of market crisis with downgrade	27.1	19.2	54.0	50.3

The targeted stress resistance was met throughout 2019. The liquidity risk stress scenarios rating downgrade, financial market crisis, and a combination of the two, structured in accordance with the guidelines of MaRisk (BTR 3.2), show that the remaining funding potential via the market, plus the free liquidity buffer, always exceeded the potential funding requirements under stress scenarios. Sufficient overcollateralization was also available at all times in the foreign currency stress tests and in the EUR stress test for intraday liquidity.

In addition to the requirements for stress resistance, the limits and requirements on LBBW's liquidity risk tolerance set by the senior management also include limits for the maximum funding requirement arising from maturities from the business portfolio and requirements concerning their coverage through funding potential. Total Group limits (EUR plus foreign currencies) were maintained at all times in 2019. The limits for USD and GBP, currencies subject to close monitoring, are designed so as to take account of both risk and return-based management. This caused the GBP requirements to be temporarily exceeded, but these were brought back within limits very quickly.

The prescribed minimum value of 100% for the European indicator for short-term liquidity »Liquidity Coverage Ratio (LCR)« was observed at all times in 2019. At 123.6%, it was exceeded as at year-end 2019 (31 December 2018: 114.8%). LBBW has prepared for the net stable funding ratio (NSFR) requirements applicable from 2021 onwards and already meets the requirements in a closely monitored process.

At the time of preparing this report, it is not yet possible to estimate the medium to long-term impact of current developments in the coronavirus crisis on LBBW's liquidity situation. Changes in sources of call risks from deposit holdings and credit line commitments, which are monitored on a daily basis, were within normal ranges. Despite the much stricter assumptions made in comparison with the actual situation, the frequent liquidity stress tests show that the funding requirement continues to be well covered by the assumed or existing funding potential. Nonetheless, the liquidity situation – which remains comfortable at present – could deteriorate if the crisis escalates. In particular, it is conceivable that there would be an upturn in credit line draw-downs, a decline in deposit holdings or a need for increased collateral positions as a result of deteriorating market factors such as interest rates.

Risk management system for Pfandbrief (covered bond) operations

A differentiated limit system was put in place to monitor risks from covered bond (Pfandbrief) operations (section 27 of the German Covered Bond Act (Pfandbriefgesetz – PfandBG)). Regular stress tests are conducted with regard to NPV (net present value) overcollateralization. In the event that the fixed limits are reached, a process for then cutting the risk is implemented. The Board of Managing Directors and the Risk Committee are informed on a quarterly basis of compliance with the provisions of the PfandBG and the utilization of legal and internal limits. The statutory requirements were met at all times in 2019. The risk management system is reviewed at least annually.

Operational risks

Definition

LBBW describes operational risks (OpRisk) as the risk of losses arising due to the unsuitability or failure of internal processes and systems, people, or due to external events. Legal and compliance risks can lead to losses in each of the aforementioned risk categories. This is because in each category the LBBW Group may be subject to legal claims, lawsuits or legal proceedings due to failure to observe statutory regulations and underlying conditions.

Credit risks in connection with operational risks are likewise viewed in line with regulatory requirements. The effects of this are included in the information on counterparty risk. Business risks and reputation risks are not included under operational risks.

Management of operational risks

Risk measurement	<ul style="list-style-type: none"> ▪ Pillar I: Standard approach ▪ Pillar II: OpVaR
Risk monitoring and reporting	<ul style="list-style-type: none"> ▪ Dual overall approach; central, decentral ▪ Central parameters: strategy and rules and regulations ▪ Organizational model: roles and responsibilities ▪ Risk monitoring: OpRisk Controlling methods and instruments ▪ Derivative sales process, scoring system for risk indicators ▪ Internal reporting (quarterly to the Risk Committee, monthly to the Internal Risk Committee, ad-hoc reporting) ▪ External reporting ▪ Risk situation
Risk management	<ul style="list-style-type: none"> ▪ Observing the specifications set for the »operational risk strategy« ▪ Determining the action strategies decentrally ▪ The management of measures for reducing risk

Risk measurement

The standard approach is used to calculate regulatory capital requirements in the regulatory steering view at the LBBW Group. In connection with LBBW Group's risk-bearing capacity (RBC), an operational value-at-risk (OpVaR) model is applied for the economic steering group.

The internally developed model is based on the loss distribution approach. Separate segment-specific modeling is carried out for the distribution of frequency and size of loss. Internal and external losses together with scenario analyses are included for the OpVaR calculation.

In line with the other types of risk, a time frame of one year and a confidence level of 99.9% were used to calculate the OpVaR within the framework of risk-bearing capacity.

The OpVaR model used for internal controlling is integrated into the Group's strategic limit system. There are economic stress scenarios that vary the risk parameters of the OpVaR model (frequency or amount of loss in expected future loss events). This covers the main business lines and event types. The stress test results for operational risks are also incorporated in the overarching MaRisk stress scenarios.

Risk monitoring, reporting and risk management

The LBBW Group has a comprehensive system for the management and controlling of operational risks. A dual overall approach is in place, under which an independent, centralized organizational unit within the Group Risk Controlling division is tasked with further developing and implementing the methods and tools used by OpRisk controlling. In the LBBW Group, the execution of the processes implemented for the management of operational risks is mainly the responsibility of the local divisions and subsidiaries.

The central parameters for handling operational risks are anchored in the Group risk strategy, the risk strategy and policy for operational risks as well as in the framework and instructions. Here the risk strategy and policy describe the risk profile of the LBBW Group as well as the risk management and controlling process with regard to operational risks.

A »three lines of defense« model describes the roles and responsibilities of those involved in operational risks processes.

As the first line of defense and supporting management, the individual divisions' and subsidiaries' operational risk managers play a key role in implementing operational risk controlling tools. They ensure the quality, completeness and timely processing of the operational risk information within the prescribed parameters. At the same time, operational risk managers serve as contacts and multipliers for employees in the allocated organizational unit on the topic of operational risks. Central OpRisk Controlling represents the second line of defense in conjunction with downstream controlling processes and is in close contact with the local OpRisk managers. At the same time, the Group Compliance division carries out further monitoring activities. Group Auditing carries out the process-independent reviews and evaluation (third line of defense).

One of the main goals of operational risk management and controlling activities is to identify operational risks at an early stage, presenting them in a transparent manner and managing them proactively.

Various methods and tools are used to identify and assess the risk situation. In addition to the internal and external loss database, a risk inventory is conducted annually with self-assessments and scenario analyses. The self-assessments record the individual risks of each division and the subsidiaries of the LBBW Group. The most important risks are aggregated and analyzed extensively in the scenario analysis using standard scenarios. In addition, risk indicators are recorded on a regular basis to identify possible unwanted developments at an early stage.

The overall exposure to operational risks is aggregated using operational value-at-risk (OpVaR) and reported in the LBBW Group's limit system as part of the risk-bearing capacity concept. Various stress tests are also conducted.

The risk data collected are used to create specific analyses, from which extensive control-relevant information can be derived. This forms the basis for drawing up and developing measures to reduce these risks. These play a key role in actively managing operational risks.

Four action strategy options are available for handling operational risks: avoid, transfer, reduce or accept risks. The risks are managed proactively by the divisions and subsidiaries. The divisions and subsidiaries take the decision on the selection and prioritization of the corresponding measures, which are implemented on a decentralized basis. The objective is to minimize or avoid risks, taking cost/benefit aspects into consideration. The internal control system, an open risk culture, the sensitivity to risks of all

staff members and transparency when handling risks also play an important role in limiting operational risks. Continuous improvement of business process, among other things, offers another possibility of reducing potential operational risks or outsourcing individual processes to specialized companies. Emergency concepts and business continuation plans drawn up within the scope of Business Continuity Management are used to limit losses in the event of an emergency. If it is not possible to completely avoid possible losses, the Legal division takes out insurance policies – as far as this is possible and reasonable.

The centralized OpRisk Controlling unit provides decision-makers with relevant information as part of regular risk reporting. Ad hoc reports are also made depending on the amount of loss. The Risk Committee also supports the Board of Managing Directors in exercising its supervisory function. The operational risks as well as the risk-bearing capacity monitoring for all risk types are therefore incorporated and integrated in the overall risk management.

Risk situation of the LBBW Group

The self-assessment performed by the divisions shows that existing operational risks in 2019 were always in accordance with the risk-bearing capacity of the LBBW Group. Looking forward, LBBW does not expect any operational risks to its going-concern status. Despite extensive precautionary measures, operational risks can never be entirely avoided.

Legal risks, IT risks and personnel risks are set out below as they are key areas of the operational risk. Divisions are generally responsible for the first line of defense. The Legal division comprises the second line of defense for legal risks; the staff department for personnel risks and the Group Purchasing and Security division for IT risks.

Legal risks

The definition of operational risks also includes legal risks. Legal risks comprise economic risks due to full or partial failure to comply with the framework of rules established by legal regulations and court rulings. These arise, for example, due to inadequate knowledge of the concrete legal position, insufficient application of the law or failure to react in a timely manner to changes in underlying legal conditions. This also applies if there is no fault or if the situation was unavoidable, for example as a consequence of changes in legislation, jurisdiction and administrative practice, especially at national and European level.

Legal risks are managed especially by LBBW's Legal division, which carries out a legal advisory role for the Group. In addition, its responsibilities include early identification of legal risks in business units and central divisions in cooperation with them, and efforts to limit these in a suitable manner. The Legal division has developed or examined and approved for use by the divisions of LBBW a variety of contract forms and sample contracts in order to minimize legal risks and simplify the business activities of the front office and trading division. In relation to this, LBBW is supported by the cooperation of the German Savings Banks Finance Group (DSGV), the German Sparkassenverlag (DSV) and the forms developed in the committees there and made available by the Sparkassenverlag publishing house. Approved, standardized contract materials are used for derivative transactions wherever possible. If legal questions arise in new areas of business or during the development of new banking products, the Legal division supervises and actively shapes these processes.

Furthermore, the Legal division monitors all relevant planned legislation, developments in court rulings, and new standards stipulated by the supervisory authorities in the Group's key areas of activity in close cooperation with the Association of German Public Sector Banks (Bundesverband Öffentlicher Banken Deutschlands – VÖB), the German Savings Banks Finance Group (Deutscher Sparkassen- und Giroverband), the German Sparkassenverlag and the Association of German Pfandbrief Banks (Verband deutscher Pfandbriefbanken – VdP) in particular.

To the extent that this results in LBBW having to take action with regard to legal matters or adapt its policies, the Legal division is instrumental in disseminating information quickly and implementing measures within the Group.

The banking landscape continues to face not inconsiderable legal risks from customer transactions in complex derivatives and the further development of consumer protection. In 2017, the German Federal Court of Justice (Bundesgerichtshof – BGH) also applied principles of consumer rights to commercial customers, to the detriment of banks. The Bank is closely monitoring legal trends relevant to banking law.

Further legal risks exist in fiscal law terms concerning capital gains tax. Here, a developed legal position with a retrospective impact on the basis of new legislation or new pronouncements by the revenue authorities cannot be ruled out.

The continuous processes of legal analysis and risk processes initiated by LBBW's Board of Managing Directors in response to this also take account of the aforementioned developments.

As far as is known today, adequate provision has been made to cover legal risks while at the same time the future development of legislation and legal disputes will continue to be of crucial importance for LBBW. Here the provisions formed relate, also against the backdrop of the unclear legislative situation, principally to covering legal risks from certain derivatives transactions as well as risks relating to consumer law.

IT risks

Today the principal business processes of the Bank are to a large extent supported by IT or depend on IT solutions. IT applications are becoming increasingly more complex and the volume of data greater, the number of outsourced services is rising and the threat to IT applications continues to grow, in part due to external attacks. On balance, this results in higher IT risks.

Managing IT risks is anchored within the company as a permanent, integrated process and is guided by the risk management and controlling process controlling cycle.

Specific risk analyses, self-assessments and scenario analyses are carried out and threats and weak points are analyzed and evaluated from different data sources (e.g. S-Cert computer emergency team, the IT baseline protection from the German Federal Office for Information Security) in order to get as complete a picture as possible of the Bank's IT risk situation.

Measures are taken and monitored in order to reduce risks to an acceptable level.

IT production operations and a part of applications development have been outsourced to a professional service provider specializing in financial institutions.

LBBW has set up a 24/7 response system, implemented an IT crisis response team and agreed security incident management processes with service providers in order to ensure that its business operations are maintained and that it can function if IT applications fail. Regular crisis drills are also conducted.

Personnel risks

LBBW's success depends materially on the commitment of its staff – and is also anchored in LBBW's mission statement: »We as employees drive the success of the Bank; with competence, knowledge and commitment«. Comprehensive personnel risk management aims to identify negative trends (risk monitoring) and evaluate suitable measures to prevent or minimize risks (risk management).

The Human Resources department distinguishes between various types of personnel risk for purposes of risk monitoring and management. The goal is to identify bottleneck, resignation, adjustment and motivation risks early on, and to minimize the resulting costs, such as staff recruitment, termination and staff turnover expenses. These risks are measured by periodically evaluating and analyzing key human resources indicators, such as fluctuation rates, absences, or data concerning personnel development measures, as well as comparing these indicators across the Group.

One focus here is on developing and promoting young employees within the company. In order to address the risk of a shortage of high-performance employees (bottleneck risk), employee potential is systematically documented and analyzed. Changes in LBBW's age structure are observed particularly closely against the backdrop of demographic changes.

Suitable talent management to fill select management and specialist roles looks set to take on increasing importance and so this is being met with a set of measures to attract, develop and retain high-achieving employees.

To counteract the risk of a shortage of suitable management personnel, a systematic process is in place to regularly evaluate potential and performance, in particular in senior management, in order to support development at an early stage with the help of suitable training programs. Particular attention is paid to women's professional development.

LBBW has already implemented a series of measures to address possible further personnel risks. These measures range from legal protection for LBBW to ensuring that employees are qualified to perform the tasks assigned to them. Among other things, a target group-oriented specialist training program is held annually. In addition, a dedicated department is responsible for providing training in and monitoring of statutory money laundering and compliance regulations. The Code of Conduct of LBBW also applies to all members of staff. These measures should also help to counter possible behavioral risks related to the staff.

Other material risks

Investment risks

LBBW invests within the Group in other companies or assigns functions to subsidiaries if this appears to be appropriate in the light of strategic and economic considerations.

By investment risks in the narrower sense LBBW understands in particular the risk of a potential loss of value both as a result of default events and due to an insufficient return on investments in subsidiaries and equity investments.

In order to limit the investment risk, subsidiaries and equity investments are only taken on if adequate risk management and appropriate integration in the processes of LBBW are ensured.

Depending on LBBW's possibilities for exerting influence, management of the subsidiaries and equity investments is effected by means of defined measures and processes (including quarterly *jour fixes* with selected subsidiaries, plausibility checks of the multi-year plans, various reports to the Board of Managing directors and corporate bodies of LBBW and the corporate bodies of the subsidiaries).

The early identification of business and risk development in the subsidiaries and equity investments is particularly important to the management of equity investments. These serve the purpose, especially for the strategically important subsidiaries, of holding regular coordination meetings at the corresponding specialist levels of LBBW. The management and monitoring at the level of these subsidiaries are generally performed by institutionalized supervisory boards or comparable bodies. At Group level, management and control is effected by investment management and by involving the staff, operating and marketing divisions in the decision-making process, taking corporate governance into account.

From the point of view of risk, a distinction is made between three categories of companies in the LBBW portfolio of equity investments (direct LBBW subsidiaries and equity investments and those held via holding companies):

- Material subsidiaries from a risk perspective, i.e. companies whose risk potential is classified as material from a Group point of view. These companies form the Risk Management Group.
- Subsidiaries to be monitored from a risk perspective, i.e. companies of minor importance to LBBW's risk situation but that could pay a higher risk premium in the future due to their performance
- Non-material subsidiaries and equity investments from a risk perspective, i.e. companies whose risk potential is classified as immaterial from a Group point of view.

From a risk perspective, as a rule, material subsidiaries are treated in line with the transparency principle. Accordingly, all material risks at Group level for each subsidiary of the Risk Management Group are quantified separately, using estimation procedures if necessary.

In the case of subsidiaries to be monitored as well as non-material direct subsidiaries and equity investments from a risk perspective, risk is generally qualified under a ratings-based credit value-at-risk approach (integrated simulation with LBBW's lending portfolio), which is prepared by Group Risk Controlling and serves as the basis for recognition in the risk-bearing capacity.

The business and risk trends in the portfolios of the subsidiaries and equity investments that are deemed non-material from a risk perspective and of subsidiaries to be monitored are generally reflected in the value of the investment as used to calculate the investment risk.

LBBW pursues a selective equity investment policy. When acquisitions of companies are planned, a comprehensive risk analysis (legal, financial etc.) is normally conducted in the form of a due diligence exercise with the involvement of specialist divisions of LBBW. Of particular importance here, among other things, is ensuring that inappropriate concentration of risk does not arise in the investment portfolio.

LBBW uses transaction agreements to contractually hedge risks as far as possible. In addition, the buying process includes the valuation of the company, taking into account capital-market-oriented risk premiums.

Enterprise values for the subsidiaries and equity investments of LBBW are calculated annually in accordance with the guidelines issued by the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer in Deutschland e. V. – IDW) as part of preparatory work for the annual financial statements. For the half-yearly report, an impairment test of the book values is performed, using the projections for the subsidiaries and equity investments to hand if necessary. A plausibility check of the valuations is performed on selected subsidiaries and equity investments as at 31 March and 30 September.

Besides the risk of a potential decline in value as the result of defaults, there is also a risk that LBBW will receive an insufficient return or no return at all on its investments. However, this risk corresponds to the above-mentioned general book value or fair value risk due to the focus on capitalized income value in the valuation of equity investments. The main drivers here are the large strategic subsidiaries and equity investments. LBBW's equity investment portfolio has a strong financial focus. Accordingly, a disruption in this market segment may lead to significant losses from equity investments.

Risks may also arise from the utilization of the personal liability assumed as shareholder (e.g. guarantor's liability, letter of comfort) for subsidiaries and investments; this also includes revoked letters of comfort or warranty declarations extended to subsidiaries and investments already disposed of and risks from assuming current losses incurred by subsidiaries due to control and profit and loss transfer agreements. Investment risk also covers step-in risks, i.e. the risk that financial support would have to be provided to subsidiaries and equity investments that are not consolidated for regulatory purposes or that are consolidated only proportionately and have no contractual obligations, e.g. to avoid reputational risks.

Management and monitoring systems ensure that LBBW is continually informed about the situation at the subsidiaries and equity investments. In addition, the subsidiaries pursue a conservative risk policy synchronized with LBBW to the extent that LBBW can influence such policies.

The investment portfolio was cut back further in the 2019 financial year, selling or terminating two property leasing companies. In addition, RW-Holding AG was liquidated.

Reputation risks, business risks, pension risks and model risks

Reputation risk is the risk of a loss or foregone profit due to damage to/deterioration of LBBW's reputation in the eyes of owners, customers, employees, business partners or the wider public. Reputation risk is not a component of operational risk. However, reputation risks may be caused by an incident of loss resulting from operational risk or other risk types becoming public knowledge. Reputation risks that have been incurred can impact on the business and liquidity risks.

LBBW draws a distinction between transaction-based reputation risk management (measures relating to individual business transactions) and non-transaction-based reputation risk management (press/issue management in particular).

In all business decisions the effect of the transaction on LBBW's reputation is to be considered. Transactions that have a long-term negative impact on LBBW's reputation are avoided. The sustainability policy of the LBBW Group must be observed. It is the LBBW Group's intention to act in the best and long-term interest of its customers and stakeholders. In order to implement the sustainability policy, the Group defines sustainability and environment social governance standards for all business areas. The transaction-based analysis of new transactions with regard to reputation risks is carried out on a decentralized basis by the front office particularly within the context of the New Product Process (NPP) and the credit application process. The Compliance division, the Sustainability group and Environment Social Governance support the relevant front office divisions in their day-to-day business in identifying and assessing reputation risks. In the case of OTC derivatives for interest-rate, currency and commodity management there is a product certification process upstream of the NPP.

Business risk is the risk of unexpected falls in earnings and negative plan variances not caused by other defined risk types. They may be caused by factors including changes in customer behavior or changes to the economic environment, as well as by the impact of reputational damage incurred. It is reflected in particular in lower fee and commission income or net interest spreads as well as in increased costs.

The historical plan/actual variances of selected items in the income statement form the basis for quantifying the business and reputation risks.

The pension risk entails the possible need to increase pension provisions on account of higher anticipated pension expenses and measurement effects in particular. This may particularly be caused by changes in interest rates, pensions, salaries and life expectancy. The risk from interest rate developments is integrated into the market price risk. The remaining risk drivers are quantified by means of scenario analyses on the basis of an actuarial report. In the event of material changes the Board of Managing Directors makes a decision with regard to the risk strategy, taking account of income statement and equity volatility.

LBBW defines model risk as the risk of potential loss or damage resulting from decisions based on the results of models that show weaknesses or uncertainties in the model theory/design, the model parameterization/calibration, model implementation, initial model data or the model application. As regards the intended use of the models, LBBW differentiates between the following types of model: models to quantify capital risks (ICAAP and ILAAP) (»risk and capital models«), models to measure asset and liability items (»valuation models«), models to define parameters relevant to lending such as ratings (probability of default: PD), loss given default (LGD) and credit conversion factor (CCF) (»lending parameter models«) and models that do not fall into these model categories (»other models«).

Model risks are a subset of operational risks (OpRisk) similar to legal or behavioral risks, but by virtue of their significance and special characteristics at LBBW they are largely managed in the scope of an independent model risk management process (MRM process). In this MRM process, methods and procedures are used that ensure model risks for individual models and across models are adequately identified, assessed, monitored, communicated and managed. This is based on the annual model inventory, which takes stock of all models used across the LBBW Group and classifies the models identified with regard to their MRM relevance (first model risk evaluation). Depending on the model class and other model-specific factors (e.g. line of defense in which the model was developed), the models are graded in the additional validation process (e.g. validation intensity). In the next stage of the model-specific validation process, model risks are identified and evaluated in terms of their materiality. Group Risk Controlling informs the Group's Board of Managing Directors of the key results of the model inventory and the model valuation, who then decide on measures to eliminate and reduce model risks. If a serious model risk cannot be eliminated within a reasonable period of time by adjusting the models, it is offset

in the risk-bearing capacity, depending on model type, as a deduction from the aggregate risk cover, as a premium in economic capital in the type of risk affected (for risk underwriting model risk), via the economic capital of the operational risk or by booking a fair value adjustment.

Real estate risks

Real estate risks are defined as potential negative changes in the value of own real estate holdings or seed capital for real estate funds managed by LBBW Immobilien due to deterioration in the general situation on the real estate markets or deterioration in the particular attributes of an individual property (possibilities of use, vacancies, reduced income, damage to buildings etc.). This does not include development risks from residential and commercial project development business, which form a separate risk category.

Real estate risks can arise in properties owned by the Group (office buildings) as well as in the commercial buildings used by third parties. The real estate portfolio is managed above all by the LBBW Immobilien Group and LBBW Corporate Real Estate Management GmbH.

Risk owners who bear business and process responsibility constitute the first line of defense, i.e. for real estate risks this is ultimately the management of the LBBW Immobilien Group and LBBW Corporate Real Estate Management GmbH. The Controlling division of the LBBW Immobilien Group and LBBW Group Risk Controlling form the second line of defense.

Conversely, in the event of a positive change in market conditions opportunities arise for positive changes in value and the generation of further income (higher rents, extensions of leases, possibility of leasing difficult space etc.).

The central principles for weighing up opportunities and risks when assessing investment and divestment decisions, material changes in property planning, concluding rental agreements and to avoid the risk of negative changes in the value of existing real estate holdings are defined in the risk strategy of the LBBW Group and of LBBW Immobilien.

LBBW uses a real estate value-at-risk (IVaR) model to measure real estate risk. Group Risk Controlling calculates IVaR indicators for real estate risks quarterly and incorporates these into the Group's analysis of risk-bearing capacity. The input data in this model are the volatilities and correlations derived from market data histories assigned to the portfolio values.

The operating subsidiaries of LBBW Immobilien Group with operations in the asset management segment are also controlled using special real-estate-specific indicators such as rent increases, vacancy rates and amounts in arrears. The real estate portfolio is monitored and analyzed for risks in the course of the quarterly portfolio valuation using the fair value approach. The goal is to identify at an early stage and analyze any adverse factors occurring as part of or relating to LBBW's activities. Proactive risk management ensures a balanced ratio of opportunities and risks within the portfolio.

The commercial portfolio is diversified by type of use, especially for office and retail property, as well as by size category. The strategic properties are predominantly located in Stuttgart, which is a stable market with relatively low rent fluctuations overall. Furthermore, the real estate owned by LBBW Immobilien is mostly situated in prime locations with low rental risk and leased to tenants of good credit standing. The credit rating of potential tenants is examined carefully when new properties are let and attempts are always made to ensure that the lease is as long as possible. Depending on the underlying real estate strategy (i.e. project development), however, it makes sense and is possible in particular cases to conclude short-term rental agreements. In addition, the performance of the portfolios that are located mainly outside Stuttgart – currently in Munich, Frankfurt am Main and Hamburg – contribute to macro location-specific diversification. These are purchased individual properties or (sub-)portfolios that will continue to

be fully let through active asset management. Subsequently, the properties will be sold again (in the medium term). Overall, risks specific to macro locations are therefore considered to be manageable.

In LBBW's asset management segment, investment and divestment decisions are usually made on a case-by-case basis following an in-depth performance audit, given the manageable number of properties. In this process, a comprehensive set of real-estate-relevant criteria, such as the cost/income situation, the Group's strategy for use/growth, the ability of the location to develop, portfolio diversification or representative purposes for the Group are taken into account.

LBBW Corporate Real Estate Management GmbH is responsible for LBBW's owner-occupied real estate. Most of the properties are used for office or bank purposes. The target portfolio is continually adapted to the uses required by the LBBW Group as well as aiming to optimize space utilization at all of the LBBW central offices. This is largely being achieved by concentrating on properties owned by LBBW, by avoiding rented space as much as possible and by optimizing occupancy. As a result, this is not expected to have a significant influence on the holdings LBBW uses itself or the real estate risk.

In addition, the business area equity real estate fund is included in real estate risk. Seed capital was used to help establish this business area. LBBW Immobilien Investment Management GmbH operates as an active real estate investment manager on the market. Investments are concentrated on office and commercial properties in selected locations in Germany. The focus is on Core+ real estate. The real estate VaR ensures inclusion in LBBW's strategic limit system.

Development risks

Development risks are defined as the bundle of risks that typically arise when implementing commercial and residential project developments. The risks in this field mainly arise from planning and approval, the projected construction costs and deadline, and especially from leasing and selling. Additional risks, such as the credit risk on the part of partners or the implementation of decisions regarding the partners, information flow or the quality of the partner also apply if project developments are implemented in partner projects. The occurrence of these risks may also result in the expected return not being generated, the invested capital not being returned in full - or not at all in extreme cases - or the need for further equity injections, provided it is not non-recourse financing.

Conversely, in the event of a positive change in market conditions opportunities arise for higher exit proceeds, driven by higher rental income as well as higher multiples. At the same time, however, a positive market trend makes it more difficult to purchase suitable development properties at favorable prices.

The central principles for weighing up opportunities and risks before commencement of a project and in all project phases with regard to factors relating to individual projects and the effects on the project portfolio are defined in the Group risk strategy of the LBBW Group and of LBBW Immobilien.

Risk owners who bear business and process responsibility constitute the first line of defense, i.e. for real estate risks this is ultimately the management of the LBBW Immobilien Group. The Controlling division of the LBBW Immobilien Group forms the second line of defense.

The regional focus is on the core markets of Southern Germany (Baden-Württemberg and Bavaria), Rhineland-Palatinate, the Rhine Main region, Berlin and Hamburg. LBBW Immobilien Group acts as an investor and service provider in commercial and residential real estate on these markets. Existing projects outside these target markets, especially on international markets, have largely been completed. The new projects are running on schedule and there is no evidence at present of any material risks.

LBBW Immobilien Group uses a risk model that was validated with the assistance of an auditing company to measure development risks. The model is based on a risk driver tree that identifies risks and shows the ranges in which these can fluctuate even before a construction project begins. From this, mark-ups and mark-downs on all future costs and revenues are determined and applied to the so-called real case calculation. A normal and extreme risk is calculated on the basis of different fluctuation ranges of risk factors. Development risk is calculated quarterly by the Controlling division of the LBBW Immobilien Group. The central Group Risk Controlling division includes this in the LBBW Group's analysis of risk-bearing capacity.

ICS with regard to the accounting process

The LBBW Group defines the internal control and risk management system (ICS) as a comprehensive system and applies the definitions of the German Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer in Deutschland e. V., IDW) on the accounting-related internal control system (IDW PS 261 Item 19 et seq.) and the risk management system (IDW PS 340 Item 4). It entails principles, processes and measures that are aimed at the implementation, in organizational terms, of management decisions

- to ensure the efficacy and economic efficiency of the business activities (including the protection of assets as well as the prevention and detection of loss of assets)
- to safeguard the propriety and reliability of internal and external accounting, and
- to observe the statutory rules and regulations of relevance for LBBW.

The ICS for the accounting process and management reporting helps to provide a true and fair view of the net assets, financial position and results of operations of LBBW (Bank) and the LBBW Group. The assessment of the effectiveness of the ICS is carried out on the basis of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. The ICS is made up of five components:

- The control environment provides the framework for the introduction and application of the principles, procedures and measures in a company.
- Risk assessment serves to recognize and analyze internal and external risks.
- The control activities ensure compliance with the management's decisions and address the corporate risks with suitable measures.
- Information and communication guarantee that information is collected for business decisions and passed on to the responsible divisions in the company.
- Monitoring the ICS serves to assess the effectiveness of the system over time.

A key aim is to ensure that all transactions are recorded, processed and documented in full and correctly in accordance with statutory provisions and standards, the provisions of the articles of association, and other guidelines.

It is also ascertained that companies included within the scope of consolidation are incorporated in the processes to ensure that the consolidated financial statements are prepared appropriately and in due time.

The accounting-related internal control and risk management system is an integral component of the ICS for integrated bank management.

Control environment

LBBW has a clear organizational, corporate, control and monitoring structure. Its Board of Managing Directors takes overall responsibility for proper business organization. All organizational units are involved in preparing the annual and consolidated financial statements as well as the management report by means of a clearly defined management and reporting organization. The departments of all Group companies involved in the accounting process conform from the Bank perspective to quantitative and qualitative requirements. The employees tasked with the accounting process are provided with regular training.

Risk assessment and control activities

The controls are geared toward ensuring that the annual and consolidated financial statements as well as the management report are prepared in accordance with the applicable provisions of the German Commercial Code (Handelsgesetzbuch, HGB) and the International Financial Reporting Standards (IFRS) as well as proper and timely compliance with internal and external financial reporting requirements. A process portal and framework and operating instructions regulate the scope of the controls and responsibilities integrated into working processes.

Every year, managers of each individual department determine which risks prevent the financial statements from complying with regulations and assess the relevance of these risks. They then document the recognized risks in the risk-control matrix.

In connection with the measures aimed at limiting certain recognized risks, it is worth mentioning the dual-control principle, the separation of functions and the assignment of authorities in line with existing decision-making regulations, among others. These have also been included in the regulations met by the respective Group companies.

Any recognized risks are reviewed using the ICS regulation cycle, which consists of five parts. The first is the ICS Quick-Check, wherein the organizational units concerned perform a self-assessment of the internal control system using a questionnaire. In the second part, key controls are carried out. The third involves management testing of select key controls using the risk-control matrix as a basis to check whether they are suitable and effective. The fourth stage is the ICS self-assessment and the fifth is the ICS reporting. Control functions are exercised within each competent department throughout the Group. The control targets defined at LBBW map the identified risks. These are set out in the written policies.

Both the annual financial statements for the Bank and the consolidated financial statements are prepared centrally by the Finance division at LBBW (Bank) with the involvement of the specialist divisions.

Detailed timetables and workflows are in place for the annual and consolidated financial statements (monthly, quarterly, half-yearly and annual financial statements), which are monitored and managed centrally. Responsibilities in all areas of the accounting process are clearly assigned. The relevant activities in terms of risk are distributed across several organizational units within the organization of business processes. The principle of dual control is applied to all processes relevant to accounting, the assignment of authorities complied with and the separation of functions taken into account.

The companies included in the consolidated financial statements have IT-based processes in place for preparing their financial statements (in accordance with local laws). This results in the delivery of the coordinated and, for the most part, audited annual financial statements for the purposes of preparing the consolidated financial statements. The senior management of the respective Group company is responsible for the completeness and accuracy of the results transmitted to the Group Accounting group.

The consolidated financial statements are prepared in accordance with IFRS and take into account the standard accounting and measurement requirements set out in the Group Manual.

Financial instruments measured at fair value at LBBW (Bank and Group) are assessed either on the basis of quoted prices for active markets (stock exchanges, brokers, price service agencies etc.) or on the basis of recognized and standard measurement methods using publicly available input data (e.g. yield curves, volatilities, spreads). In cases where not all the input parameters can be observed directly on the market, fair values are calculated using realistic assumptions, based on market conditions. The prices used for accounting purposes are checked independently of trading and validated by the separate organizational unit, Independent Price Verification, within Group Risk Controlling.

Higher-level control and coordination of the interdivisional process of preparing the LBBW management report are carried out centrally by the Group Communication division under the overall responsibility of the Finance division. The preparation process is integrated in the timetables and workflows for the half-yearly and annual financial statements. Applying the principle of dual control, the sections of the management report are produced separately by the specialist divisions and approved by the divisional managers.

Information and communication

The risk principles of the LBBW Group, the organizational structure and procedures and the processes of the accounting-related ICS are set out in manuals and guidelines (e.g. accounting guidelines, operating procedures, specialist concepts etc.), which are, in general, regularly adjusted to current external and internal developments and published on the intranet of LBBW (Bank). This also applies to the Group Manual, which includes the measurement and accounting rules for preparing the consolidated financial statements. Taking the current IFRS rules into account, it is updated regularly and forwarded to the Group companies.

The Finance Principles & NPP group identifies and evaluates all legal changes that have an impact on the accounting process. It informs the specialist divisions and subsidiaries affected and initiates implementation.

New types of products and product variants are examined in detail in the Bank's New Product Process and in the Group companies with regard to their treatment under accounting law. This process also defines the structures and embedded derivatives for each product type. In the case of new types of products, the correct mapping, analysis and recognition of transaction types is also checked in a test phase. If systems and/or processes of the Group head office are required for Group companies' new product types, the Finance Principles & NPP group determines how they should be treated under accounting law.

Group Accounting prepares the figures for the consolidated financial statements using standardized consolidation software on the basis of the information provided by the companies included in the consolidated financial statements. The consistency of the data provided by the Group companies is inspected by checking rules implemented and by comprehensive validation. The content of the data is validated using a matrix organization responsible for various Group companies and various balance sheet items within the Group. The notes to the consolidated financial statements are also prepared using standardized software. Group Accounting guarantees the completeness and accuracy of the relevant explanatory notes on the basis of the information provided by the Group companies.

Financial reports created in connection with accounting and sent to external parties or readers are checked for consistency by the internal organizational units responsible before being sent.

Furthermore, the Board of Managing Directors has issued rules stipulating that it must be informed immediately if doubts arise in individual divisions or Group companies as to proper business organization (»ad hoc reporting requirement«). The same also applies to accounting. If information is significant in terms of risk aspects, the Group Board of Managing Directors must also forward it to the Risk Committee of the Supervisory Board.

Monitoring

LBBW's current ICS is characterized by decentralized responsibility of the specialist divisions for essential accounting-relevant processes.

The central, internal ICS Compliance Office regularly monitors the accounting-related ICS as part of the bank-wide ICS monitoring process to evaluate its effectiveness and adequacy. This ensures that potential improvements are identified and processes are adjusted accordingly where required.

All internal and external audit findings are discussed and analyzed with the employees involved in the preparation of the annual and consolidated financial statements and the management report. The findings are processed and monitored in an ongoing process. Measures are derived and incorporated into ongoing processes.

Both the Audit Committee of the Supervisory Board and Group Auditing serve as senior monitoring bodies. Group Auditing is responsible for process-independent monitoring of business operations and, as such, is an instrument used by the entire management. In addition, Auditing carries out process-integrated and process-related monitoring measures. Its remit also includes helping improve the ICS's effectiveness. The Audit Committee, as a committee of the Supervisory Board, deals with the analysis and preparation of the findings of the audit of the annual accounts and informs the Supervisory Board of these activities.

Forecast and opportunity report

Anticipated economic performance

The pace of growth is expected to be lower in 2020 than in the previous year. Nonetheless, GDP growth will be somewhat inflated by a calendar effect caused by the timing of public holidays and the extra day provided by the leap year. Taking this into account, Germany's economic output is likely to pick up by around 0.8% in 2020, falling to just 0.4% after adjusting for the calendar effect and thus putting it on par with 2019. The calendar effect is somewhat less pronounced for the eurozone. Estimates put GDP growth for 2020 at 0.8% after adjusting for the calendar effects and 1.0% including this effect. The US economy also looks set to slow in 2020, with GDP growth declining to 1.9%. The trade conflict is continuing to weigh heavily, as tariffs that have already been imposed are not being removed for the time being with countries simply deciding not to introduce any additional tariffs. In addition, the expansive effects of the tax reform are likely to run their course. Both of these factors are squeezing GDP growth in the US. In China, the pace of GDP growth is more notable than in the economic areas described above. As opposed to the rate of 6.1% seen in 2019, it will likely amount to just 5.2%. The slowdown in the pace of growth also partly reflects the fallout of the trade dispute with the US, as well as high debt levels at state-owned firms, which is likely to curb investment by these companies. Furthermore, the spread of the Covid-19 virus and efforts to contain it have put considerable strain on economic activities in China. As the extent and duration of this pressure on China and other industrialized countries cannot be predicted at the time of writing, we must assume further downside risks for the economy.

Inflation is likely to be similar to that of the previous year in Germany (1.5%) and the eurozone (1.4%) in 2020. Energy prices and food products are key factors behind rising prices. Inflation looks set to pick up somewhat in the US and China. Inflation risks are considerably higher in China. The spread of an animal epidemic has driven up the price of pork, causing inflation to increase to 4.5% at the end of 2019. As recently as February of the same year, China's inflation rate was just 1.5%.

Monetary policy is likely to be cautious in 2020. Although the US Federal Reserve looks set to reduce its key interest rate again by 25 basis points to between 1.25% and 1.50%, no further easing is expected as the economy is performing better than thought at the end of 2019. Moreover, the risks posed by the trade conflict with China declined considerably after the phase 1 deal was signed. Finally, US Fed's inflation outlook is unlikely to give any reason to introduce measures one way or another. Under the scenario described, the US dollar is likely to continue to gain against the euro thanks to the improved economic climate in the US. We expect to see an exchange rate of USD 1.05 to the euro at the end of 2020, compared to USD 1.12 at the start of the year. The ECB will implement the measures announced in September 2019 regarding the net purchase of bonds totaling EUR 20 billion each month plus the reinvestment of maturing bonds from previous purchases and targeted three-year long-term tenders. However, no change to key interest rates is expected and so the deposit facility rate should remain at -0.50% throughout the year and the main refinancing rate at 0%.

Given this macroeconomic data, yields on the Bunds market are likely to remain close to the current level at the end of 2020. We expect to see a yield on 10-year Bunds of -0.1%. In the US, yields on 10-year US treasuries are likely to pick up slightly to 2.00%. Against this backdrop, equities look set to continue benefiting from moderate economic growth and ongoing low interest rates, although price gains are likely to be lower than in the previous year. We expect 14,000 points for the DAX at the end of 2020. The Euro Stoxx 50 is likely to climb to 3,850 points by the end of 2020. Even in a sluggish economy, house prices in Germany look set to continue to rise on account of low interest rates.

The spread of the novel corona virus and the associated respiratory illness, known as the »Covid-19 pandemic«, is responsible for human suffering and significant disruption to all economic activities across the world. General sources show that public life in key industrialized countries is largely coming to a standstill to prevent or at least slow the spread of the corona virus. This is leading to a considerable loss of earnings for companies and private households. It is not yet known how long these losses will go on for or how extensive they will be. We can say with almost complete certainty that overall economic performance in Germany and in the eurozone will decline, at least in the first half of 2020. As in many places, central banks in the United States and the eurozone are also attempting to mitigate the economic brunt of the pandemic and the financial market turbulence that this brings with it by introducing sweeping expansionary policy measures. At the same time, governments have passed or promised fiscal policy measures including generous support programs for private households and for businesses. The Covid-19 pandemic is likely to have far-reaching implications for the financial services sector, too. It is not possible to gauge further details at present. There are also questions over how long it will take to recoup economic losses after the end of the pandemic.

Industry and competitive situation

Ongoing geopolitical risks and structural problems in the automotive sector and in upstream industries are taking a toll on economic momentum in Germany. We are thus expecting to see relatively weak GDP growth of 0.6% in Germany in 2020 (adjusted for calendar effects), which is similar to the previous year's figure. This kind of challenging economic environment will also likely have an impact on how the German banking sector develops in 2020. Lending growth could lose speed, also a result of the German Federal Financial Supervisory Authority (BaFin) introducing a countercyclical capital buffer in 2019. In addition, allowances for losses on loans and advances are likely to gradually increase in connection with the tough economic climate. In our view, this will do little to improve profit prospects for the German banking sector as a whole given that not much is expected to change in terms of the low interest rate environment in the eurozone in 2020.

This is compounded by ongoing IT expenses for continuing digitalization of banking business and the required implementation of new EU regulations under CRR II (Capital Requirements Regulation) and CRD V (Capital Requirements Directive). Both were published in the Official Journal of the European Union in June 2019. In the longer term, the issue of sustainability could also become increasingly important as part of future regulatory requirements. Both the action plan on sustainable finance presented by the European Banking Authority (EBA) at the end of 2019 and the notice issued by the BaFin on handling sustainability risks highlight the significance of this issue.

Despite these challenges, LBBW believes that the German banking system is still on solid footing, with high asset quality and adequate capital resources: According to information from the EBA in September 2019, the risk-weighted total capital ratio is 17.5% and the average ratio of non-performing loans is just 1.2%. As described above, on the other hand, comparatively low profitability represents the Achilles' heel of the German banking system. Sustainably boosting profitability – the return on equity at German banks averages just 0.3% according to the EBA analysis above – is thus likely to remain a necessity for the sector as a whole. Cutting costs should therefore remain on the agenda at many banks in 2020, particularly given the intensely competitive nature of the German banking market.

Company forecast

General conditions

The following statements on LBBW's company forecast are based on the planning produced at the end of 2019.

The forecast period will likely be dominated by low growth in the eurozone on account of unresolved trade conflicts and structural change in the automotive industry and among suppliers. After the expected turnaround on the benchmark interest rate and the aimed tightening of monetary policy in 2019, the ECB reversed its policy again and cut deposit rates. Given this, interest rates will probably remain very low in the forecast period and be reflected in banks' earnings and capital figures.

In addition to sustained strains caused by implementing regulatory requirements, the forecast period will also be hallmarked by continued stiff competition on the German banking market and ongoing pressure on earnings. With technological change continuing to make strides and increasing sustainability efforts by governments and regulatory authorities, the demand for investment in these areas will remain high. Although the increasing significance of digitalization and sustainability creates more competition, the innovation it generates also opens up new opportunities.

LBBW's focus

Despite the challenging conditions, LBBW, a *mittelstands-minded universal bank* with the highest standards when it comes to the quality of its services and customer focus, still considers itself well positioned on the market. Its strong market position is supported by solid capitalization and a good risk profile, which constitute a stable basis for expanding and refining its customer-oriented business model using the *four strategic cornerstones* of business focus, digitalization, sustainability and agility.

LBBW aims for profitability and capital efficiency in the scope of its *business focus* strategic cornerstone. Consistently focusing on customer requirements, intensifying and expanding existing client relationships while also gaining selected new, long-term client relationships and improving the efficiency of internal processes on an ongoing basis should help achieve this goal. The strategic cornerstone *digitalization* plays a key role in strengthening customer relationships and boosting efficiency in the long term by digitalizing key customer business procedures and internal processes. The *sustainability* objective aims to further grow the selection of sustainable investment and financing solutions for customers and support customers in their challenging transition towards sustainable business models. Our own vision of who we are as a company also draws heavily on sustainability, for example in human resources and in our efforts to design our business with an eye to using fewer resources. Further establishing the importance of *agility* at LBBW also makes the organization more flexible and dynamic so that it can respond to diverse changes more quickly and effectively. Not least, this benefits customers by providing quick, uncomplicated and innovative solutions. This also generates the potential for cost savings.

Thanks to its long-term stable and successful business model, LBBW considers itself well positioned to meet future market and customer requirements and to prevail when faced with ongoing intense competition. Even in the current economic slowdown, LBBW should be able to build on its longstanding customer relationships thanks to its strong regional roots and grown customer base. As well as selective attempts to bolster customer business, tighter monetary policy in the future should have a positive impact on income in the long-term, with developments in process and IT structures also being reflected in lower costs in the medium to long term.

Outlook for LBBW

The most significant financial performance indicators for LBBW will likely develop as follows in the 2020 financial year at the Group level, in comparison with the previous year. The planning adopted at the end of 2019, on which the following forecasts are based on, didn't already include the potential effects of the current coronavirus pandemic. However, this could result in a deviating development of the performance indicators than shown below. Nonetheless, it is not possible to estimate these effects at present. Earnings and profitability could be negatively impacted, for example by muted business growth or higher expenses for losses on loans and advances. Capital ratios may also be adversely affected, for example by a rise in risk-weighted assets in connection with declining credit ratings. Similarly, it is not possible to assess the impact on LBBW's liquidity situation, which is currently considered very positive. Given that these effects cannot be precisely predicted or reliably quantified, the following is based purely on statements made on the basis of the planning adopted in 2019.

In the 2019 financial year, thanks to its business model LBBW was once again well prepared for low interest rates and tough competition on the German banking markets and continued profitable growth. One area this can be seen is in the good *profit before tax* at EUR 612 million, which achieved the figure forecasted in the previous year. Nonetheless, the negative external effects described above will not be completely offset in the 2020 forecast period and so LBBW is anticipating lower profit before tax, albeit likely still reaching a middle three-digit million amount. Despite selective investments aimed at adjusting to changed market and customer requirements, ongoing cost discipline has a dampening effect and so administrative expenses are expected to remain at the previous year's level. In the forecast period, with regard to allowances for losses on loans and advances LBBW is likely to continue to benefit from the high quality of the Bank's credit portfolio and its conservative risk policy. *Return on equity* at year-end 2020 is to remain noticeable below the previous year's figure, with the *cost income ratio* at the end of 2020 more or less at previous year's level.

As part of its efforts to generate profitable and capital-efficient growth, LBBW will also focus on intensifying existing client relationships and gaining selected new clients in 2020. *Total assets* and *risk weighted assets in accordance with CRR/CRD IV* should be moderately higher than in the previous year.

In line with the anticipated performance of risk weighted assets, both the *common equity Tier 1 capital ratio* (»fully loaded«) and the *total capital ratio* (»fully loaded«) are expected to be down slightly year on year at the end of 2020. Nonetheless, LBBW continues to enjoy solid capitalization. The common equity Tier 1 (CET 1) capital ratio is expected 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 of 1.75%, 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 be far above requirements.

The non-risk-weighted *leverage ratio*, which was further strengthened in 2019 by raising AT1 capital, should be on par with the previous year at the end of 2020, keeping it considerably above the minimum level of 3% stipulated by the Basel Committee.

Looking at economic capital management, the *utilization of aggregate risk cover* should remain almost unchanged at year-end 2020. This means that LBBW will be able to retain its 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 far above the minimum target of 100% by the end of 2020. By the end of 2020, 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.

LBBW is forecasting the following developments for the *operating segments* in the 2020 financial year:

Although LBBW expects the earnings before tax of the *Corporate Customers segment* to decline substantially year on year in the 2020 financial year, this is due primarily to the negative effect of a change in methodology when accruing commission similar in nature to interest. In addition, low interest rates, intensive competition and the selective growth focused on profitability and capital efficiency will represent other key drivers. A moderate rise in administrative expenses is also expected, in part due to continuing to strengthen product expertise in the interests of customers. Despite the focus on qualitative growth, assets are likely to decline slightly, whereas risk weighted assets in accordance with CRR/CRD IV are expected to pick up marginally. In line with the developments in earnings described, return on equity should be substantially lower than in the previous year at the end of 2020. The cost/income ratio at the end of 2020 looks set to increase moderately on the previous year's figure.

In the 2020 financial year, LBBW expects the earnings before tax of the *Real Estate/Project Finance segment* to be clearly lower than in the previous year. This will likely be due to non-recurring income from early loan repayments in 2019 and higher administrative expenses in the forecast period as part of the ongoing growth strategy. In addition, allowances for losses on loans and advances should rise to a normal level in line with the economic trend. Return on equity is expected to remain sharply below the previous year's figure on account of earnings and the clear rise in risk weighted assets in accordance with CRR/CRD IV. The cost/income ratio should increase slightly in line with the expected earnings performance and remain at a normal level.

In the *Capital Markets Business segment*, LBBW is anticipating an upturn in segment earnings before tax in the 2020 financial year after tough market conditions in the previous year. This will be driven essentially by the optimization of the sales approach and resulting increased income from strengthening customer business. Administrative expenses are expected to decline marginally in response to the new segment structure and the additional efforts to boost process efficiency that this entails. In line with the profit upturn expected, return on equity should see a marked improvement compared to the previous year at the end of 2020. The improved income situation should also ensure that the cost/income ratio performs slightly better than in the previous year.

In the *Private Customers/Savings Banks segment*, LBBW expects earnings before tax to be up on the previous year in the 2020 financial year. The expansion of the digital product range in widespread sales, for example, as well as further growth in wealth management and with business customers should lead to a moderate increase in net fee and commission income. Looking at costs, administrative expenses are likely to fall marginally as a result of lower costs for payment transactions and account processing. With risk weighted assets in accordance with CRR/CRD IV remaining virtually unchanged, return on equity should see a substantial year-on-year improvement at the end of 2020 in line with projected earnings. The cost/income ratio is also likely to improve slightly.

In its *annual financial statements according to the German Commercial Code (HGB)* for the 2020 financial year, *LBBW (Bank)* anticipates *net profit/loss for the year before tax* to remain slightly lower than in the previous year. This expected development is essentially in line with IFRS consolidated profit/loss before tax. In addition, under HGB, effects that cannot be taken into consideration or that are only partially effective are offset by anticipated HGB-specific negative effects from pension provisions and additional negative effects from aligning allowances for losses on loans and advances with IFRS accounting in accordance with BFA 7.

Opportunities and risks

Over the course of the 2020 financial year, the statements made could be positively or negatively affected by the *opportunities and risks* described below:

First and foremost, the potential effects of the current coronavirus pandemic must be noted, although this cannot be reliably quantified at present. In addition to this, persistent protectionism, for example as seen in the trade dispute between the US and China, as well as structural changes in individual sectors – especially in the automotive industry – could hurt the below-average economic performance in Germany and the eurozone more than expected. The strained debt situation in Italy and France should also be mentioned here. For LBBW, for example, this could be reflected among its customers in higher allowances for losses on loans and advances than planned. Ongoing intensified competition and even lower than expected interest rates could have unexpected negative consequences for margins and thus earnings in the forecast period. In addition, unanticipated tighter regulatory requirements could cause a strain. In addition, membership of the bank-related guarantee fund of the Landesbanks and the »European bank levy« could require LBBW to make special payments in the event of compensation and support measures, which could put unforeseen strain on LBBW's results of operations, net assets, financial position and liquidity.

Advances in digitalization and the regulatory authorities' increased focus on sustainability pose risks as they require adjusting to changed market and customer requirements, but also present opportunities for LBBW in terms of further developing its business model.

On the other hand, all the general conditions already described could also open up opportunities for LBBW if the factors develop better than expected. For example, margins and results of operations could perform better than expected if yields increase earlier than anticipated. Moderation of protectionist tendencies could also lend impetus. LBBW's business model also offers opportunities if the bank adapts particularly well in comparison to the market, strengthening its market position.

Explanatory notes on the annual financial statements of LBBW (Bank)

Results of operations, net assets and financial position

Business development in 2019

The management of the LBBW Group is generally guided by the IFRS key figures. As a significant part of the Group, LBBW (Bank) is managed in accordance with these figures.

Relatively stable overall economic conditions in Germany formed the basis of a successful business performance for LBBW (Bank) in 2019. LBBW (Bank) achieved a good result overall last year thanks to its sustainable business model. Despite particular challenges including a demanding market environment and ongoing low interest rates, the Bank continued to make successful progress as a mittelstands-minded universal bank, expanding customer business and enjoying ongoing growth in lending and deposits.

Total assets at LBBW (Bank) as at the end of 2019 rose moderately by EUR 14.3 billion or 6.3% to EUR 243.3 billion compared with the previous year. The upturn was shaped primarily by lending growth in business with corporate customers and in real estate and project finance business. At the same time, LBBW (Bank)'s business volume climbed by EUR 18.2 billion or 6.8% to EUR 285.0 billion.

Operating income/expenses before allowances for losses on loans and advances/remeasurement gain or loss came to EUR 632 million, marking a considerable EUR 235 million upturn on the previous year's result of EUR 397 million. The main factor behind this was a perceptible increase in net interest income and a slight rise in net fee and commission income, contrasted with a sharp decline in total operating income/expenses from the trading portfolio. A higher net expense from allowances for losses on loans and advances and valuation of the equity investment played a role in the drop in the allowances for losses on loans and advances/remeasurement gain or loss item. The remeasurement gain or loss on securities improved but did not fully offset the effects described above. The allocation to the fund for general banking risks in accordance with Section 340g HGB served mainly to compensate in future for a change in the calculation of allowances for losses on loans and advances under HGB in accordance with the statement of the Banking Committee of the German Institute of Public Auditors (IDW RS. BFA 7). After taking into account the extraordinary result, which was characterized by higher restructuring expenses and lower tax expenses, net profit/loss before profit appropriation increased to EUR 259 million (previous year: EUR 250 million).

Net profit/loss for the year before taxes undershot the *target figure* for the 2019 financial year significantly, chiefly a result of the unplanned high addition to the fund for general banking risks in connection with future requirements under IDW RS BFA 7. In operating terms, earnings were slightly higher than expected thanks primarily to net interest income being moderately higher than forecast and other operating income/expenses up markedly on the target figure. While administrative expenses were in line with planning, total operating income/expenses from the trading portfolio were significantly lower than expected due to methodological developments in calculating funding valuation adjustments. Lower than expected measurement gains/losses in the lending business and from equity investments also had a negative impact on earnings performance in comparison to planning.

Results of operations

Performance figures:

	01/01/2019 –	01/01/2018 –	Change	
	31/12/2019	31/12/2018	EUR million	in %
Net interest income	1,713	1,414	300	21.1
Net fee and commission income	441	402	39	9.7
Total operating income/expenses from the trading portfolio	189	294	-105	-35.7
Administrative expenses ¹	-1,762	-1,752	-10	0.6
Other operating income/expenses	51	39	12	30.8
Operating income before allowances for losses on loans and advances/remeasurement gain or loss	632	397	235	59.1
Allowances for losses on loans and advances/remeasurement gain or loss	-171	-67	-104	>100
Reversal/addition to fund for general banking risks	-91	109	-200	-
Operating income/expenses (result from ordinary business activities)	369	440	-70	-16.0
Extraordinary result	-57	-35	-22	62.9
Partial profit transfer	-44	-44	0	0
Net profit/loss for the year before tax	269	360	-91	-25.3
Income taxes	-10	-110	100	-90.9
Net profit/loss for the year after tax	259	250	9	3.6

Rounding differences may occur in this and subsequent tables for computational reasons.

¹ In addition to staff costs and operating expenses, this item also includes amortization and write-downs of intangible assets and depreciation and write-downs of property and equipment.

Net interest income at LBBW (Bank) increased perceptibly in the financial year under review by EUR 300 million to EUR 1,713 million, due primarily to business expansion and a rise in early termination fees resulting from early loan repayments. Volume growth was seen chiefly in business with corporate customers, real estate and project finance. Ongoing historically low interest rates particularly strained the deposit business. Pressure on margins in the sector was high and was also compounded by the ECB lowering the deposit rate from -0.4% to -0.5%. The absence of the non-recurring effect seen in the previous year in connection with dissolving the Sealink portfolio, which bundled securities from the former Sachsen LB, also had a negative effect. After the sale of the final securities by the administrator and the repayment of loans extended by LBBW to Sealink Funding DAC, LBBW (Bank) booked a EUR 33 million share of the surplus as at 31 December 2018. The contribution from the ECB's targeted longer-term refinancing operations II (TLTRO II) also shrank by EUR 14 million to EUR 16 million (previous year: EUR 31 million).

Net fee and commission income again improved year on year, rising by EUR 39 million to EUR 441 million (previous year: EUR 402 million). Almost all types of commission increased. In particular, net fee and commission income from the securities and custody business climbed considerably by EUR 15 million to EUR 107 million (previous year: EUR 91 million). In particular, this rise reflects good performance in the securities and underwriting business as a result of issuing debt securities. In addition, net gains/losses from loans and guarantees also benefited from the operating performance in almost all areas of business, also increasingly significantly to EUR 92 million (previous year: EUR 82 million). Rising by EUR 7 million to EUR 107 million, payments business also played a role in increasing net fee and commission income. Other and non-periodic net fee and commission income also improved by EUR 4 million to EUR 16 million.

At EUR 189 million, *total operating income/expenses from the trading portfolio* remained below the previous year's level, declining by EUR 105 million. This decline can be attributed for the most part to measurement effects which caused the result to fall by EUR 111 million against the previous year. Methodological developments in calculating funding valuation adjustments (FVA) as part of measuring unsecured derivatives reduced the result by EUR 52 million. After increasing the allocation pursuant to Section 340e (4) no. 4 HGB last year to such an extent that the extraordinary item amounted to over 50% of the average net income of the last five years, allocations were stopped again in the current financial year.

Administrative expenses changed only insignificantly year on year and totaled EUR -1,762 million (previous year: EUR -1,752 million). Staff costs, which fell by EUR 14 million to EUR -926 million at the end of 2019 (previous year: EUR -941 million), particularly benefited from lower pension expenses. Other administrative expenses rose from EUR -716 million to EUR -747 million, chiefly due to higher expenses for the bank levy and deposit guarantee system. The increase in the contribution to the bank levy reflects 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. These 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. The higher contribution for the deposit guarantee system was caused by allocations to the guarantee system of the Sparkassen-Finanzgruppe as a result of negotiations to support NordLB. Expenses for maintenance and building work also increased in connection with modernization work required. Amortization and write-downs of property and equipment and intangible assets fell to EUR -88 million (previous year: EUR -95 million). This was attributable chiefly to lower write-downs on intangible assets, which were downstream from the previous years' investments, as well as lower depreciation on land and buildings.

Other operating income/expenses rose by EUR 12 million and came to EUR 51 million (previous year: EUR 39 million). There were also opposing effects. An intra-Group building sale had a particularly positive effect, with the contribution from the sale of real estate improving by EUR 43 million against the previous year. Other items under other operating income/expenses rose by EUR 12 million overall. This was countered by a net increase in legal expenses of EUR 33 million. This included net transfers to provisions of EUR -46 million (previous year: EUR -6 million). Income from selling equity investments remained down year on year, falling by EUR 10 million to EUR 1 million.

Allowances for losses on loans and advances and remeasurement gain or loss fell markedly overall year on year by EUR -104 million to EUR -171 million (previous year: EUR -67 million). A differentiated performance was recorded for the individual subitems:

- The *remeasurement gain or loss on securities* improved by EUR 45 million to EUR 38 million, shaped by treasury activities to optimize the risk structure in individual portfolios.
- By contrast, the *remeasurement gain or loss from equity investments and affiliate* fell by EUR 55 million against the previous year to EUR -45 million (previous year: EUR 10 million), primarily in connection with higher impairment losses due to lower expectations for the future.
- *Gains/losses from the transfer of losses* remained on par with the previous year at EUR -3 million.
- *Allowances for losses on loans and advances* rose by EUR 94 million to EUR -161 million at the end of 2019. The higher figure reflects a normalization of the development, but this is still well below the long-term average.

The EUR 91 million addition to the *fund for general banking risks* in accordance with Section 340g HGB in 2019 served mainly to compensate in future for a change in the calculation of allowances for losses on loans and advances under HGB in accordance with the statement of the Banking Committee of the German Institute of Public Auditors (IDW RS. BFA 7). The IDW pronouncement on this is to be applied to financial years starting after 31 December 2021.

On balance, the *extraordinary result* decreased by EUR -22 million to EUR -57 million (previous year: EUR -35 million). In the past financial year, the restructuring result rose by EUR -17 million to EUR -30 million (previous year: EUR -13 million). The additions relate to a follow-up program to implement additional efficiency measures. The conversion of the allocation of pension provisions pursuant to the Accounting Law Modernization Act (BilMoG) meant that the extraordinary expense of EUR -26 million was held constant from the previous year.

Net profit/loss before tax for the 2019 financial year amounted to EUR 269 million overall (previous year: EUR 360 million).

Income taxes fell to EUR -10 million (previous year: EUR -110 million). The previous year was shaped largely by an extraordinary effect from discounting liabilities related to targeted longer-term refinancing operations (TLTRO II) with the ECB. This effect will be reversed in full in the next few years when the liability is repaid on an ongoing basis.

Net profit/loss for the year after tax rose by EUR 9 million to EUR 259 million (previous year: EUR 250 million).

Net assets and financial position

Assets	31/12/2019	31/12/2018	Change	
	EUR million	EUR million	EUR million	in %
Cash and cash equivalents	18,317	24,712	- 6,395	- 25.9
Loans and advances to banks	53,010	44,776	8,234	18.4
Loans and advances to customers	110,175	109,734	441	0.4
Debentures and other fixed-income securities	25,935	21,006	4,929	23.5
Equities and other non-fixed-income securities	200	164	36	22.0
Trading portfolio	27,172	20,453	6,719	32.9
Equity investments	592	625	- 33	- 5.3
Shares in affiliates	1,627	1,639	- 12	- 0.7
Trust assets	289	356	- 67	- 18.8
Intangible assets	169	199	- 30	- 15.1
Property and equipment	792	831	- 39	- 4.7
Other assets	2,398	2,122	276	13.0
Deferred items	2,665	2,388	277	11.6
Total assets	243,342	229,005	14,337	6.3

Equity and liabilities	31/12/2019	31/12/2018	Change	
	EUR million	EUR million	EUR million	in %
Deposits from banks	64,334	61,033	3,301	5.4
Deposits from customers	90,850	83,162	7,688	9.2
Securitized liabilities	42,017	42,400	- 383	- 0.9
Trading portfolio	17,243	15,634	1,609	10.3
Trust liabilities	289	356	- 67	- 18.8
Other liabilities	1,356	932	424	45.5
Deferred items	2,415	2,480	- 65	- 2.6
Provisions	3,045	2,753	292	10.6
Subordinated liabilities	5,482	4,797	685	14.3
Capital generated from profit participation rights	229	229	0	0.0
Regulatory AT 1 capital instruments	755	0	755	100.0
Fund for general banking risks	834	743	91	12.2
Equity	14,494	14,485	9	0.1
Total equity and liabilities	243,342	229,005	14,337	6.3
Contingent liabilities	9,860	9,380	480	5.1
Other obligations	31,752	28,372	3,380	11.9
Business volume¹	284,954	266,757	18,197	6.8

¹ In addition to total assets, the business volume includes off-balance-sheet contingent liabilities and other obligations.

Total assets

Total assets at LBBW (Bank) as at the end of 2019 rose by EUR 14.3 billion or 6.3% to EUR 243.3 billion compared with the previous year. LBBW (Bank)'s business volume thus grew by EUR 18.2 billion or 6.8% to EUR 285.0 billion.

Lending

At the end of the year under review *cash and cash equivalents* came to EUR 18.3 billion. The EUR -6.4 billion decline was essentially a result of lower central bank balances.

Loans and advances to banks as at 31 December 2019 picked up by EUR 8.2 billion to EUR 53.0 billion. In particular, stronger development loan business with savings banks allowed public-sector loans to climb by EUR 4.3 billion. An upturn in business with major European banks led to a EUR 3.7 billion rise in securities repurchase business.

The portfolio of loans and advances to customers increased by EUR 0.4 billion and came to EUR 110.2 billion as at the current balance sheet date. Other receivables increased by EUR 6.0 billion due to expanding financing business with corporate customers and real estate financing. This was offset by a EUR -3.5 billion fall in securities repurchase transactions due to a reduction in business with clearing houses, a EUR -1.0 billion drop in mortgage loans and a EUR -0.9 billion decrease in public-sector loans.

Debentures and other fixed-income securities rose by EUR 21.0 billion to EUR 25.9 billion. A EUR 6.2 billion volume increase in bonds and debentures by private issuers was offset by a decline from public-sector issuers of EUR -1.8 billion.

Trading assets increased compared with the previous year by EUR 6.7 billion to EUR 27.2 billion. In addition to growth in the volume of new business, the sharp decline in interest rates caused positive fair values from derivative financial instruments to rise by EUR 2.5 billion. Purchases of debentures and other fixed-income securities resulted in an increase of EUR 1.7 billion.

Funding

Compared to year-end 2018, *deposits from banks* increased by EUR 3.3 billion to EUR 64.3 billion. This development was due to an increase in overnight and term deposits of EUR 2.3 billion in connection with new business with international banks and a EUR 1.8 billion upturn in transmitted loans due to expanding the business volume with development banks. At the same time, securities repurchase transactions declined by EUR -1.5 billion.

Deposits from customers amounted to EUR 90.9 billion as at 31 December 2019, up EUR 7.7 billion on the previous year. The volume of overnight and term deposits increased by EUR 4.9 billion, with current account liabilities rising by EUR 3.3 billion. The German states and authorities in particular, but also high net worth private clients, increasingly turned to LBBW (Bank) to invest their cash funds. Securities repurchasing business also saw growth of EUR 0.9 billion.

The volume of *securitized liabilities* declined slightly by EUR -0.4 billion to EUR 42.0 billion. A EUR -1.3 billion fall in other debentures reflects a lower volume of outstanding liabilities at the New York branch at the end of the year. By contrast, public-sector covered bonds rose by EUR 0.9 billion, largely in response to issuing two covered bonds in a benchmark format.

Trading liabilities also rose against the previous year by EUR 1.6 billion to EUR 17.2 billion. Deposits increased by EUR 2.7 billion, essentially a result of new business. Delivery obligations from short sales of securities declined by EUR -0.7 billion, with negative fair values from derivative financial instruments also falling by EUR -0.3 billion.

LBBW (Bank) increased its *subordinated liabilities* by EUR 0.7 billion from EUR 4.8 billion to EUR 5.5 billion in the year under review. This was primarily a result of issuing new subordinated debentures.

LBBW (Bank) issued an AT-1 bond for the first time, increasing *regulatory AT 1 capital instruments* by EUR 0.8 billion. This subordinated bond meets the requirements for additional Tier 1 capital under the Capital Requirements Regulation (CRR) and has a volume of EUR 750 million.

Equity

At EUR 14.5 billion as at 31 December 2019, LBBW (Bank)'s equity was unchanged as against the end of 2018. At EUR 0.3 billion, unappropriated profit/loss was at the previous year's level.

Financial position

The funding strategy at LBBW (Bank) is determined by the Asset Liability Committee (ALCo). Here, LBBW (Bank) focuses on ensuring a balanced overall structure in terms of the groups of products and investors used. LBBW (Bank) still has sufficient liquidity at all times. LBBW (Bank) was always able to obtain funding on the market on the requisite scale. CRR banks have been required to maintain a *liquidity coverage ratio* (LCR) of 100% since 1 January 2018. At individual bank level, this came to 126.6% at LBBW (Bank) as at 31 December 2019.

Non-financial statement

Preliminary note

The contents that follow contain the combined non-financial statement for the 2019 financial year of LBBW (Bank) and the LBBW Group within the meaning of sections 340i (5) in conjunction with 315b and 315c, sections 340a (1a) and in conjunction with 289b to 289e of the German Commercial Code (Handelsgesetzbuch - HGB).

LBBW provides comprehensive information on its sustained commitment in its annual Sustainability Report. The report is created in accordance with the GRI standards (GRI = Global Reporting Initiative), »Core« option.

In its non-financial statement, LBBW offers a condensed viewpoint on select topics also found in the LBBW Sustainability Report. While the statement also follows the model of the GRI, it does not fully comply with the GRI standards.

Business model of LBBW

Information on the LBBW Group's business model can be found on page 27 of the annual report.

Concepts and due diligence processes

Principles and guidelines for implementing LBBW's sustainability policy and goals

The sustainability policy provides guidelines that form a framework for all sustainability activities at LBBW and forms the basis for integrating economic, ecological and social issues into our business activities as a whole. It encompasses LBBW's guiding principles for sustainable development in the areas of strategy and management, customers, employees, business operations, social commitment and communication. The sustainability policy is in effect throughout the entire LBBW Group.

For purposes of implementing the sustainability policy, LBBW has defined the following overarching goals:

- We want to gradually implement sustainability as an integral part of our business policy. For this reason, we strive for an active focus on projects, products, and services with a positive impact on sustainability.
- We offer sustainable investment products to all customer groups and in all asset classes to the greatest extent possible. The goal is to increase the share of sustainable investments in all business areas – including in our own investment portfolio. In credit advisory and credit decision-making, we take into account sustainability risks and earning potential for customers and the Bank. We cultivate a fair, and respectful relationship with our customers based on trust, ensure data protection and transparency, and provide high-quality advice.
- We promote the health and performance of our employees with specific measures for this purpose. We ensure a good work-life balance, and promote diversity and equal opportunity within the company. We intend to maintain and further raise the high education and training level in our company.

- We will further optimize the use of resources within our organization. Our efforts to reduce the CO2 emissions generated by our business focus on energy usage and business-related travel. We apply sustainability criteria in the selection of products and service providers when procuring materials and awarding contracts.
- Beyond providing our banking services, we want to actively contribute to adding value to society. To this end, we are active as a donor and sponsor. In the regions in which we do business, we support education initiatives and a variety of social projects.
- We keep our stakeholders informed and engage in a constructive dialog with them.

The overarching goals are broken down into individual targets and specific measures, and put into operation in the annual sustainability program.

Examples from the 2019 Sustainability Program

Measure	Date	Date Implementation status
Awareness training session for back office risk managers on financing properties with green bonds.	12/2019	Training sessions were delivered to 120 risk managers in Stuttgart, Karlsruhe, Mannheim and Mainz.
Purchase of 100% green electricity for LBBW and BW-Bank buildings in 2020 and 2021.	12/2019	Green electricity was purchased for 2020 and 2021.
Organization and implementation of future dialogs, e.g. on energy with customers and representatives from politics, the business community and NGOs.	12/2019	The first »future dialog« on climate change took place in May 2019.
Creation of two talent groups as part of talent management to promote top talents. One of the talent groups focuses on promoting female managers.	12/2019	A specific talent group was set up for women.

The »Principles and guidelines for implementing LBBW’s sustainability policy and goals« serve as concrete guidance when it comes to performing day-to-day activities. In addition to the »sustainability guidelines«, they provide concrete exclusion criteria for individual business ventures and overarching principles such as compliance, human rights and biodiversity. The LBBW climate strategy is also integrated as an overarching principle.



Management's involvement

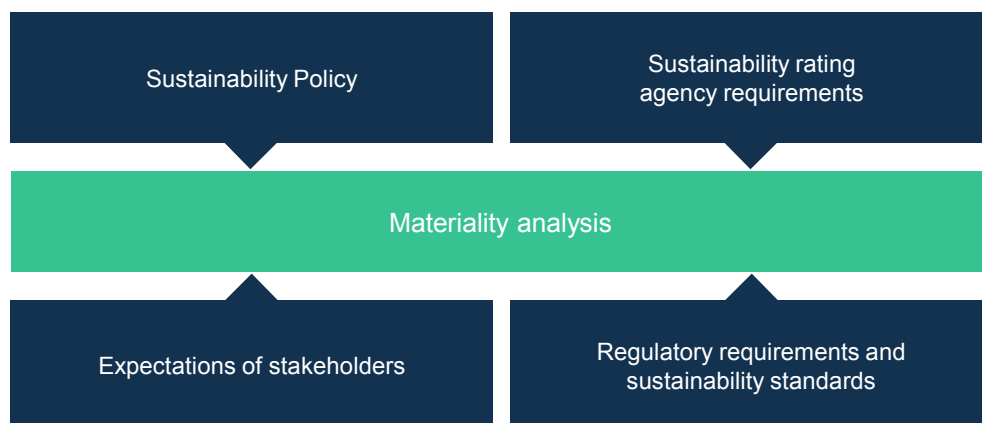
LBBW ensures compliance with the sustainability policy through consistent application of a sustainability management system, which covers all divisions and is being implemented in a multistage process throughout the company. At the highest level, LBBW's Board of Managing Directors is responsible for managing the Group sustainably and for complying with its sustainability policy.

The central »sustainability« project, in place for 2018 only, was transferred into a new organizational structure in 2019. A member of the Board of Managing Directors at BW-Bank has since been responsible for sustainability activities. The six areas of action under last year's sustainability project – lending, investments, CO₂ footprint, staff, regulatory and sustainability management – were taken over and continued.

Environmental/sustainability management at LBBW is regularly evaluated by top-level management (management review in accordance with ISO 14001). Key issues are presented to the Board of Managing Directors for information or decision-making purposes.

Materiality analysis

LBBW classifies the potential effects of its business activities on its sustainability balance sheet as slight, average or substantial. Aside from the requirements set by sustainability rating agencies, in particular the expectations and standards of our stakeholders play a material role. The relevant focus areas are aligned to international sustainability standards and to our sustainability policy. The company has defined the respective sustainability measures primarily in areas that have been identified as having a substantial impact on the LBBW sustainability balance.



Taking into account the »double materiality« principle, certain non-financial aspects must be reported in order to ensure that reporting meets HGB requirements. The combined non-financial statement must contain the disclosures that are required in order to understand LBBW's business performance, results of operations, and position, as well as to understand the effects of non-financial aspects on LBBW's business activities. Key areas at LBBW include:

- stakeholder dialog
- sustainability standards in the investment business and sustainable investment products
- sustainability standards in the lending business and financing with a sustainable focus
- Product responsibility/consumer protection
- Compliance
- Personnel management, expansion and development

LBBW does not go into greater detail regarding the »use of resources and CO2 emissions« in its non-financial statement because these are not deemed to have a material effect on LBBW's sustainability balance. It does, however, report on this in more detail in the LBBW sustainability report. This is based on the Bank's environmental management system, which is certified in accordance with ISO 14001 and EMAS. The EMAS regulation calls for this information to be published in the form of an environmental statement, which LBBW has integrated into its sustainability report.

An internal workshop was held in 2014 to direct the focus of sustainability activities even more toward the central topics. The main objective was finding out how future global changes will affect LBBW and what the stakeholders expect of LBBW in this regard. The company delved deeper in 2015 and 2016 and further analyzed the results of the workshop in several rounds of discussions with retail and private banking customers. In 2017, LBBW also carried out a dialog with corporate customers and surveyed the Bank's institutional customers.

Together with political representatives, LBBW has continued its series of customer dialogs. These »future dialogs« aim to develop joint solutions to the challenges facing the region in line with the global sustainability goals.

Stakeholder dialog

Future dialog

The first future dialog in May 2019 looked at climate change and the challenges and responsibilities this presents at national and local level. Government representatives, together with representatives from public services companies and bank experts, discussed societal challenges such as how the switch to renewable energy sources is being made in Baden-Württemberg and the common goal of forward-looking solutions. Particular attention was given to specific measures that can be implemented quickly and that would have an immediate positive impact. Energy-efficient construction and renovation was identified as a particularly key issue, especially at a local level. Subsequently, the idea of a regional or municipal loan that rewards energy-efficient construction with an attractive interest rate and low barriers was pursued further and brought to market in the form of the Stuttgart climate loan.

Discussion with NGOs

The second dialog took place with climate activists from Fossil Free Stuttgart in July 2019. Discussion centered around the ongoing development of the bank's sustainability strategy in connection with the transformation of the (energy) economy. Other topics of conversation included the high public awareness created by »Fridays for Future« and the work of LBBW/BW-Bank, especially in the Private Customers segment. Representatives from LBBW Asset Management Investmentgesellschaft mbH also participated in the discussions and explained the investment process and the range of services for institutional customers such as the savings banks.

Sustainable investment products

LBBW actively encourages this interest in sustainable investments and raises public awareness of the concept of sustainability at its in-house and external events. The investment services offered are geared toward the »sustainability guidelines« with the aim of avoiding risks that relate to sustainability and taking advantage of any relevant opportunities. LBBW's goal is ultimately to support its customers to the greatest extent possible when it comes to investing their assets in a responsible, ecological and ethical manner and to prove again and again that financial returns can be combined with value creation for the benefit of society and the environment.

LBBW therefore offers retail, corporate and institutional customers an extensive portfolio of sustainable investment products. The portfolio is geared toward sustainability criteria through voluntary commitments, among other things.

By signing the United Nations' »Principles for Responsible Investment« (UN PRI), LBBW undertakes to increasingly incorporate aspects of our responsibility for the environment and society as well as corporate governance (environmental, social and corporate governance (ESG)) into analysis and decision-making processes in our investment activities.

In 2019, LBBW continued to expand its range of sustainable investment solutions, complementing its existing product portfolio in this area.

Green bonds

Green bonds finance specific projects related to environmental and climate protection. LBBW aims to actively promote the market development of green bonds and thus launched its own »green bond program« in 2017. Parallel to this, a »Green Bond Committee« was established at LBBW, securing cross-divisional transfer of expertise.

The following green bonds were issued in 2019:

- EUR 750 million of green senior non-preferred (term of five years)
- USD 750 million of green mortgage-backed covered bonds (term of three years) – first green covered bond in USD
- EUR 500 million of green senior non-preferred (term of seven years)

In order to be able to make a substantiated selection of energy-efficient buildings for property portfolios, together with a reputable external advisor LBBW developed an approach to measure and compare the carbon intensity of commercial properties and renewable energies when issuing its first green bond. The methods can also be used by other market participants and by governments.

Social bonds

Social bonds fund a diverse array of social project such as education, health, drinking water supply, public infrastructure and transport.

In 2018, the initial conditions for developing a social bond program were created at LBBW. This is based on the successful green bond program and expands the range of financing for the United Nation's »sustainable development goals« (UN SDG).

LBBW issued a EUR 500 million social bond with a term of eight years for the first time in September 2019.

Asset management in line with ethical, social and ecological criteria

BW Bank offers its customers asset management solutions taking ethical, social and ecological aspects into account. To do this it works with suppliers and asset management companies which assess and classify financial instruments and/or issuers in line with transparent sustainability criteria. With premium mandates the classification as »sustainable« is also made by BW Bank.

In addition, we offer investors two sustainable strategy funds. Both actively managed funds invest in equities and fixed-income securities from issuers who contribute to meeting the UN's sustainable development goals.

In addition to multiple sustainable special funds and asset management for institutional investors, LBBW Asset Management also manages four sustainable mutual funds and one sustainable speciality fund. Sustainability ratings from ISS-ESG Research (formerly ISS oekom) are used when selecting the investment universes for these funds.

LBBW Asset Management's four sustainable mutual funds observe a strict sustainability concept which combines the best-in-class approach with comprehensive exclusion criteria (negative screening). Accordingly, they meet the requirements imposed by sustainability-driven private and institutional investors as well as investors with additional ethical requirements such as churches and pension funds.

Investment business

EUR billion	2019	2018	2017
Volume of sustainable cash investments at LBBW Asset Management Investmentgesellschaft mbH	21.68	19.86	19.18
Volume of sustainable cash investments at BW-Bank-Vermögensverwaltung	1.15	0.91	0.79

The share of sustainably invested or managed assets is approximately 27% (LBBW Asset Management) and approximately 14% (asset management) of the entire invested capital.

Sustainable financing

Avoidance of reputation and sustainability risks in financing

LBBW is aware of its corporate responsibility in all financing projects. For this reason, we ensure, through mandatory in-house review processes and industry-specific rules, that ecological, social and ethical reputation and sustainability risks are identified, analyzed, and assessed early in the process of deciding on extending credit such as export financing, corporate loans, or project financing. This can result in LBBW rejecting such transactions or terminating business relationships.

Based on the internal lending rules, the respective client advisor also checks loan inquiries in respect to compliance and sustainability risks. In cases of uncertainty or for topics for which there are no binding regulations or checks, the client can request an opinion from Compliance and/or the sustainability team. To facilitate this, Front Office and Bank Office have specially developed inquiry forms which cover all persons involved, type and purpose of the business relationship, results of previous research, anomalies determined in respect to compliance risks (including money laundering, fraud) or sustainability risks (including topics such as arms, genetic engineering, nuclear power, environmental degradation, protection of species and biodiversity, climate change, labor laws and human rights). After the compliance and/or sustainability experts have made a relevant examination, the responsible client advisor determines if the business is pursued. If this is the case, the relevant sustainability/compliance assessments are integrated into the loan application and appropriate account taken of them in the credit decision.

Our »Principles and Guidelines for Implementation of LBBW's Sustainability Policy and Goals« and the guidelines in the lending business it contains form the basis for sustainability standards for financing.

Alongside legislative requirements and regulations, with its internal policies and instructions LBBW aligns itself to internationally recognized standards and voluntary commitments. In addition to the UN Global Compact, these include the OECD guidelines for multinational enterprises and the performance standards promulgated by the International Finance Corporation (IFC).

The following internal test processes for financing projects, along with others, are implemented at LBBW:

- **Review process for industry/country risks**
In order to identify, analyze and assess any sustainability risks in international financing projects, a sustainability review must be carried out for certain loan inquiries in the industries deemed especially relevant, namely mining, petroleum/natural gas, wood/paper and bioenergy, in certain countries sensitive to these industries.
- **Company exclusion list for controversial weapons systems**
LBBW does not enter into any business relationships with companies that produce cluster munitions and/or anti-personnel mines, which are prohibited by international conventions. We ensure this at the operational level with a company exclusion list that applies throughout the entire Group at LBBW Bank and all subsidiaries majority owned by LBBW) and is also integrated into the automated embargo monitoring system of the Bank. The exclusion list is updated based on an external database.

Energy-efficient housing renovation

LBBW/BW Bank assists retail customers in renovating and modernizing buildings in line with energy-efficiency requirements and arranges related advisory services. To do so, we collaborate with the Deutsches Energieberater-Netzwerk e. V. (German Energy Advisers' Network – DEN).

Project financing

In 2019, LBBW again financed projects in the area of renewable energies.

The share of project financing in the area of renewable energies amounted to approximately 52.4% of the overall portfolio in 2019. This includes not only projects in the area of energy, but also infrastructure and public-private partnership projects.

Project financing

EUR billion	2019	2018	2017
Volume of renewable energies project finance (assets)	2.46	2.45	2.32

Issues financed

In 2019, Landesbank Baden-Württemberg commissioned MACS Energy & Water to calculate the greenhouse gas emissions of its lending portfolio as part of a pilot project. The calculation was based on LBBW's gross exposure in 2018, broken down in line with the Statistical Classification of Economic Activities in the European Community (NACE).

Product responsibility/consumer protection

The goals and wishes of our customers are the top priority. Integrated advising tailored to customer needs is very important to LBBW. Our customer account managers work with customers to explore their goals – including those beyond investing – and subsequently prepare a personalized »financial plan«. Long-term wealth accumulation and portfolio optimization are at the forefront here.

LBBW offers clear and detailed information on various types of investment and any associated risk. For each investment consultation, we prepare a »Declaration of Suitability«. In the declaration, banks must

show in writing how the recommendation given – for example to buy or to sell a product – fits the respective customer and his investment targets, i.e. that it is suitable.

Our advisors are not assigned sales targets for individual securities products. There are no point systems for assessing sales and revenue targets. We are available to provide advice and support to our customers in each phase of life.

Our sustainable approach to financial advising and the rules for systematic implementation and review are set out in the »Leitlinien für die Privatkundenberatung in der BW-Bank« (»Guidelines for retail customer advice at BW-Bank«) (www.bw-bank.de). We foster a business philosophy shaped by sustainability. Fair, responsible and customer-oriented activity is the basis of our business policy. Our advice follows a holistic approach where the focus is the individual requirements of each individual customer. We take up customer suggestions in a continuous improvement process.

Specific work instructions and process guidelines provide the framework for the advising process. Product selection guidelines and review mechanisms aim to ensure that we always focus on the customer's interests.

Compliance (combating corruption and bribery)

Responsible business activities are based on compliance with external and internal rules and laws. Effective compliance management prevents in particular criminal activities such as money laundering, terrorism financing, fraud, corruption or insider trading and monitors compliance with data protection and finance sanctions.

Compliance training

All employees must take tutorials on fraud prevention and sustainability every three years. The tutorials on money laundering prevention and finance sanctions/embargoes have been mandatory for all LBBW employees who are responsible for banking operations since August 2019 (once per year). The tutorial on capital market topics is to be taken in line with the employee's area of work. Currently the average completion rate of the respective web-based training is approximately 97.43% (as at December 2019). The low percentage of employees who have not completed tuition results from long-term illnesses or job changes within the divisions.

Code of conduct

Sustainable business success is based on trust. In the long term, LBBW will only be competitive if it meets its responsibility to customers, shareholders, competitors, business associates, supervisory authorities and, not least, its own employees. Therefore, unconditional compliance with all statutory provisions and internal rules as well as the integrity of each individual employee constitute the foundations of sustainable corporate governance. For this purpose, a code of conduct was adopted as an overarching guideline (<https://www.lbbw.de/code-of-conduct>). This code applies to LBBW and its subsidiaries. The aim of the code is to create a reliable, normative frame of reference or guidance for responsible action by each individual that satisfies the legal requirements and is in line with ethical and societal standards.

Compliance function pursuant to MaRisk

More than ever, it is important that the company react quickly to critical developments and make sound decisions based on reliable data. This means preparing risk information in a timely fashion, providing substantive risk reporting and agile risk management, and above all establishing a culture of corporate compliance that exemplifies a responsible risk culture.

For this purpose, the German Federal Financial Supervisory Authority (BaFin) provided more details on the »minimum requirements for risk management (MaRisk)« of banks and financial service institutions using the German Banking Act as a basis in its Circular 9/2017. LBBW has established a compliance function that meets the requirements in accordance with MaRisk and is directly integrated into its basic procedures. The key legal regulations and stipulations for the Bank are continually identified, including risk-based monitoring to ensure compliance with all appropriate, effective procedures.

Preventing money laundering and tackling terrorism financing

Money laundering describes the process of channeling illicitly-obtained assets from organized crime, drug trafficking, fraud or other criminal offenses into the legal financial system. The aim of this is to conceal the illegal origin of the money so that it can be »laundered« and reintroduced into the legal financial system. Terrorism financing describes the risk that customers misuse LBBW and/or subsidiaries in order to gather (legally or illegally acquired) funds that are used in full or in part to carry out acts of terrorism. Accordingly, the LBBW Group developed appropriate Group-wide business and customer-related security systems and controls for preventing money laundering and terrorism financing. These include, for example, rules on relationships with politically exposed persons, the process for accepting applications from new customers, the updating of customer data and continual monitoring of business relationships as well as the integration of the Anti Money Laundering Officer in the New Product Process.

Financial sanctions/embargoes

LBBW is obligated to initiate measures to ensure compliance with national and international financial sanctions and embargo regulations. Financial sanctions result in restrictions to capital movements and payments, whereas embargoes limit the freedom of foreign trade.

Measures and organizational requirements for the Bank and the Group are defined in the internal rules. For example, all international payments and the entire LBBW customer portfolio are compared automatically on a daily basis against all national and international sanction and embargo lists. The same applies to the internal company exclusion list on cluster munitions and anti-personnel mines. The necessary processes and IT-supported testing methodology are firmly established internally. A country and product matrix included on LBBW's intranet describes some of the internal sustainability requirements relevant for international business (sanctions and embargo regulations and key sector/country combinations due on the basis of sustainability and reputational risks).

Fraud prevention (other criminal offenses)

At LBBW, the purpose of fraud prevention is to prevent criminal acts that could expose the assets of LBBW or its customers to the risk of loss or could harm the LBBW Group's reputation. Risks are analyzed, leading indicators are tracked, and transaction and customer-related security systems and controls are implemented. The annual risk analysis identifies and evaluates all potential internal and external risks relating to criminal offenses that are relevant to the Bank and the Group. Using this as a basis, suitable preventive measures are then developed. At a general level, LBBW aligns itself to the OECD guidelines for multinational enterprises which also includes recommendations on tackling corruption.

The regulatory framework for combating criminal offenses for the Bank and the Group includes all preventive measures and general organizational requirements (e.g. paths for reporting suspicions). An example of how these regulations are implemented is the framework policy for acceptance and granting of benefits (gifts, invitations, events). Employees can also report abuses or suspicious activities anonymously via an external ombudsman. This possibility has been implemented across the group in the branches and in the subordinated companies of the LBBW Group.

In 2019, there were no corruption cases against LBBW (Bank) or subsidiaries integrated into sustainability management.

Capital market compliance

In line with the »Minimum Requirements for the Compliance Function and Additional Requirements Governing Rules of Conduct, Organization and Transparency for Investment Services Enterprises«, the Compliance function ensures compliance with all legal regulations pertaining to securities products and the relevant stipulations of supervisory authorities. To this end, it issues internal guidelines and work instructions which serve as guiding principles.

A risk analysis is performed once a year. Among other factors, this focuses on the relevant statutory regulations and an analysis of individual risks.

Compliance with external and internal conditions is monitored on an ongoing basis. This is done not only on the basis of central examinations of documents, processes and instructions, but also with local checks, e.g. in the branches, the advisory centers and central units. If improvements are required, the Compliance function pursuant to MaComp works together with the areas impacted to achieve implementation in line with regulations.

The Compliance function pursuant to MaComp retains the task of preventing market abuse and securing the financial market regulations requirements of the revised EU Directive »Markets in Financial Instruments Directive« (MiFID II). For this reason, compliance on regulations regarding employee transactions, on avoiding insider transactions and market manipulation are monitored.

In line with the requirements of the Compliance function pursuant to MaComp, conflicts of interest in connection with investment and ancillary (non-core) services are to be avoided. In the matter of identifying, avoiding and managing conflicts of interests, our employees of the Compliance function pursuant to MaComp provide advice.

Employee matters

LBBW is very demanding of itself and hence of its workforce. At the same time, it offers highly attractive workplaces with development potential for ambitious employees who take pleasure in success. As an attractive employer, the Bank has always offered a wide range of training opportunities and extensive solutions for achieving a good work-life balance. It also invests in the health of its workforce. The personal development activity is designed using the »guidelines« of sustainable human resource work as a basis.

Personnel development

LBBW offers a comprehensive internal training program to ensure the focused qualification of all its employees. This comprises seminars and training opportunities that also include training in methodological and social competence alongside the focus on technical qualifications. These are supplemented by training to optimize foreign language skills together with subject-specific seminars run by external providers. Employees wishing to expand their business management skills also have the option of attending part-time university courses while continuing their employment. At the same time, it includes specific offerings for executives on personnel management and the careful handling of the Bank's own and external resources. LBBW (Bank)'s employees took advantage of the education opportunities on offer approximately 9,000 times in 2019. As well as its tradition of offering a wide range of further training, LBBW also focuses on promoting excellence through its talent management initiative. The objective is to employ targeted development opportunities aimed at strengthening internal senior management candidates in the competition for key positions and thus retain them for the bank. Specifically, 2019 saw the launch of talent groups for senior management candidates and top young candidates with an attractive range of individual and joint measures.

Individual workshops were held in 2019 for the purpose of making the change processes within LBBW successful. A number of managers and their teams took part. The focus was on general challenges in change management processes, specific requirements in practice and agile work methods.

In addition, managers can take advantage of career development coaching workshops to receive individual consulting and support relating to management and personality.

Key figures for LBBW (Bank)^{1,2}

	2019	2018	2017
Average age	45.5	45.3	44.8
Average length of service in years	19.3	19.4	18.9

1 The data basis for the calculation of the HR figures is the number of »active employees« as defined by HGB (excluding interns, student trainees, students at universities of cooperative education, temporary staff, employees on leave and members of controlling bodies).

2 Approximately 82.3% of Group employees are covered by LBBW (Bank).

Diversity

LBBW has been part of »Initiative Chefsache« (www.initiative-chefsache.de), a network to promote a balanced ratio of women and men in management positions, since 2018. In addition, LBBW (Bank) signed the Diversity Charter (www.charta-der-vielfalt.de) in 2008 and so has committed itself to ensuring a workplace free of prejudice for all employees.

Promoting the careers of women

LBBW (Bank) plays a role in supporting women's career opportunities, with the goal of making competition for positions fair and thus significantly increasing the percentage of women in mid to upper management positions. To this end, we have established a comprehensive concept, which includes a mentoring program as well as individual career planning seminars. This guarantees that women's leadership potential and career ambitions are both recognized early on and supported in the long run. In the development program for senior management candidates, which comprises two talent groups, a total of ten women are prepared for top management positions over a period of three years. The »female senior management candidates« talent group is thus specially designed to promote top female performers.

Key figures for LBBW (Bank)/diversity^{1,2}

	2019	2018	2017
Percentage of female employees	52%	52%	53%
Percentage of women in leadership positions	19.3%	18.7%	17.2%
Percentage of severely disabled employees or equivalent status ³	5.1%	5.0%	5.0%
Percentage of employees with a foreign nationality	6.1%	5.7%	5.6%

1 The data basis for the calculation of the HR figures is the number of »active employees« as defined by HGB (excluding interns, student trainees, students at universities of cooperative education, temporary staff, employees on leave and members of controlling bodies).

2 Approximately 82.3% of Group employees are covered by LBBW (Bank).

3 The number of severely disabled employees or those with equivalent status can vary depending on the date of compilation, due to the retroactive recognition of an employee's status as severely disabled. This may lead to discrepancies between the information contained in the non-financial statement of the Management Report and the LBBW Sustainability Report.

Additional information on the topic of diversity is available in the Human Rights section (see page 121).

Work-life balance

To provide the best possible work-life balance, LBBW (Bank) offers various options for flexible working hours. As helping parents find childcare services is a matter of course for us as an employee-oriented company, we also allow scope for, for instance, sabbaticals.

Support for employees who are caring for elderly relatives or disabled family members is also becoming increasingly important. Subject to prior consultation with their managers, employees who care for a family member can apply for an additional six months' leave over and above the statutory entitlement of six months. The »Pflegefäll, was nun?« (Care required, what now?) seminar, which around 630 employees have attended so far, provides our employees with an overview of issues including long-term care insurance and financing of costs, dealing with home nursing services, legal precautions, and counseling centers.

Support in childcare is another offering. The Bank's employees at all head offices can utilize childcare services. These include children's day care services, emergency childcare and special arrangements during school holidays. We offer all employees an advisory and support program provided by a third-party service provider, pme Familienservice. In addition to the parental leave time guaranteed by law, mothers and fathers who have been employed by LBBW for at least three years prior can take a leave of absence called a »family year«.

The conditions underlying HR policy that have been created at LBBW provide an important contribution to ensure that the constantly changing requirements regarding the work-life balance are met. Thus, there has been a service agreement in place regulating mobile working since December 2018.

LBBW has been designated a »family-friendly company« by »audit berufundfamilie« since 2010. After two successful audits in 2013 and 2016, the new audit in 2019 focused on how to make management positions appealing to women. Five workshops were held with employees from different areas. The findings from the workshops were used to create a program of action, which is to be implemented in the next three years. In the successful new audit, berufundfamilie Service GmbH confirmed that LBBW offers a good work-life balance, both in terms of its family-friendly policies and its culture.

Company health management

LBBW's Company Health Management (CHM) is tasked with maintaining and, where possible, improving the health, well-being and thus motivation and performance of its employees in the workplace.

Taking the factors generally accepted to have an effect on health - ergonomics and occupational psychology - as a starting point, efforts also move beyond the immediate working environment and aim to strengthen employees' general health. Whereas leadership and communication styles are of central importance in a professional sense, general healthcare promotion focuses on movement, nutrition, addictive behavior and mental health. CHM therefore takes an interdisciplinary approach and answers to the head medical officer of LBBW in his post as the head of the Health Management department.

Occupational health service

As the primary point of contact, the Occupational Health Service supports and advises all employees in basically all health-related matters while maintaining strict doctor-patient privilege. In addition to typical workplace and socio-medical issues such as returning to work after a physical or mental illness, the Occupational Health Service is also available for behavioral and environmental prevention, first aid, emergency medical care/services, travel medicine, general medical care and vaccinations. These services are closely integrated with those offered by the Social Services Department and Company Health Management at LBBW to create a model that our employees can access to develop their own personal health strategy.

Occupational health and safety

There are a number of legal requirements in place to ensure occupational health and safety. Nonetheless, we do more than simply the minimum required by law in order to provide our employees with a safe, comfortable and productive workplace.

We bring in experts on occupational safety and company doctors before making workplace decisions, such as when purchasing furnishings and computer equipment, carrying out construction or renovation work or developing building standards.

Conditions are examined on site during workplace inspections and, where necessary, checked to see where any potential improvements could be made. In 2019, safety-related inspections were carried out and individual workplace guidance given on ergonomics as required or scheduled. In addition, those involved in occupational safety (e.g. managers, employee representative and safety officers) received regular training. Safety officers were trained as »Ergo Scouts« in order to further improve workplace ergonomics.

Our occupational safety committee, which meets four times a year and represents all LBBW employees, is an advisory and coordination body responsible for all key occupational safety and health issues.

Welfare department

The Welfare department advises employees and executives at the sites in Stuttgart, Karlsruhe, Mannheim, Mainz and Leipzig as well as branch employees on topics such as stress, conflicts and difficult situations at work, mental health issues (burnout, depression), addiction, and personal issues (such as the death of a loved one). Preventive advising on matters like resilience and healthcare is also offered. After an acute crisis situation such as a serious accident, sudden death or bank robbery, the Welfare Department offers immediate emergency psychological care.

In addition to one-on-one advising, the Welfare Department also offers employees and managers workshops, training courses and presentations covering psychosocial issues such as burnout prevention, dealing with difficult situations with customers or resilience.

LBBW Ideas Management

The future requires ideas and ideas are born in the minds of people. LBBW Ideas Management gives our employees the opportunity to help actively shape the future with their ideas and their expertise. 4,234 suggestions and a calculated benefit of EUR 33.8 million show the enormous potential this has. Thanks to our employees' great commitment towards developing and implementing creative ideas, we create agile, innovative, sustainable and digital solutions, efficient processes and optimal products that offer our customers real added value. Innovation and process excellence, high quality standards and a strong sense of identification among employees are key factors in a company's success. Ideas Management, as part of our corporate culture, is a vital element of living by these values and thus making a long-lasting and sustainable contribution to the bank's success.

Social matters

Investing in education is investing in the future – and the rewards are the highest when as much practical training as possible is provided. As a public-sector bank with regional roots, LBBW takes its social mandate seriously and actively helps to increase young people's familiarity with the business world while giving students early guidance in choosing their career. In doing so, we do not only want to convey knowledge but also reinforce social skills and awareness of responsibility for the sustainable development of society.

Donations are an important part of LBBW's commitment to society. Donations are primarily focused on social, cultural and scientific projects. In keeping with our strong regional roots, we generally support recipients in our regional core markets.

As sponsor LBBW supports projects and cultural institutions in the regions it does business, with a focus in Baden-Württemberg. In addition to musical establishments, such as Stuttgart Opera House and Nationaltheater Mannheim, we also sponsor sporting events including the renowned STUTTGART GERMAN MASTERS equestrian competition. Moreover, LBBW participates in various community projects, a successful example of which is Kinderspielstadt Stutengarten (Stutengarten play city for children).

The Landesbank Baden-Württemberg Foundation has sponsored nearly 11,100 projects since being founded in 1984, with a total of EUR 26 million. LBBW's foundation activities aim to have as broad an effect as possible, to promote young people and to provide help to a continual stream of new initiatives.

Human rights

Company policy

To enforce its sustainability Policy and sustainability goals, LBBW has defined principles and guidelines as a basis for orientation. Our commitment to the protection of human rights states, »As part of the international community, we are committed to the United Nations' Universal Declaration of Human Rights«.

Supply chain

Supplier registration

Activities with our suppliers are based on supplier registration. In order to be an approved supplier of LBBW, among other things questions about sustainability issues must be answered on LBBW's supplier portal. Every supplier is additionally required to acknowledge the »Sustainability agreement for LBBW suppliers« when registering with LBBW and sign it when entering into a contract. This agreement compels our suppliers to comply with what we consider to be essential environmental and social criteria. Any supplier violating the social standards contained in the Sustainability Agreement (e.g., prohibition against human rights abuses, such as child labor) must accept such violation as grounds for termination of the Agreement without notice.

LBBW expects from its suppliers that they commit to taking responsibility for environmental, economic, social and community issues in all areas of their business activities to the same degree as LBBW.

Central purchasing

Centrally organized purchasing operations and binding Bank-wide standards enable us to ensure that sustainability issues are factored into investment decisions and, in cases where several product alternatives with comparable quality and cost are available, the best product in terms of sustainability is chosen. On the one hand, this enables us to guarantee that the manufacture and use of products at LBBW meet the highest sustainability standards possible. On the other hand, it allows us to promote environmentally and socially aware policies and business practices by our business partners.

Customer relationships

In its guidelines on the loan business and those for retail customer advice, LBBW incorporates sustainability aspects in terms of the observance of human rights (see page 112 and 114).

Treatment of our employees

Co-determination and representation of employees with disabilities

Co-determination at LBBW is based on the State Employee Representation Act for Baden-Württemberg. Staff meetings are held regularly at LBBW's larger locations. Employees have the right to exercise the freedom of association and assembly throughout the Group. LBBW employees who hold severely disabled status are advised and represented by the General Representative Body for the Severely Disabled (GSBV – Gesamtschwerbehindertenvertretung) and six regional representative bodies for the severely disabled.

Diversity

A Diversity Officer is assigned to supervise and support diversity and equal opportunity efforts at LBBW. According to a works agreement on protection from discrimination and a cooperative environment in the workplace, employees who feel discriminated against may turn to the Staff Council, the representative for employees with disabilities, the responsible manager, the Welfare department or the complaints board.

Training

All of LBBW's employees must complete the e-learning tool »Fraud prevention and sustainability« and the tool for implementing the General Act on Equal Treatment (Allgemeines Gleichbehandlungsgesetz). The e-learning tools include human rights issues.

Environmental management system

Our environment and sustainability management system is applicable to LBBW (Bank) including BW-Bank, Gastro Event GmbH, LBBW Immobilien Management GmbH, LBBW Corporate Real Estate Management GmbH and LBBW Asset Management Investmentgesellschaft mbH.

Certification EMAS and ISO 14001

LBBW has committed to complying with the standards of the Eco-Management and Audit Scheme (EMAS) and ISO 14001, and has maintained a certified environmental management system since 1998. The implementation of the Scheme and ISO standard is verified once a year by means of an internal and an external audit. Both audits were performed successfully in 2019.

The following are validated according to EMAS and certified according to ISO 14001:

- four Am Hauptbahnhof buildings and two buildings located at »Pariser Platz« in Stuttgart,
- the »Fritz-Elsas-Strasse 31« building (known as the »Bollwerk« building) in Stuttgart,
- the »Königstrasse 3« building in Stuttgart,
- the »Kleiner Schlossplatz 11« building in Stuttgart,
- the »Augustaanlage 33« building in Mannheim.

Results of the concepts

Sustainability ratings

- ISS ESG gave LBBW an overall grade of C+ on a scale of A+ to D-. This result puts LBBW in 4th place out of a total of 209 banks analyzed internationally and 2nd place among German banks in the »Financials/Public & Regional Banks« sector (as at November 2019). LBBW meets ISS-ESG's sustainability requirements and is ranked »Prime«.
- In imug's Sustainability Rating of Bank Bonds 2019, LBBW was evaluated positively (BB). It was thus ranked No. 1 from 27 banks within the state and savings bank sector, and No. 7 from 159 banks examined across Europe. In addition, LBBW was assessed very positively as an issuer of public-sector bonds (A) and positively for mortgage-backed covered bonds (BBB) (March 2019).
- LBBW was awarded 83 out of 100 points in Sustainalytics's sustainability rating, putting it in second place among German banks and in 12th place out of 338 banks rated at international level (as at May 2019).
In 2019, LBBW was rated AA (on a scale from AAA to CCC) in the rating by MSCI ESG.

External and internal audits

During the internal and external audits in 2019, no substantive violations of environmental law were uncovered.

Material risks and how they are handled

Risk Management at LBBW is defined as the use of a comprehensive range of tools to manage risks – including reputation risks – within the scope of LBBW's potential to bear risk and the strategy laid down by the Board of Managing Directors. Non-sustainable behavior exhibited by our customers and projects with a negative environmental impact represent reputational risks for LBBW.

- Non-transaction-related risk management is the responsibility of the »Group Communication/Marketing/Board of Managing Directors« area, the »Regulatory and Corporate Compliance« department and the »Sustainability Management« group.
- The transaction-related management of reputation risks, such as evaluating new business, is conducted peripherally by the front-office units, especially in the course of the New Product Process (NPP) and credit application process. There is a product certification process upstream of the NPP for OTC derivatives relating to interest-rate, currency and commodity management.
- The Compliance division and the Sustainability Management group support the relevant front office divisions in their day-to-day business in identifying and assessing transaction-related sustainability and reputation risks.

The risk management guidelines set out the main principles for the consideration of opportunities and risks within the LBBW Group and form the basis of a uniform Group-wide understanding of the Bank's goals in connection with risk management.

For additional information see page 43.

03

Consolidated Financial Statements



Consolidated financial statements

Contents

Income Statement	125		
Statement of comprehensive income	126		
Balance sheet	128		
Statement of changes in equity	130		
Cash flow statement	132		
Notes and additional disclosures in accordance with Section 315e HGB	134		
Basis of Group accounting	134		
Accounting policies	134		
1. Accounting principles	134		
2. Changes and estimates	135		
3. Basis of consolidation	138		
4. Principles of consolidation	141		
5. Currency translation	142		
6. Government grants	142		
7. Cash and cash equivalents	143		
8. Financial instruments	143		
9. Shares in investments accounted for using the equity method	157		
10. Non-current assets held for sale and disposal groups	157		
11. Intangible assets	158		
12. Investment property	158		
13. Property and equipment	159		
14. Leasing business	160		
15. Income taxes	162		
16. Other assets and other liabilities	163		
17. Provisions	163		
18. Equity	169		
Segment reporting	170		
Notes to the income statement	177		
19. Net interest income	177		
20. Net fee and commission income	179		
21. Net gains/losses on remeasurement and disposal	180		
22. Other operating income/expenses	184		
23. Administrative expenses	185		
24. Expenses for bank levy and deposit guarantee system	187		
25. Net income/expenses from restructuring	187		
26. Income taxes	188		
Notes to the balance sheet	191		
27. Cash and cash equivalents	191		
28. Financial assets measured at amortized cost	191		
29. Financial assets measured at fair value through other comprehensive income	193		
30. Financial assets designated at fair value	194		
31. Financial assets mandatorily measured at fair value through profit or loss	194		
32. Shares in investments accounted for using the equity method	197		
33. Non-current assets held for sale and disposal groups	197		
34. Intangible assets	198		
35. Investment property	199		
36. Property and equipment	201		
37. Income tax assets	203		
38. Other assets	203		
39. Financial liabilities measured at amortized cost	204		
40. Financial liabilities designated at fair value	208		
41. Financial liabilities mandatorily measured at fair value through profit or loss	209		
42. Provisions	210		
43. Income tax liabilities	216		
44. Other liabilities	217		
45. Equity	217		
Notes on financial instruments	219		
46. Allowances for losses on loans and advances and gross carrying amounts	219		
47. Counterparty risk	223		
48. Determining fair value	232		
49. Fair value of financial instruments	237		
50. Fair value hierarchy	238		
51. Financial instruments designated at fair value	253		
52. Equity instruments voluntarily measured at fair value through other comprehensive income	254		
53. Net gains/losses from financial instruments	255		
54. Maturity analysis	255		
55. Issuing activities	256		
56. Transfer of financial assets	256		
57. Collateral	258		
58. Offsetting financial assets and liabilities	258		
59. Hedge accounting	261		
Other information	265		
60. Disclosure of Interests in Other Entities	265		
61. Leases	271		
62. Related party disclosures	274		
63. Off-balance-sheet transactions	276		
64. Capital management	278		
65. Events after the end of the reporting period	284		
Additional disclosures in accordance with Section 315e HGB	285		
66. List of shareholdings and information on subsidiaries, associates and joint ventures	285		
67. Employees	297		
68. Executive and supervisory bodies and positions held	298		

Income Statement

for the period 1 January to 31 December 2019

EUR million	Notes	01/01- 31/12/2019	01/01- 31/12/2018 ¹
Net interest income	19	1,676	1,558
Interest income and current income from equity instruments		14,051	13,966
of which negative interest income		- 243	- 230
Interest expenses and current expenses from equity instruments		- 12,376	- 12,408
of which positive interest expenses		225	220
Net fee and commission income	20	558	513
Fee and commission income		688	643
Fee and commission expenses		- 130	- 129
Net gains/losses on remeasurement and disposal	21	169	213
of which allowances for losses on loans and securities		- 151	- 141
Other operating income/expenses	22	148	140
Administrative expenses	23	- 1,806	- 1,773
Expenses for bank levy and deposit guarantee system	24	- 102	- 89
Net income/expenses from restructuring	25	- 31	- 12
Consolidated profit/loss before tax		612	549
Income taxes	26	- 167	- 136
Net consolidated profit/loss		444	413
of which attributable to non-controlling interests after tax		1	0
of which attributable to shareholders after tax		443	413

¹ Restatement of prior year amounts (see Note 2).

Statement of comprehensive income

for the period 1 January to 31 December 2019

EUR million	Notes	01/01- 31/12/2019	01/01 - 31/12/2018 ¹
<i>Net consolidated profit/loss</i>		444	413
Items that will not be transferred subsequently to the income statement			
Retained earnings	18.45	- 285	- 37
Actuarial gains/losses before tax		- 410	- 53
Income taxes	15.26	125	16
Measurement gains/losses from own credit rating	18.45	- 12	27
Measurement gains/losses from own credit rating		- 18	39
Income taxes	15.26	6	- 12
Measurement gains/losses from equity instruments (financial assets measured at fair value through other comprehensive income)	18.45	- 26	- 52
Measurement gains/losses before tax		- 23	- 60
Measurement gains/losses from investments accounted for using the equity method		0	3
Income taxes	15.26	- 3	5
Items that will be transferred subsequently to the income statement when specific conditions are met			
Measurement gains/losses from debt instruments (financial assets measured at fair value through other comprehensive income)	18.45	142	- 163
Measurement gains/losses before tax		175	- 270
Change in allowances for losses on loans and securities		0	- 1
Transferred to income statement		23	37
Income taxes	15.26	- 56	71
Currency translation differences	18.45	6	3
Changes before tax		6	3
<i>Net consolidated profit/loss in equity</i>		- 175	- 221
Net consolidated total comprehensive income		269	191
of which attributable to non-controlling interests after tax		1	0
of which attributable to shareholders after tax		268	191

¹ Restatement of prior year amounts (see Note 2).



Balance sheet

as at 31 December 2019

Assets

EUR million	Notes	31/12/2019	31/12/2018 ¹	01/01/2018 ¹
Cash and cash equivalents	7, 27	18,331	24,721	22,729
Financial assets measured at amortized cost	8, 28	167,202	157,127	151,736
Loans and advances to banks		55,801	46,749	48,128
Loans and advances to customers		110,320	109,231	101,928
Debentures and other fixed-income securities		1,082	1,146	1,680
Financial assets measured at fair value through other comprehensive income	8, 29	28,648	22,821	23,260
Financial assets designated at fair value	8, 30	1,170	1,207	1,028
Financial assets mandatorily measured at fair value through profit or loss	8, 31	34,610	29,779	33,891
Shares in investments accounted for using the equity method	9, 32	265	266	245
Portfolio hedge adjustment attributable to assets	8	839	569	583
Non-current assets held for sale and disposal groups	10, 33	65	24	104
Intangible assets	11, 34	198	224	244
Investment property	12, 35	655	697	554
Property and equipment	13, 36	814	463	482
Current income tax assets	15, 26, 37	126	142	92
Deferred income tax assets	15, 26, 37	1,089	1,140	1,102
Other assets	16, 38	2,619	2,017	1,577
Total assets		256,630	241,197	237,630

¹ Restatement of prior year amounts (see Note 2). The figures for 1 January 2018 are based on the opening balance sheet amounts as per IFRS 9.

Equity and liabilities

EUR million	Notes	31/12/2019	31/12/2018 ¹	01/01/2018 ¹
Financial liabilities measured at amortized cost	8, 39	201,890	190,388	188,419
Deposits from banks		66,633	63,585	61,670
Deposits from customers		90,319	82,481	79,124
Securitized liabilities		38,815	38,827	42,307
Subordinated capital		6,123	5,495	5,318
Financial liabilities designated at fair value	8, 40	6,757	7,613	5,497
Financial liabilities mandatorily measured at fair value through profit or loss	8, 41	26,959	24,478	25,196
Portfolio hedge adjustment attributable to liabilities	8	486	297	239
Provisions	17, 42	4,410	3,916	3,816
Liabilities from disposal groups	10, 33	4	0	0
Current income tax liabilities	15, 26, 43	55	32	47
Deferred income tax liabilities	15, 26, 43	33	27	29
Other liabilities	16, 44	2,113	1,283	1,199
Equity	18, 45	13,923	13,163	13,188
Share capital		3,484	3,484	3,484
Capital reserve		8,240	8,240	8,240
Retained earnings		824	960	769
Other comprehensive income		155	45	233
Consolidated profit/loss		443	413	416
Shareholders' equity		13,146	13,142	13,142
Additional equity components		745	0	0
Equity attributable to non-controlling interests		32	20	46
Total equity and liabilities		256,630	241,197	237,630

¹ Restatement of prior year amounts (see Note 2). The figures for 1 January 2018 are based on the opening balance sheet amounts as per IFRS 9.

Statement of changes in equity

for the period 1 January to 31 December 2019

EUR million	Share capital	Capital reserve	Retained earnings ¹	Valuation reserve for equity instruments	Valuation reserve for debt instruments	Measurement gains/losses from investments accounted for using the equity method
Equity as at 31 December 2017	3,484	8,240	820	345	- 52	44
Reclassification of opening balances due to adoption of IFRS 9	0	0	125	- 80	0	- 44
IFRS 9 effects of first-time adoption	0	0	- 167	0	8	0
IFRS 15 effects of first-time adoption	0	0	2	0	0	0
Restatement of prior year amounts	0	0	- 10	0	0	0
Equity as at 1 January 2018	3,484	8,240	769	266	- 43	0
Allocation to retained earnings	0	0	416	0	0	0
Distribution to shareholders	0	0	- 173	0	0	0
Capital increase/capital decrease	0	0	0	0	0	0
Changes in the scope of consolidation	0	0	- 17	0	0	0
Net consolidated profit/loss in equity	0	0	- 37	- 54	- 163	3
Net consolidated profit/loss	0	0	0	0	0	0
Net consolidated total comprehensive income	0	0	- 37	- 54	- 163	3
Other changes in equity	0	0	1	0	0	- 3
Equity as at 31 December 2018	3,484	8,240	960	211	- 207	0
IFRS 16 effects of first-time adoption	0	0	- 14	0	0	0
Equity as at 1 January 2019	3,484	8,240	946	211	- 207	0
Allocation to retained earnings	0	0	413	0	0	0
Distribution to shareholders	0	0	- 250	0	0	0
Net consolidated profit/loss in equity	0	0	- 285	- 26	142	0
Net consolidated profit/loss	0	0	0	0	0	0
Net consolidated total comprehensive income	0	0	- 285	- 26	142	0
Other changes in equity	0	0	- 1	0	0	0
Equity as at 31 December 2019	3,484	8,240	824	185	- 64	0

¹ Restatement of prior year amounts (see Note 2).

	Gains/losses from the measurement of cash flow hedges	Measurement gains/losses from own credit rating	Currency translation reserve	Consolidated profit/loss	Shareholders' equity ¹	Additional equity components	Equity attributable to non-controlling interests	Total ¹
	0	11	23	416	13,331	0	46	13,377
	0	0	- 2	0	0	0	0	0
	0	- 21	0	0	- 180	0	0	- 180
	0	0	0	0	2	0	0	2
	0	0	0	0	- 10	0	0	- 10
	0	- 11	21	416	13,142	0	46	13,188
	0	0	0	- 416	0	0	0	0
	0	0	0	0	- 173	0	0	- 173
	0	0	0	0	0	0	8	8
	0	0	0	0	- 17	0	- 30	- 47
	0	27	3	0	- 221	0	0	- 221
	0	0	0	413	413	0	0	413
	0	27	3	413	192	0	0	192
	0	0	0	0	- 1	0	- 4	- 5
	0	16	25	413	13,142	0	20	13,163
	0	0	0	0	- 14	0	0	- 14
	0	16	25	413	13,129	0	20	13,149
	0	0	0	- 413	0	0	0	0
	0	0	0	0	- 250	0	0	- 250
	0	- 12	6	0	- 175	0	0	- 175
	0	0	0	443	443	0	1	444
	0	- 12	6	443	268	0	1	269
	0	0	0	0	- 1	745	11	755
	0	4	30	443	13,146	745	32	13,923

LBBW issued an AT1 bond in the 2019 financial year. As LBBW is not contractually obliged to repay this or to make current payments, this bond meets the definition of an equity instrument. The subordinated bond meets the requirements for additional Tier 1 capital under the Capital Requirements Regulation (CRR) and is recognized under the new sub-item »additional equity components«.

Cash flow statement

for the period 1 January to 31 December 2019

EUR million	01/01 – 31/12/2019	01/01 – 31/12/2018 ¹
<i>Net consolidated profit/loss</i>	444	413
<i>Non-cash items in net consolidated profit/loss and reconciliation to cash flow from operating activities</i>		
Depreciation, write-downs and reversals of impairment losses on receivables, property and equipment, and financial investments (including equity investments)	194	140
Increase in/reversal of provisions	302	240
Other non-cash expenses/income	- 150	303
Gains/losses from the sale of equity investments, property and equipment and intangible assets	- 10	- 2
Other adjustments (net)	- 1,644	- 1,458
<i>Subtotal</i>	- 864	- 363
<i>Changes in assets and liabilities from operating activities</i>		
Financial assets measured at amortized cost	- 10,320	- 5,585
Loans and advances to banks	- 9,061	1,383
Loans and advances to customers	- 1,256	- 7,485
Debentures and other fixed-income securities	- 3	517
Financial assets measured at fair value through other comprehensive income	- 5,702	123
Debentures and other fixed-income securities	- 5,462	652
Loans and advances	- 239	- 526
Equity instruments	- 1	- 2
Financial assets designated at fair value	59	- 183
Financial assets mandatorily measured at fair value through profit or loss	1,677	6,800
Shares in investments accounted for using the equity method	7	8
Other assets from operating activities	- 544	- 394
Financial liabilities measured at amortized cost	10,910	2,898
Deposits from banks	3,074	2,995
Deposits from customers	7,835	3,369
Securitized liabilities	1	- 3,465
Financial liabilities designated at fair value	- 962	2,168
Financial liabilities mandatorily measured at fair value through profit or loss	- 3,269	- 3,602
Other liabilities from operating activities	202	- 128
Dividends received	36	47
Interest received	13,243	13,268
Interest paid	- 11,871	- 12,817
Income taxes paid	7	- 160
<i>Cash flow from operating activities</i>	- 7,392	2,080
Proceeds from the sale of		
Equity investments	43	50
Property and equipment	14	1
Intangible assets	2	1
Payments for the acquisition of		
Equity investments	- 11	- 55
Property and equipment	- 62	- 24
Intangible assets	- 43	- 49
Payments for the acquisition of consolidated companies	0	- 34
<i>Cash flow from investing activities</i>	- 57	- 111
Proceeds from issuing additional equity components	745	0
Dividends paid	- 250	- 173
Other payments	0	- 20
Net change in cash and cash equivalents from other capital	567	219
<i>Cash flow from financing activities</i>	1,061	27

¹ Restatement of prior year amounts (see Note 2).

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018 ¹
Cash and cash equivalents at the beginning of the period	24,721	22,729
Cash flow from operating activities	- 7,392	2,080
Cash flow from investing activities	- 57	- 111
Cash flow from financing activities	1,061	27
Changes to cash and cash equivalents owing to exchange rates, basis of consolidation and measurement	- 3	- 4
Cash and cash equivalents at the end of the period	18,331	24,721

¹ Restatement of prior year amounts (see Note 2).

The cash flow statement shows the change in cash and cash equivalents resulting from cash flows from operating, investing and financing activities during the financial year.

Cash and cash equivalents correspond to the LBBW Group's cash reserve and include cash, balances with central banks, public-sector debt instruments eligible for refinancing operations and bills.

Cash flow from operating activities is determined indirectly from net consolidated profit/loss. Cash flows that are primarily connected with the revenue-producing activities of the LBBW Group or cash flows resulting from activities that cannot be allocated to investing or financing activities are allocated to cash flow from operating activities. At the LBBW Group, outgoing payments for the interest and repayment components of lease liabilities and payments for short-term leases and low-value lease assets are shown in cash flow from operating activities. Total cash outflows from leases amounted to EUR 48 million in the 2019 reporting year.

Cash flow from investing activities shows proceeds and payments relating to the disposal or acquisition of non-current assets.

All proceeds and payments from transactions relating to equity and subordinated capital are included in cash flow from financing activities. In addition to the cash change in equity (dividend payment, issuing and servicing additional equity components), 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 628 million from the previous year. In addition to a cash increase of EUR 559 million, the change resulted from measurement effects of EUR 35 million and the effects from present value accounting of EUR 16 million. In addition, changes in exchange rates of EUR 19 million and other changes of EUR - 1 million changed the amount of subordinated capital.

As part of a methodological refinement, accrued interest for capital contributions by silent partners was included in accrued interest for subordinated capital. This adjustment affects the comparative figures for the previous year with EUR 45 million in change in cash and cash equivalents from other capital and EUR - 45 million in interest paid.

Notes and additional disclosures in accordance with Section 315e HGB

for 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 mid-sized 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 financial statements for the 2019 financial year were prepared in accordance with Section 315e (1) of the German Commercial Code (HGB) and Commission Regulation (EU) no. 1606/2002 of the European Parliament and of the Council dated 19 July 2002 (IAS regulation) in accordance with the regulations of the International Financial Reporting Standards (IFRS) as applicable 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 binding for the Group, are authoritative.

Accounting policies

1. Accounting principles

The consolidated financial statements are based on the going concern principle.

In accordance with IFRS 10.19 and IAS 28.35, financial statements at LBBW are prepared using uniform accounting policies across the Group. These were applied consistently to the reporting periods shown, unless stated otherwise. The annual financial statements of the fully consolidated companies or investments accounted for using the equity method are prepared as at the balance sheet date of the consolidated financial statements of LBBW.

The functional currency and the reporting currency of LBBW is the euro (EUR). The amounts in these consolidated financial statements are generally rounded to EUR millions 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. The reporting year is the calendar year.

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, SIC-15 and SIC-27. 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. No adjustments were made retroactively to the comparison periods.

Future lease payments were discounted with a weighted average incremental borrowing rate of 0.7% as at 1 January 2019 and recognized as a lease liability under Other liabilities in the amount of EUR 400 million.

The reconciliation effects from obligations in connection with minimum leasing payments from operating leases under IAS 17 as at 31 December 2018 in the amount of EUR 359 million on the lease liabilities recognized in accordance with IFRS 16 as at 1 January 2019 related primarily to the discounting of payment obligations, the recognition of renewal and termination options, changes in indices that affect variable payments, and leases that are not relevant in accordance with IFRS 16.

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.

Interest Rate Benchmark Reform – Amendments to IFRS 9, IAS 39 and IFRS 7

LBBW has opted for voluntary early application of this standard. This was the IASB's response to the IBOR reform and grants temporary special provisions in connection with hedge accounting. These special provisions and the effects for LBBW of the first-time adoption are described in Note 8.

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

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

This change is effective for the first time in the 2020 financial year. The first-time adoption of this standard is not expected to have any material effect on the consolidated financial statements.

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.

These changes are to be applied for the first time to business combinations and to acquisitions of assets where the date of acquisition falls on or after the start of the first annual reporting period beginning on or after 1 January 2020. The changes may mean that fewer acquisitions are treated as acquisitions of business operations. 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 effective for the first time in the 2020 financial year. This is not expected to affect the preparation of the LBBW consolidated financial statements.

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.

Classification of Liabilities as Current or Non-Current – Amendments to IAS 1

This amendment updates the Standard IAS 1 by clarifying in which cases an existing right to defer settlement of liabilities results in this being classified as »non-current« (more than 12 months).

These changes are expected to be effective for the first time in the 2022 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.

Adjustments

Estimates and assumptions were made in accordance with the accounting standards concerned for determining the assets, liabilities, income and expenses recognized in the consolidated financial statements. These are based on historical experiences and other factors such as plans and – as far as can be currently judged – probable expectations and forecasts of future events. Such significant estimates can change from time to time and significantly affect the net assets and financial position, as well as the results of operations.

In addition, discretionary decisions were reached when preparing the financial statements regarding the determination of the scope of consolidation, the classification of the financial instruments, investment property, the leasing relationships and the allocation to the levels pursuant to IFRS 13.

Estimates and assumptions mainly relate to the calculation of the fair value of financial instruments and investment property, the value of assets and the calculation of the allowances for losses on loans and advances, as well as the recognition and measurement of subordinated capital, provisions and deferred taxes. Moreover, estimates and assumptions are made regarding specific cash flows. Where significant estimates and/or complex judgments were required, the assumptions made are explained in detail in the Notes to the corresponding items.

The estimates and assumptions are each based on the level of knowledge currently available about the expected future business performance and trends in the global and sector-specific environment. Where actual values differ from the estimates made, the underlying assumptions and – if necessary – the carrying amounts of the relevant assets and liabilities are adjusted accordingly on a prospective basis.

The following changes in estimates were applied prospectively in accordance with IAS 8.39 in the financial year:

- As well as price components related to credit risk such as credit or debt valuation adjustments (CVA/DVA), refinancing effects represent a price component and are thus to be taken into consideration when accounting for unsecured derivatives as funding valuation adjustments (FVA). Previously, LBBW took FVA into account implicitly as part of measuring derivatives using an approach based on flat-rate allocation. Now, however, explicitly accounting for FVA based on theoretically sound principles has become standard on the market and comprises a new, model-based approach based on NSFR costs. This change results in a negative effect of EUR 52.2 million in net gains/losses from financial instruments measured at fair value through profit or loss.

The impact of the changes in estimates on future reporting periods that were implemented in the year under review are in particular dependent on the development of market parameters and expectations in the future. A quantitative determination of the effects on future reporting periods is therefore only possible on the basis of models and to a limited extent.

The following adjustments were made retrospectively in accordance with IAS 8.42 in the financial year:

- The CVA/DVA simulation approach was introduced for state bonds in 2015. This resulted in inappropriate product representation for transactions that were originally reported correctly. The selected product representation in the CVA/DVA simulation model also generated an incorrect exposure profile, resulting in an inflated DVA disclosure. The retroactive correction reduced equity by EUR –10.3 million as at 1 January 2018. Deferred income tax assets rose by EUR 4.5 million and trading assets fell by EUR –14.9 million. The retroactive valuation adjustment caused trading assets to fall by another EUR –9.1 million and deferred income tax assets to increase by a further EUR 2.8 million for the 2018 financial year. Net gains/losses from financial instruments measured at fair value through profit or loss fell by EUR –9.1 million as at 31 December 2018 and deferred tax expense improved by EUR 2.8 million.

3. Basis of consolidation

In addition to LBBW (Bank) as the parent company, 97 subsidiaries, including five structured entities (previous year: 104 subsidiaries including eight structured entities), were included in the consolidated financial statements.

A subsidiary is an entity that is controlled by another entity (known as the parent). Control is assumed to exist if the company can exert direct or indirect authority over the relevant activities of a company, obtains variable benefits from a company or has rights to variable benefits, or can use its authority to draw on the account of the company to influence the amount of its variable benefits. In assessing whether LBBW exercises a controlling influence, the purpose and structure as well as the company's relevant activities must be taken into consideration.

If the voting rights are material for the management of the relevant activities, control by LBBW is assumed if it holds more than half of the voting rights in the company, either directly or indirectly, unless there are signs that at least one other investor (for example, due to statutory provisions or agreements) has the practical capability to unilaterally determine the relevant activities.

In cases in which LBBW does not hold a majority of the voting rights but has the practical capability to unilaterally control the relevant activities, power of control is also assumed. This is particularly relevant for structured entities (includes securitization platforms initiated by LBBW or funds launched by LBBW), where voting or comparable rights are not the dominant factor when determining control. The following additional factors are therefore also taken into consideration when assessing the possibility of control:

- The voting rights relate solely to administrative duties; the relevant activities, on the other hand, are governed by contractual agreements.
- By performing various functions and given the rights it is granted from these, LBBW is given power of control together with the rights of other parties.
- LBBW also carries a burden of risk or rights to variable benefits from liquidity lines provided and from interest and fees paid, among other things.

With the securitization platforms controlled by LBBW, the voting rights relate solely to administrative duties; the relevant activities, on the other hand, are governed by contractual agreements. By performing various functions and given the rights it is granted from these, together with the rights of other parties, LBBW is given power of control. It also carries a burden of risk or rights to variable returns from liquidity lines provided and from collection of fees. It was concluded in an overall view that LBBW has power of control over this securitization vehicle.

With regard to some project companies in which LBBW does not hold a majority of the voting rights, LBBW is given power of control together with the rights of other parties because of the financing structure. It also bears a burden of risk or has rights to variable benefits from financing these companies. It was concluded in an overall view that LBBW controls these companies.

Other factors such as a principal-agent relationship can also lead to the assumption of control. If another party with decision-making rights operates as an agent for LBBW, it does not control the company, as it merely exercises decision-making rights that were delegated by LBBW as the principal and are therefore allocated to LBBW. If LBBW operates merely as an agent for another party, LBBW does not assume control over the company.

Subsidiaries are consolidated from the time when the Group acquires a controlling influence and the subsidiary meets quantitative or qualitative materiality criteria. The consolidation ends at the time when there is no longer any possibility for exercising a controlling influence or the regular dissolution of the subsidiary has started.

The appropriateness of the consolidation decisions met previously is reviewed regularly or on a case-by-case basis. Changes to the shareholder and capital structure, as well as changes to contractual agreements in relation to influencing rights result in a reappraisal of the possibility of control. Other motives for a reappraisal are events that lead to a change in the control factors.

After acquiring the remaining shares in SGB - Hotel - Verwaltung GmbH in the 2019 financial year and thus being classified as a subsidiary, the company is fully consolidated and included in the consolidated financial statements. The company, which used to be a joint venture, was accounted for in the consolidated financial statements using the equity methods until the remaining shares were acquired.

The following subsidiaries are no longer included in the scope of consolidation due to accruals/mergers into other Group companies:

- Heerdter Landstrasse Düsseldorf GmbH & Co. KG
- Carnotstr. 5-7 Berlin Verwaltungs GmbH
- Carnotstr. 5-7 Berlin GmbH & Co. KG
- SGB - Hotel GmbH & Co. KG
- Schockenriedverwaltungs GmbH
- Vermietungs- und Verwaltungsgesellschaft Sendlinger Straße mbH
- LBBW Immobilien M_Eins Berlin GmbH

The following structured entity was deconsolidated in the period under review.

- PALS Funding 2 LLC

The status of the following companies included in the consolidated financial statements has changed from structured entity to subsidiary managed by voting rights.

- FOM/LEG Generalübernehmer GmbH & Co. KG
- Turtle Vermögensverwaltungs-GmbH & Co. KG

The following consolidated subsidiaries were renamed:

- MKB Mittelrheinische Bank Gesellschaft mit beschränkter Haftung renamed MMV Bank GmbH
- MKB Versicherungsdienst GmbH in MMV Versicherungsdienst GmbH
- BW-Immobilien GmbH in LBBW Corporate Real Estate Management GmbH
- Uhlandstraße 187 GmbH in LIAM Horizont Stuttgart GmbH
- Bauwerk-Stuttgart GmbH in LBBW Immobilien Development Komplementär GmbH

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

Joint ventures are joint agreements whereby LBBW and other parties exercise joint control over the agreement and have rights to the net assets of the agreement.

A joint agreement is an agreement where two or more contractual parties are linked by means of a contractual agreement and exercise joint control over the participating interest. A joint agreement can be a joint venture or a jointly controlled operation. LBBW has only joint ventures.

Joint ventures are included in the consolidated financial statements using the equity method from the time when the Group obtains joint control with at least one other party and the joint venture satisfies quantitative or qualitative materiality criteria. The inclusion using the equity method ends at the time when there is no longer any possibility for exercising a controlling influence.

The company Sealink Funding DAC no longer performs any relevant activities but is still to be included in the consolidated financial statements of LBBW as a joint venture using the equity method as at 31 December 2019 as it has not yet been liquidated. However, the equity method cannot be used for Sealink Funding DAC, due to a lack of equity investment by LBBW.

An associate is a company over which LBBW exercises significant influence but no controlling influence over the financial and operating policy decisions. Associates are companies in which LBBW holds a voting interest of between 20% and 50% (rebuttable presumption of association) or an unambiguous proof of association and an LBBW voting interest of less than 20%. The presumption of association of a minimum 20% voting right held by LBBW may be rebutted by limitations of the influence.

Existing exercisable or convertible potential voting rights, representation in managerial or supervisory bodies, participation in decision-making processes, including participation in decisions about dividends or other distributions, as well as material business transactions with the (potential) associate, are taken into consideration as proof of association or to rebut the presumption of association.

Associates are included in the consolidated financial statements using the equity method from the time when the Group exercises a material influence and the associate satisfies quantitative or qualitative materiality criteria. The inclusion using the equity method ends at the time when there is longer any possibility for exercising a controlling influence.

A total of 55 subsidiaries (previous year: 57 subsidiaries) were not included in the consolidated financial statements because their individual and aggregate influence on the net assets, financial position and results of operations of LBBW is not significant. These comprise mainly real estate and shelf companies, as well as start-up financing.

4. Principles of consolidation

The subsidiaries and structured entities are consolidated according to the purchase method in accordance with IFRS 10.B86 in conjunction with IFRS 3. Accordingly, all of the subsidiaries' assets and liabilities recognized from the acquirer's perspective at the time of acquisition or at the time when controlling influence is acquired are recognized at their fair value. The remeasured assets and liabilities are taken over into the consolidated balance sheet, taking deferred taxes into account, and are treated according to the standards to be applied in the subsequent periods.

Where the cost for the business combination exceeds the fair value of the assets and liabilities at initial acquisition, goodwill (goodwill in proportion with the investment) is recorded under intangible assets. The share of the equity or in the net gain/loss of the fully consolidated companies of LBBW not attributable to shareholders is reported separately in the item Equity attributable to non-controlling interests or Net income/loss of which attributable to non-controlling interest after tax in the income statement.

Intra-group receivables and liabilities, as well as income, expenses and profits and losses resulting from intragroup transactions, were adjusted by adjusting debt and profit or the elimination of the interim result.

Joint ventures and associates are accounted for using the equity method provided they are not of minor significance for the presentation of LBBW's net assets, financial position and results of operations. The pro rata share in profit or loss of investments accounted for using the equity method is recorded in the consolidated financial statements at the same time. Investments accounted for using the equity method are measured on the basis of the Group's share in equity plus goodwill and historical undisclosed reserves.

5. Currency translation

The foreign currency translation in the Group is conducted in accordance with IAS 21. Each LBBW Group company determines its functional currency. The items included in the financial statements of the relevant group company are measured using this functional currency and translated into the reporting currency (euro).

A foreign currency transaction must be initially recognized at the spot rate between the functional currency and the foreign currency at the transaction date. Monetary assets and liabilities denominated in foreign currency and unsettled foreign currency spot transactions are always translated into euro at the prevailing closing rate. Nonmonetary items measured at amortized cost are translated at the historical rate at the transaction date. Non-monetary items measured at fair value are translated at prevailing exchange rates on the date of the measurement (closing rate).

Exchange differences are generally recognized in profit or loss in the period in which they occur. Exceptions are non-monetary items for which fair value adjustments are recognized in Other comprehensive income. Resulting translation differences are also recognized in »Other comprehensive income«.

In the consolidated financial statements, the balance sheet items of consolidated companies whose reporting currency is not the euro are translated at the exchange rate on the balance sheet date. Average annual rates are used to translate the expenses and income of these companies. Equity is translated at historic prices. All the resulting translation differences are recognized in Other comprehensive income (currency translation reserve).

The exchange rates used for the most important currencies at LBBW at the closing date are as follows:

Amount per EUR 1 in the respective currency	31/12/2019	31/12/2018
USD	1.1195	1.1462
SGD	1.5095	1.5653
MXN	21.1185	22.5462
RUB	69.3597	79.5971
RON	4.7833	4.6634

6. Government grants

LBBW recognized the ECB's »targeted longer-term refinancing operations II« (TLTRO II) that, if certain conditions are met, bear interest at a rate below the market rate, in accordance with IAS 20. This benefit will only be recognized if there is reasonable assurance that the company will comply with the conditions attached and that the grant will be received. The benefit is recognized in profit or loss on an accrual basis over the periods in which the regular interest expenses on refinancing to be compensated by the grant are recognized. LBBW uses the net presentation method, whereby grants reduce the reported interest expense.

7. Cash and cash equivalents

In addition to cash and balances with central banks due on demand, cash and cash equivalents include public-sector debt instruments and bills due in up to three months. All items are reported at amortized cost.

8. Financial instruments

Financial instruments are contracts that give rise to a financial asset of one contracting party and, at the same time, a financial liability or equity instrument of another contracting party.

Recognition of financial instruments

Financial assets and financial liabilities are initially recognized when LBBW (Bank) or a subsidiary included in the consolidated financial statements becomes a contractual party of the financial instrument. Spot purchases of financial assets that are delivered not on the trade date but instead within a standard period on the settlement date are recognized on the settlement date, regardless of the category. Derivatives are not recognized in the balance sheet if they prevent the disposal of financial assets when these are transferred.

A financial asset is derecognized when the contractual rights to the cash flows from the financial assets expire. In addition, financial assets can be disposed of by selling them to a third party. Spot sales of financial assets that are delivered not on the trade date but instead within a standard period on the settlement date are also derecognized on the settlement date, regardless of the category. Pass through arrangements may also lead to derecognition. These arrangements are contractually agreed obligations to pass on payments from financial assets to third parties. Material opportunities and risks associated with the ownership of the financial assets must be transferred in order for them to be derecognized. If material opportunities and risks are neither transferred nor retained, derecognition from the balance sheet is conditional upon control of the asset being transferred. In this case, the financial asset is derecognized when the recipient is entitled and also able to sell or pledge the transferred financial asset to third parties without requiring the agreement of the transferring entity or needing to impose restrictions on resale. If control is not transferred, the transferred asset must continue to be recognized in LBBW's balance sheet in the amount of the continuing involvement and an associated liability must also be recognized. Finally, financial assets are also to be derecognized if the contractual terms and conditions have been substantially modified.

Financial liabilities are derecognized once they have been settled. This means that the obligations stated in the contract must have been met or rescinded or have expired. Financial liabilities are also derecognized if financial liabilities with substantially different contractual terms and conditions are exchanged or if the contractual terms and conditions of financial liabilities are substantially altered. Finally, repurchases of financial liabilities also lead to derecognition.

Initial measurement of financial instruments

Financial instruments are recognized at fair value. The initial value is only equal to the transaction price for trade receivables with no significant financing component. The transaction price is the amount which an entity expects to be entitled to in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties.

Transaction costs for financial instruments measured at fair value through profit or loss are recognized directly in profit or loss. In all other cases, transaction costs – where material – are distributed on an accrual basis. Transaction costs include additional costs that are directly attributable to the acquisition, issue or disposal of a financial asset or financial liability. These are costs that would not have been incurred if the entity had not acquired, issued or disposed of the financial instrument.

Subsequent measurement of financial instruments

The subsequent measurement of financial assets is based on the classification decision at the time of addition. In accordance with IFRS 9, this decision incorporates the objectives of the business model for managing financial assets, an analysis of the contractually agreed cash flows and the exercise of classification options.

Business model

Financial assets at LBBW are managed at portfolio level. These portfolios follow different investment strategies. The business model of a portfolio provides information as to whether or not the assets in the portfolio will be held in the long term. LBBW has three business models: »Hold«, »Hold to collect and sell« and »Sell«.

The business models are identified on the basis of portfolio-specific information on remuneration and measuring performance, internal reporting and risks and risk management. At LBBW (Bank), the portfolios are identified and the individual business models determined by the LBBW (Bank) Board of Managing Directors. For subsidiaries included in the consolidated financial statements, this is done by the management of the subsidiary in question. At LBBW (Bank), the business models are determined at segment level, with the exception of the »Capital Markets Business« segment where the business models are established at a lower level. As opposed to other segments, which (with some exceptions – syndicated loans) use the »Hold« business model, this segment features a diverse variety of portfolios under the business models »Hold«, »Hold to Collect and Sell« and »Sell«.

The »Hold« business model means that the intention is to hold the assets of a portfolio for the foreseeable future and to collect the resulting cash flows over their term. Sales from these portfolios are not intended. Nevertheless, financial assets whose credit risk has increased since initial recognition could still be sold under a »Hold« business model. The same applies to sales made close to maturity, if the proceeds from the sales approximate the collection of the remaining contractual cash flows, and to infrequent sales and sales involving smaller volumes. Sales from portfolios operating under the »Hold« business model are subject to an internal process which monitors holding intent. For this purpose, sales agreements with third parties under civil law are considered sales, which lead to the assets sold being derecognized from the balance sheet.

The »Hold to collect and sell« business model does not involve the strict intention to hold the financial assets in a portfolio in the long term. In addition to collecting cash flows from the financial assets held, the assets can also be sold in line with the investment strategy of the portfolio. These kind of investment strategies can be found, to some extent, in portfolios in the Treasury's area of responsibility.

The »Sell« business model comprises all investment strategies that do not fall under the other two models. In particular, this includes financial assets acquired for trading and shares of loans intended for syndication. In LBBW Group, loans intended for syndication are allocated to two portfolios with different business models. The part of the loan to be placed on the market is assigned to a »Sell« business model portfolio while the final take is assigned to a »Hold« portfolio. Syndicated loans for which placement was unsuccessful remain in the original »Sell« portfolio permanently.

In rare cases, a portfolio's business model may change. Nonetheless, there are major obstacles for a change of business model: A change must be agreed upon by the LBBW (Bank) Board of Managing Directors or a subsidiary's management and must have been prompted by internal or external changes. In addition, these changes must have a not insignificant impact on business activity and be demonstrable to third parties. If all these conditions are met, it is essential to make a new classification decision for the assets in the portfolio. This new classification of a financial asset during its term is considered a reclassification and is permitted only for debt instruments that meet the cash flow criterion.

Cash flows

The analysis of the contractually agreed cash flows looks at whether the financial asset represents a simple loan agreement, thus generating solely payments of principal and interest (SPPI) as defined in IFRS 9. The term »repayment« generally refers to the repayment of capital. For the purpose of classifying financial assets, the capital concept is defined not as the nominal value but as the fair value of the financial asset on initial recognition. The interest term also has its own definition for the purpose of classifying financial assets. It represents consideration for the provision of capital and can only include components which are also reflected in a simple credit agreement. These include:

- time value of money,
- credit risk premium,
- surcharges for other risks associated with a loan (e.g. liquidity risk),
- surcharges for costs associated with a loan (e.g. administrative costs) and
- profit margin.

Equity instruments and derivatives thus do not constitute financial assets comparable to a simple loan agreement. The same applies to debt instruments with embedded derivatives that generate leverage. Non-recourse financing, which primarily involves an investment risk, also constitutes a breach of a simple loan relationship. At LBBW (Bank), restructuring of this kind of financing occasionally caused loans to be mandatorily recognized at fair value through profit or loss. However, non-leveraged interest rate caps embedded in debt instruments may be compatible with a simple loan agreement.

The analysis of the contractually agreed cash flows is subject to discretion. This applies in particular to LBBW (Bank)'s non-recourse financing. This includes financing of special investment vehicles, which are characterized by the limitation of LBBW (Bank)'s right of recourse to certain assets of the special investment vehicle or payments from these assets. At LBBW (Bank), this method of financing is therefore always in accordance with a simple loan agreement if either the special investment vehicle is able to service its debt without selling the financing object or if sufficient unimpaired collateral has been provided by third parties. As such financing is often tailored to the customer's specific investment projects, it is assessed taking into account all quantitative and qualitative information on the project in back office to reflect the special features of the respective financing when analyzing its cash flows. An analysis process that has been implemented and standardized at LBBW (Bank) guarantees a consistent, Bank-wide procedure.

Options

The fair value option enables LBBW to voluntarily measure financial assets measured at fair value through profit or loss if this eliminates or at least substantially reduces an accounting mismatch. An accounting mismatch arises when different standards are used for the recognition and measurement of financial assets and related liabilities.

Financial assets that represent an investment in equity instruments can be voluntarily measured at fair value through other comprehensive income. This applies only if they are not held for trading and do not constitute contingent consideration recognized by a purchaser in the context of a business combination.

This option can be exercised separately if the conditions are met for each financial asset and is irrevocable. These options can only be exercised at the time of the financial asset's initial recognition and are exercised by LBBW.

Which combinations of business model, cash flow criterion and options result in which measurement is explained in the notes on the effects on the items of the balance sheet.

Financial assets measured at amortized cost

Financial assets belonging to portfolios with the »Hold« business model and which meet the requirements for a simple loan agreement are reported in this balance sheet item. The item exclusively comprises non-derivative debt instruments such as receivables and securities. These financial assets are measured at amortized cost.

Interest income and fees of an interest nature from these financial assets are reported in the income statement in the item »Interest income and current income from equity instruments«. Expenses and income resulting from allowances for losses on loans and securities and gains and losses from selling these financial assets can be found in the income statement under the item »Net income/expenses from financial assets measured at amortized cost«.

Financial assets measured at fair value through other comprehensive income

Financial assets (debt instruments) held in portfolios with the »Hold to collect and sell« business model and which meet the requirements for a simple loan agreement are reported here. Fluctuations in the fair value of these assets are recognized through other comprehensive income. Interest and fees of an interest nature from a financial asset measured at fair value through other comprehensive income are also distributed on an accrual basis and changes in default risks from recognizing impairment losses are taken into account.

Interest income from these financial assets is reported in the income statement in the item »Interest income and current income from equity instruments«. Expenses and income resulting from allowances for losses on loans and securities and gains and losses from selling these financial assets is shown in the income statement under »Net income/expenses from financial assets measured at fair value through other comprehensive income«. Effects of changes in fair value are recognized directly in »Other comprehensive income«.

Financial assets that are equity instruments voluntarily recognized at fair value through other comprehensive income are also shown under this balance sheet item. Under this option, only distributions from these financial instruments are recognized through profit or loss under »Interest income and current income from equity instruments«. All other effects, such as changes in the fair value of gains/losses on disposal, are reported directly in equity under »Other comprehensive income«.

Financial assets designated at fair value

Financial assets designated at fair value comprise financial assets that are voluntarily recognized at fair value through profit or loss by exercising the choice to do so. This offsets or reduces fluctuations in results that are not justified from an economic viewpoint and that arise from countertransactions that must be recognized at fair value through profit or loss. The balance sheet item exclusively comprises debt instruments that meet the requirements for a simple loan agreement and which belong to portfolios with the »Hold« or »Hold to collect and sell« business models. Voluntary subsequent measurement at fair value through profit or loss immediately takes into account all fluctuations in the fair value in the income statement.

Interest income from these financial assets is reported in the income statement in the item »Interest income and current income from equity instruments«. Changes to fair value and gains and losses from selling these financial assets can be found in the income statement under »Net income/expenses from financial instruments measured at fair value through profit or loss«.

Financial assets mandatorily measured at fair value through profit or loss

Financial assets which either do not meet the requirements of a simple loan agreement or which belong to a portfolio with the »Sell« business model are reported in this balance sheet item. Subsequent measurement at fair value through profit or loss immediately takes into account all fluctuations in fair value in the income statement.

Interest income from these financial assets and distributions from equity instruments are reported in the income statement under »Interest income and current income from equity instruments«. Changes to fair value and gains and losses from selling these financial assets can be found in the income statement under »Net income/expenses from financial instruments measured at fair value through profit or loss«.

Allowances for losses on loans and securities

Under IFRS 9, impairment for credit risks is recognized using a three-stage impairment model on the basis of expected credit losses. The scope of provisions for allowances for losses on loans and securities includes financial assets measured at amortized cost or at fair value through other comprehensive income. This essentially includes loans, securities and lease receivables. For outstanding credit commitments and financial guarantee contracts, provisions for credit risks are established in line with the principles, estimation techniques and assumptions described below.

Calculating allowances for losses on loans and securities

A review is carried out on an ongoing basis to assess whether there is any evidence that a financial asset is credit-impaired. The criteria for this review are based on the regulatory definition of default in accordance with the Capital Requirements Regulation (CRR). This definition is also used for internal management. In particular, defaults include substantial financial difficulty for the borrower due to which repayment seems unlikely, breach of contract (default or delinquency in interest or principal payments of over 90 days), an application to open insolvency proceedings, termination or repayment, partial and full write-downs and the borrower entering other financial reorganization. The events described apply to all customers, regardless of rating or scoring procedures.

If there is no evidence of credit-impairment, impairment losses are recognized in the amount of the expected credit losses resulting from possible loss events in the next twelve months (stage 1). In the event of a significant increase in the default risk of a financial asset since its initial recognition to the balance sheet (stage 2), all expected credit losses over the remaining term of the financial instrument are recognized. Each asset is generally measured individually; groupings are established when taking into account special cases as required.

If there is evidence of credit-impairment (stage 3), the impairment loss for significant financial assets is measured as the gross carrying amount of the financial instrument less the present value of the estimated cash flows. To calculate anticipated future cash flows, various probability-weighted scenarios are used to estimate expected proceeds from the financial instrument (payments of principal and interest) and any payments from the liquidation of collateral on the basis of their amount and accrual date. The procedure for financial assets that are not significant is the same as for stage 2 assets (stage 3 based on parameters).

For financial assets allocated to stages 1 and 2 or measured on the basis of parameters under stage 3, the expected credit loss is calculated based on the probability of default (PD), the estimated loss given default (LGD) and the expected exposure at default (EaD). These parameters are standardized at twelve months for stage 1 financial instruments. To calculate life-time expected credit loss, the inputs are standardized at the remaining term of the financial asset.

Regardless of the remaining term, expected credit losses (calculated as the product of the three parameters already described) are discounted to the end of the reporting period using the effective interest rate of the financial instrument or an approximation of this rate. This does not apply to significant financial assets which already show credit-impairment at initial recognition. In this case, the effective interest rate is adjusted by taking into account the life-time expected credit losses, with the result that no further allowances for losses on loans and securities are reported on initial recognition. The credit-adjusted effective interest rate resulting from this is used for subsequent measurement.

LBBW has not used the simplified approach in accordance with IFRS 9.5.5.15 for lease receivables.

Inputs and assumptions

Specific rating and risk classification procedures are used for all relevant business activities. These procedures quantify the probability of default of the individual investments, which is initially standardized to twelve months. In addition, multi-year probabilities of default are determined on the basis of many years of internal rating histories. Historical, current and forward-looking information is considered when determining customer creditworthiness, provided this demonstrably improves the forecast quality. In addition, the regulatory rating for the Bank's core business areas – corporate customers and real estate financing in Germany – is adjusted for expected economic conditions on the basis of the rate of change in the ifo business climate or gross domestic product.

The loss given default is primarily determined by the probability of recovery and the collateral ratio of the underlying asset. The collateral ratio is the ratio between the expected proceeds from the liquidation of collateral and the expected exposure at default. There are specific forecasts for different types of collateral and customer groups. The estimates of the model inputs are based on pool data gathered by the Bank itself and in cooperation with savings banks and other Landesbanks, in which case it has been ascertained that these data are representative for LBBW. The LGD is initially standardized at twelve months. In addition, multi-year loss rates for defaults are determined using collateral value models and EaD forecasts for each potential default date for the debtor. Similar to the probability of default forward-looking information is also considered.

The expected exposure at default (EaD) is determined using various models on the basis of the characteristics of the underlying financial instrument. The EaD for a fully disbursed, non-revolving financial instrument corresponds to the average exposure in the default year and is calculated taking into account the contractually agreed cash flows. For non-revolving financial instruments that have not yet been fully disbursed at the measurement date, the expected time of full disbursement is determined by means of models that use customer and transaction specific characteristics as risk factors. Disbursements are then estimated up to the full disbursement date using linear interpolation and are thus included in the EaD estimate. A separate class of models has been developed for revolving commitments which forecast the expected use of commitments for any point in the future until the end of the contract in question. If this is not explicitly stipulated, the notice period is used to determine the term. A performance-based term that extends beyond the notice period is estimated on the basis of historic data only for overdrafts and credit cards. As well as statistical business and customer characteristics, the period until the default date and the credit line's historical draw-down pattern are all used as inputs for the models. The models are estimated on internal data using different types of regression models. Guarantees, which are not fully used in the event of default, represent a special case. The amount at risk for these transactions is calculated by means of a credit conversion factor (CCF).

The quality of the risk classification procedures used to measure PD, LGD and EaD is reviewed regularly and the procedures are refined if necessary. Most of the portfolio is measured using internal rating procedures that have been approved for the Internal Ratings Based Approach (IRBA) by the banking regulator. The rating grades are not only used for internal management purposes but also to measure the regulatory capital requirements.

Consideration of changes to estimation techniques or assumptions

All models used to calculate expected credit losses in the reporting period were validated regularly and adjusted if necessary. There were no significant changes to methodology that would affect the calculation of expected credit losses.

Consideration of forward-looking information

As well as taking into account future information on a parameter-specific basis, all business areas are also regularly subjected to qualitative and quantitative analysis to determine whether there are special circumstances requiring an adjustment to allowances for losses on loans and advances. Special cases are extraordinary, temporary circumstances in which the models are unable to create parameters suitable for the calculation of allowances for losses on loans and advances set out in IFRS 9 (PD, LGD and EaD including correlations of these parameters) because the modeling may no longer deliver unbiased results. For example, this occurs if major macroeconomic or political fluctuation, technological development, legal conditions or other disruptive elements are anticipated that cannot (yet) be sufficiently accounted for in the ratings (like LGD). In this case, qualitative information, estimates, scenario analyses and simulations are utilized to determine to what extent allowances for losses on loans and advances must be adjusted so as to adequately cover all risks. If it is not possible to carry out these adjustments for individual financial instruments, suitable clusters are established. A process involving the LBBW Early Warning team was created to recognize and consider special cases. This interdisciplinary group of experts from Research,

Front Office, Back Office and Risk Controlling deal with all relevant events that may influence LBBW's operating activities on both a regular and ad hoc basis. Its aims include identifying crises and developing scenarios for LBBW's management bodies in the event that they emerge.

Description of transfer criterion

Three criteria (transfer criterion) are used to assess whether to measure impairment on the basis of 12-month expected credit loss (stage 1) or over the lifetime of a financial instrument (stage 2):

- Quantitative transfer criterion: First, the expected probability of default at the end of the reporting period is calculated using the initial rating and expected migrations specific to the segment. If the current risk assessment is significantly worse than the expected value at the end of the reporting period, the financial asset is transferred.
- »De minimis threshold« criterion: A change in the probability of default by a maximum of 10 basis points in comparison to the initial rating is considered low. In this case, the impairment loss is always measured using the 12-month expected credit loss. This is relevant only for financial instruments with an initial rating of up to 3, as a downgrade of one notch from a rating of 4 or above increases the probability of default by over 10 basis points.
- »Warning signal« criterion: If certain warning signals are present, the impairment loss of a receivable is always measured using the life-time expected credit losses. This includes internal warnings (e.g. observation case or seizure), 30-day arrears, actively intensified loan management and forbearance measures.

Securities are exempt from the above criteria; stages are allocated on the basis of the current rating. If this falls under »investment grade«, it is allocated to stage 1. In all other cases, the securities are allocated to stage 2 and the impairment loss is measured on the basis of the life-time expected credit losses. The definition of »investment grade« is based on international standards.

There is another exception for financial assets which already showed credit-impairment at initial recognition. In this case, impairment loss is always measured using the life-time expected credit losses of the financial instrument, even when recovery is expected or actually occurs. There is no stage transfer for these instruments.

For the quantitative aspects of the transfer criterion, the current rating with a timescale for probability of default of twelve months is considered. As shown by analysis in the context of the development of the transfer criterion, this is suitable for measuring the probability of default over the remaining term.

If the requirements for measuring impairment over the lifetime of a financial instrument (stages 2 and 3) are no longer met, impairment is measured on the basis of 12-month expected credit loss (stage 1).

Depreciation, amortization and write-downs

A financial instrument is to be written down directly in the event of an actual, potentially only partial, default or loss. This is considered uncollectible if no surrogate substitutes the defaulted receivable. If no recovery is expected, the receivable is derecognized. This is the case, for example, with:

- insolvency, when no further proceeds from the liquidation of collateral or an insolvency ratio are expected
- terminated exposures where the residual receivables cannot be settled
- the claim is waived fully or partially
- sale of receivables with a loss and
- private customers who pay small installments on a high outstanding receivable after the collateral is liquidated because it is assumed that the customers will be unable to repay the receivable in full within the two year reporting period.

Exposures that are still subject to enforcement activity after being written down are serviced centrally. The objective is to collect extraordinary income from these receivables. To this end, negotiations are conducted with customers in order to achieve voluntary repayments or settlements, engage in personal enforcement against the debtor's assets, accompany insolvency proceedings and account for payment transactions.

Balance sheet recognition

For Financial assets measured at amortized cost, allowances for losses on loans and securities are deducted directly. The amount remaining after the deduction of allowances for losses on loans and securities is reported in the balance sheet. For transactions subject to measurement at fair value through other comprehensive income, the amount reported in the balance sheet is the fair value. Credit losses for off-balance-sheet transactions are shown in the item provisions for credit risks.

Subsequent measurement of financial liabilities

In the subsequent measurement, financial liabilities are to be classified at amortized cost. This excludes:

- financial liabilities measured at fair value through profit or loss;
- financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies;
- financial guarantee contracts;
- commitments to provide a loan at a below-market interest rate;
- contingent consideration recognized by an acquirer in a business combination to which IFRS 3 applies.

A financial liability must be measured at fair value if it is held for trading. Held for trading means that the financial liability,

- is acquired or incurred principally for the purpose of selling or repurchasing it in the near term;
- on initial recognition it is part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking; or
- is a derivative (with the exception of derivatives that are financial guarantees or designated and effective hedging instruments).

In addition, a financial liability must be measured at fair value if it includes an embedded derivative which is required to be separated and that cannot be measured separately either at acquisition or at the end of a subsequent financial reporting period.

Options

A financial liability can be irrevocably designated as at fair value through profit or loss on initial recognition provided that doing so results in more relevant information. This is the case when:

- it eliminates or significantly reduces a measurement or recognition inconsistency (accounting mismatch) that arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases;
- a group of financial liabilities or of financial assets and financial liabilities is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the Board of Managing Directors or the management.

They can also be voluntarily designated as at fair value if the financial liability contains one or more embedded derivatives, provided

- the embedded derivative(s) change the contractually stipulated cash flows not insignificantly; or
- it is clear with little or no analysis when a similar hybrid instrument is first considered that separation of the embedded derivative(s) is prohibited.

Financial liabilities measured at amortized cost

Financial liabilities resulting from banking activities are recognized in this balance sheet item. This item includes securitized liabilities and subordinated capital, as well as deposits from banks and customers. These liabilities are measured at amortized cost.

LBBW reports subordinated liabilities (e. g. borrower's note loans or issues), profit participation rights and typical silent partners' contributions under Subordinated capital. In view of the contractually agreed repayment of capital, the subordinated liabilities and profit-participation rights are classified as debt in accordance with the provisions of IAS 32. The silent partners' contributions are also recognized as debt, on account of the existence of a contractual right of termination or repayment to the investor. In supervisory law terms, subordinated liabilities, profit participation rights and silent partners' contributions are considered to form part of own funds in accordance with the CRR.

Interest expenses from these financial liabilities and gains and losses from repurchasing own liabilities are reported in the income statement under »Net interest income and current net income/loss from equity instruments«.

Financial liabilities designated at fair value

Financial liabilities designated at fair value comprise financial liabilities that are voluntarily measured at fair value through profit or loss by exercising the choice to do so. This offsets or reduces fluctuations in results that are not justified from an economic viewpoint and that arise from countertransactions that must be recognized at fair value through profit or loss.

Interest expense from these financial liabilities is reported in the income statement in the item »Net interest income and current net income/loss from equity instruments«. Changes to the fair value of these financial liabilities can be found in the income statement under »Net gains/losses from financial instruments measured at fair value through profit or loss«. However, if the change in fair value is due to a change in own credit rating, the portion of the change in fair value attributable to the change in the own credit rating is recognized in equity in the »Other comprehensive income« balance sheet item. Nonetheless, if measurement inconsistencies were to arise or increase as a result of this, this effect must also be recognized through profit or loss under »Net gains/losses from financial instruments measured at fair value through profit or loss«.

Financial liabilities mandatorily measured at fair value through profit or loss

All financial liabilities that must be recognized at fair value are reported in this balance sheet item.

Interest expense from these financial liabilities is reported in the income statement in the item »Net interest income and current net income/loss from equity instruments«. Changes to the fair value of these financial liabilities can be found in the income statement under »Net gains/losses from financial instruments measured at fair value through profit or loss«.

Embedded derivatives

If a hybrid contract contains a host that is an asset within the scope of IFRS 9, the embedded derivative must be taken into account when assessing whether or not there is a simple loan agreement. The embedded derivative is never separated in this case.

On the other hand, in the case of a hybrid contract that, as a host, does not contain any assets within the scope of IFRS 9, the embedded derivative must be separated from the host and accounted for as a derivative under the following conditions:

- the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract;
- a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- the hybrid contract is not measured at fair value through profit or loss.

The obligation to separate embedded derivatives therefore relates primarily to financial liabilities and some assets that are included in the scope of other IFRSs (e.g. rights under leases). If an embedded derivative is separated, the host contract shall be accounted for in accordance with IFRS in the scope in which it is included.

Hedge accounting

LBBW does not apply the new IFRS 9 regulations on hedge accounting. Instead, the decision was made to continue recognizing all hedges in accordance with the previous requirements of IAS 39.

The hedge relationship is documented at the inception of the hedge. The documentation clearly identifies the hedged item and the hedging transaction, it encompasses the definition of the risk being hedged, the description of the hedging strategy and the risk management objective (cf. risk report), and defines the method used to assess the hedging instrument's effectiveness. The Bank uses suitable control instruments, including interest rate swaps, as a hedge to minimize the interest rate risk (e.g. from different fixed interest rates or a change to the yield curve) in the banking book. LBBW uses both micro and portfolio hedge accounting to avoid earnings volatility. In accordance with the provisions of IAS 39, the hedge relationship must be expected to be highly effective at its inception and throughout the entire term. LBBW applies the critical term match method and regression analysis when determining the prospective effectiveness test. In addition, effectiveness must also regularly be reviewed retrospectively. A hedge relationship is considered to be effective if the ratio of the changes in value from the hedging transaction

to the hedged part of the hedged item is between 80% and 125%. The Bank uses the dollar offset method to measure effectiveness retrospectively. An ineffective hedge relationship must be reversed. However, as part of the IBOR reform the IASB has issued various exemptions for a transitional period (see section on IBOR reform). A reversed hedge relationship can be redesignated for the remaining term provided it is assumed to be effective for the remaining term (prospective test). Inefficiencies are the result primarily of causes including the variable interest rate leg exerting a disproportionate impact on measurement and differing interest payment dates within the hedge relationship.

If the requirements for hedge accounting in accordance with IAS 39.71 et seqq. are met, a decision is made as to whether the hedge relationship will be accounted for as a fair value hedge or as a cash flow hedge. Fair value hedges serve to hedge the exposure to market price risk (mainly interest rate risks) and therefore the related changes in fair value. They exist in the form of micro fair value hedges and portfolio fair value hedges. The Bank uses interest rate swaps and cross-currency interest rate swaps as hedging instruments to hedge the interest rate and exchange rate risk in fair value hedges. This means that certain Bank lending or issuing and securities portfolios are hedged against changes in market value (in relation to the hedged risk). In a micro fair value hedge, the Bank does not designate any partial hedge, i.e. the hedged item and the hedging transaction are always included in a hedge relationship in full.

In a micro fair value hedge the carrying amount of the hedged item is adjusted for the change in the fair value of the hedged risk and recognized in profit or loss. This applies to the financial instruments valued at amortized cost as well as to the hedged item measured at fair value, whose changes in value are recorded in Other comprehensive income. Changes in the fair value of the hedged item not attributable to the hedged risk are accounted for in accordance with the guidance applicable to the relevant category.

LBBW uses the portfolio fair value hedge to hedge interest rate risks within the meaning of IAS 39. The rules applicable to portfolio fair value hedges on interest rate risks enable LBBW to reproduce internal Bank management of interest rate risks. The portfolios contain both receivables and liabilities that are subject at regular intervals (monthly designation and dedesignation at the end of the month) to prospective and retrospective measurement of effectiveness in a dynamic hedge accounting cycle. The portfolio available for designation changes on a monthly basis due to new business, disposals and early repayments. LBBW uses a monthly hedge cycle to counteract this. The cash flow is allocated to the appropriate time interval for each financial instrument according to the expected maturity.

In the case of portfolio fair value hedges, a separate line item (portfolio hedge adjustment attributable to assets/liabilities) is carried on the face of the balance sheet to record the valuation effect on the hedged items as regards the hedged risk.

The measurement gains and losses resulting from the measurement of the hedging transaction generally offset the measurement effect of the hedged items attributable to the hedged risk. These are recognized under Net gains/loss from financial instruments measured at fair value through profit or loss (subitem »Net gains/losses from hedging transactions«).

A hedging relationship ends when the hedged item or the hedging transaction expires, is sold, is terminated before maturity or is designated for other purposes, or if the hedge no longer meets the criteria to qualify for hedge accounting. If a financial instrument used to hedge changes in the fair value of a hedged item is terminated before maturity or designated for other purposes, the interest-related fair value adjustment included in the carrying amount of the hedged item is amortized over its remaining maturity and netted against interest income or expenses. In the event of disposal or early repayment of the hedged assets or liabilities, the adjustments in the fair value of the hedged item are recognized along with the realized gains/losses from the disposal or repayment.

Securities repurchase and lending agreements

To date only genuine repurchase agreements are permitted at LBBW. A genuine repurchase agreement is a contract under which one party (the pledgor) transfers its securities to another party (the pledgee) against payment of a specified amount and in which the parties also agree to return the securities to the pledgor at a specified date for the price received or another price agreed in advance. In addition, the pledgor is generally entitled to current income (e.g. interest or dividends) and other rights (e.g. subscription rights) from the securities. Under genuine repurchase transactions, all opportunities and risks therefore essentially remain with the entity that transferred the securities.

Thus, the pledgor does not derecognize the securities from the balance sheet. However, it must recognize a financial liability in the amount of the payment received. Furthermore, the pledgor must recognize all income from the securities and all expenses incurred as a result of the financial liability in subsequent periods. Any difference between the amount received when the securities were originally transferred and the amount to be paid upon return must be allocated by the pledgor to the liability over the term of the repurchase agreement.

In turn, the pledgee must recognize a receivable in the amount paid for the transfer. This receivable by the pledgee is measured at amortized cost. Any difference between the receivable's acquisition costs and the amount due upon return must be allocated to the liability over the term of the repurchase agreement.

Securities lending refers to transactions in which ownership of securities is transferred with an obligation on the borrower to retransfer securities of the same type, quality and quantity on expiration of the agreed period of time and pay a fee for the duration of the loan. Securities lending agreements relate to the »loan of a thing« in accordance with Section 607 of the German Civil Code (BGB). The lender bears the market price risk as the borrower is required to retransfer securities of the same type, quality and quantity. The borrower is also generally entitled to current income (e.g. interest or dividends) and other rights (e.g. subscription rights) directly or indirectly through the borrower. There is no balance sheet derecognition as the lender continues to assume all opportunities and risks. If cash collateral is provided, the lender must recognize a financial liability in the amount of the sum received. Furthermore, the lender must recognize all income from the securities and all expenses incurred as a result of the financial liability in subsequent periods. In the event that cash collateral is provided, any difference between the amount received on transfer and the amount to be paid upon return must also be allocated by the lender to the liability over the term of the repurchase agreement. If the borrowed securities/tangible assets are sold on to another party, a gain on disposal is recognized as an asset and an obligation to return the securities is recognized under Trading liabilities at the same time. The consideration paid by the borrower is reported under Net interest income.

Financial guarantee contracts

Under IFRS 9, a financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.

If the LBBW Group is the assignee, financial guarantee contracts are accounted for in the financial statements by taking them into account when determining the allowances for losses on loans and advances for the related secured financial asset as part of the IFRS 9 impairment model. This means that no contingent claims from financial guarantee contracts received are recognized in the LBBW Group's financial statements. The LBBW Group recognizes commission payments for financial guarantee contracts as a commission expense on an accrual basis in accordance with IFRS 15. In the case of a guarantee event, a claim is recognized against the assignor

If the LBBW Group is the assignor, financial guarantee contracts are initially recognized at fair value as soon as the LBBW Group becomes a contractual party. The fair value comprises the present value of the anticipated benefits and the current present value of the future fee and commission payments (net method). Financial guarantees concluded at market conditions have a fair value of zero. Financial guarantee contracts issued are to be included in the IFRS 9 impairment model. The amount for allowances for losses on loans and advances attributable to financial guarantees is reported under provisions for credit risks

Offsetting

Financial assets and financial liabilities are recognized in the balance sheet on a net basis if, at the balance sheet date, the Group has a legally enforceable right to set off the recognized amounts and intends either to settle on a net basis or to liquidate the respective asset and settle the associated liability simultaneously. In all other cases, they are recorded by way of gross disclosure.

If asset and liabilities are reported as offset in the balance sheet, the associated income and expenditure in the income statement must also be offset, unless offsetting is expressly prohibited by an applicable accounting standard.

IBOR reform

At LBBW, the IBOR reform affects both lending and capital markets products. An independent project was set up at LBBW to adequately address the many challenges presented by this reform, with representatives from the areas affected by the IBOR reform playing a role. In the first half of 2019, the project focused on an impact analysis aiming to identify where action needs to be taken. The implementation project was then launched in mid-July, focusing on the transition from EONIA to €STR.

From an accounting perspective, the two major questions as at 31 December 2019 are how the contractual modifications required by the IBOR reform are to be accounted for and whether existing hedge relationships are to be terminated prematurely on account of the IBOR reform.

LBBW considers all cases in which the IBOR reform results in a contractual amendment to the interest rate terms of a financial instrument to be a modification. In particular, these include a change to the reference interest rate and the inclusion of fallback clauses. Where conditions otherwise remain unchanged, both of these contractual amendments represent insubstantial modifications.

At LBBW, fixed-income financial assets and liabilities in different currencies are hedged against interest rate risks. The main method used is interest rate swaps. The IBOR reform will have several effects on these hedge relationships until the end of 2021. For example, the interest conditions for the variable aspect of many of the interest rate swaps will change by the end of 2021. It is still unclear when exactly this will occur and by how much they will change. This may result in the premature termination of hedge relationships. For this reason, the IASB has introduced the IFRS »Interest Rate Benchmark Reform«, new requirements which enable the accounting parties to maintain their hedge relationships for the period of this uncertainty even if there is insufficient prospective or retrospective effectiveness due to effects of the IBOR reform. These exemptions also include various operating practical expedients for assessing effectiveness and designating hedge relationships. The exemptions may be used only until there is no more uncertainty resulting from the IBOR reform with regard to the hedge relationship. However, the period of uncertainty must be interpreted broadly and ends only when the final successors for the

discontinued reference interest rates have been determined and incorporated into the contracts of financial products.

LBBW's hedging instruments are based on EURIBOR, USD LIBOR, CHF LIBOR and GBP LIBOR. LBBW believes that the conditions for applying the practical expedients granted for the reference interest rates of the EURIBOR family are no longer met as at 31 December 2019, as the European Money Market Institute – the administrator responsible for these reference interest rates – announced the successful completion of its reform efforts on 28 November 2019.

The nominal volume of the hedging instruments still covered by the exemptions described above fallen amounted to EUR 16,803 million as at 31 December 2019. The hedged risk components were still separately identifiable as at 31 December 2019.

9. Shares in investments accounted for using the equity method

Investments in associates or joint ventures accounted for using the equity method are carried at cost in the consolidated balance sheet once a significant influence is obtained or on formation of the company. This also comprises goodwill from the acquisition of an associate or a joint venture and hidden reserves. In subsequent years, the amount accounted for using the equity method is adjusted by the Group's share in the associate's equity. The proportion of profit or loss generated by the investment is reported in the income statement as Net income/expenses from investments accounted for using the equity method. Changes in the investment's other comprehensive income are recognized directly and proportionately in LBBW's Other comprehensive income.

Because of the valuation of the equity investment, the equity value must be adjusted if necessary. The impairment test is conducted on the basis of IAS 36.

Investments in associates and joint ventures that are not incorporated in the consolidated financial statements on account of their immaterial importance, are recognized under »Financial assets mandatorily measured at fair value through profit or loss«.

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

The carrying amount of non-current assets or groups of assets and debt (disposal groups), whose disposal is planned, is realized largely through the disposal business and not through continued use.

With regard to the cumulative fulfillment of the conditions stated below, the assets or disposal groups in question are classified as held for sale and shown separately from the other assets or debt in the balance sheet. The criteria for classification as held for sale is that the assets or disposal groups can be disposed of in their present condition at prevailing conditions and that the disposal is highly likely. A disposal is highly probable if the plan to sell the asset is completed, an active program to find a buyer and to complete the plan has been initiated, the assets or the disposal group is actively offered at a price that is appropriate relative to the current fair value and the disposal is expected to occur within one year from the date of classification.

Assets classified as held for sale are measured at the lower value comprising carrying amount and fair value less the cost of disposal. The depreciation of the assets is suspended from the date they are classified as held for sale. Assets and liabilities held for sale and disposal groups are generally measured in accordance with IFRS 5. Assets that are subject to the exemptions specified in IFRS 5.5 are measured according to the provisions of the respective standard. Accordingly, the fair value measurement of the relevant assets of this balance sheet item uses the same methods, parameters and approaches as all other assets of LBBW that are measured at fair value. Assets or disposal groups classified as held for sale are recognized separately in the balance sheet item »Non-current assets held for sale and disposal groups and Liabilities from disposal groups«.

Gains/losses from the measurement and gains/losses from the disposal of these assets or disposal groups that are not included in a discontinued operation are contained in the income statement or in the valuation reserve in equity and are not separated. The total profit or loss from discontinued business divisions must be shown separately in the item »Profit or loss from discontinued operations«.

11. Intangible assets

Mainly software acquired or developed in-house is recognized under Intangible assets.

Purchased intangible assets are carried at amortized cost, i.e. less their cumulative write-downs and impairment. Internally developed software is capitalized at cost if the recognition criteria in accordance with IAS 38 are met. The capitalized costs mainly include staff costs and expenses incurred for external services during development. As previously, the internally developed or purchased software is amortized over three to ten years on a straight-line basis.

Amortization, write-downs and impairment losses on intangible assets are recognized under Administrative expenses in the income statement. Income from reversals of impairment losses on intangible assets, excluding goodwill due to prohibition of reversal, is recognized under Other operating income.

Intangible assets are derecognized when sold. Gains and losses on disposal are the difference between the net proceeds from the disposal of the asset, if any, and its carrying amount. The profit or loss on the disposal of the asset is recognized through profit or loss at the date of derecognition, and reported under Other operating income/expenses.

12. Investment property

Property leased out to third parties for purposes of generating profit is reported separately in the balance sheet as »Investment property« according to IAS 40 as long as it is held to earn rental income and/or for capital appreciation. Where mixed-use properties exist and the non-owner-occupied parts can be sold separately or leased out separately, these parts are accounted for separately. Mixed-use properties with a leased portion of over 80% of the total area are consistently derecognized from property and equipment and classified in their entirety as »Investment property«.

Investment property is measured initially at cost including transaction costs. Remeasurement is at fair value on the closing date. This is determined primarily from model-based valuations. Regular actuarial reports are obtained for material investment properties to validate the fair value from the model-based valuations.

In the measurement of investment property, the estimating uncertainties are based on the assumptions used to calculate future cash flows. Changes in parameters such as the inflation rate, interest rate, anticipated cost trends and leasing, market conditions and vacancy rates affect future cash flows and, consequently, the fair value.

The value of investment property is assessed based on cash calculated per property on the basis of the discounted cash flow method. The contributions to earnings determined by this method are checked for plausibility and verified by means of reference figures from broker associations, past experience from LBBW's own disposals and appraisals by external experts. In order to ensure that the appraisals are available at the time the financial statements are drawn up, the management team responsible decides for which properties external appraisals are to be commissioned in the second half of the year. In line with internal provisions, it must be ensured that an appraisal of the main properties is conducted at least once every three years by an independent expert.

Fair value is calculated using the discounted cash flow method based on the following assumption. As a valuation object, the respective building serves as an independent, strategic 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 discount rate takes into account factors such as the quality of the property, the type of property and the macro and micro-location.

All other things being equal, an increase in the underlying market rents would lead to an increase in the fair value, while a decrease in the underlying market rents would lead to a decline in the fair value. All things being equal, an increase in the underlying future expenditure would lead to a decline in the fair value, while a decline in the underlying future expenditure would lead to an increase in the fair value. Higher discount rates would, all other things being equal, lead to lower fair values, while lower discount rates would lead to correspondingly higher fair values.

A change in the assumptions on expected market rents generally leads to a corresponding change in the discount rate and to a reverse change in the vacancy ratios and therefore the vacancy costs.

13. Property and equipment

Property and equipment includes commercially used land and buildings, technical equipment and machinery, operating and office equipment, advance payments and assets under construction, leased assets and rights-of-use from leases.

Property and equipment is initially carried at cost and subsequently at amortized cost. Subsequent expenditure for property and equipment is capitalized if it is deemed to increase the future potential benefit. All other subsequent expenditure is recognized as an expense. Property and equipment is depreciated over its expected economic life, mainly on a straight line basis and sometimes on a diminishing basis. Determination of the economic life reflects expected physical wear and tear, technical obsolescence and legal and contractual constraints.

	Estimated useful life in years	
	31/12/2019	31/12/2018
Buildings	25 - 50	25 - 50
Technical equipment and machinery	5 - 10	5 - 10
Operating and office equipment	1 - 20	1 - 20
Purchased IT systems	3 - 7	3 - 7

The determination of the useful life and depreciation method is reviewed at a minimum at the end of each financial year. After scheduled depreciation, including the review of the depreciation method used, the underlying useful life and the residual value (recoverable amount of a comparable asset) of the asset in question, a check is performed at each balance sheet date as a minimum to ascertain whether there are any indications of impairment. Consequently, any impairments resulting from technical or economic obsolescence, wear and tear or a decline in market prices are taken into account. Where indications of impairment exist, the recoverable amount (the higher of the fair value minus sales costs or the value in use) is calculated and compared with the carrying amount. Impairment losses are charged to profit or loss as unscheduled write-downs.

Impairment losses must be reversed if the calculation of the recoverable amount has increased since the last time an impairment was recorded. Impairment losses are only reversed up to the amount by which the asset would have been depreciated until this date. If the carrying amount is increased by the reversal of impairment losses or reduced by impairment, the depreciation is adjusted over the remaining useful life of the asset.

The gain or loss on the disposal of property or equipment is calculated as the difference between the net proceeds from the disposal of the asset, if any, and its carrying amount.

Depreciation and impairment losses on intangible assets are recognized under Administrative expenses. Gains and losses on the disposal of property and equipment are recorded under Other operating income/expenses.

14. Leasing business

Leases are contracts that grant the right to use an asset for a specific period of time against payment of a fee.

LBBW as the lessee

Under leases concluded by LBBW as the lessee, a right of use to the underlying asset and a corresponding lease liability are recognized. This excludes contracts not covered by the scope of IFRS 16 and leases where the underlying assets are of no material value.

A right of use is measured at cost on the day the lease begins. The costs comprise the lease liability, advance consideration paid, initial direct costs and expected restoration obligations less leasing incentive payments.

Lease liabilities are recognized on the basis of the present value of the future lease payments. Lease payments are determined from fixed and variable components representing agreed payments that are subject to fluctuation and are virtually fixed (e.g. index-linked payments). The interest rate underlying the lease is used for discounting. If this is not available, an incremental borrowing rate is used. The term of the lease is calculated as the non-terminable basic leasing period, taking into account renewal and termination options. In assessing the likelihood of options being exercised, relevant facts and circumstances are taken into account which may represent an economic incentive for the lessee. This is reassessed in the event of significant events or changes in circumstances.

In subsequent measurement, the right of use is measured using the cost model and adjusted for cumulative write-downs and impairment losses. The period of amortization is calculated according to the useful life of the right of use and is the same as the end of the contract. Where right of use assets meet the definition of investment property within the meaning of IAS 40, they are measured at fair value.

In subsequent periods, the lease liability is increased by a constant interest effect through profit or loss and repaid in accordance with the lease payments made through other comprehensive income.

In the event of reassessments or contract amendments, rights of use and lease liabilities are adjusted accordingly in subsequent measurement.

In the event of subleases exist, the accounting requirements for both the lessee and the lessor are taken into account for the main and subleases.

The right of use asset is tested for impairment as part of an annual impairment test within the meaning of IAS 36.

LBBW as the lessor

Leases are recognized by the lessor in accordance with IFRS 16 on the basis of their classification as a finance or operating lease. This classification takes place at the beginning of a lease and is based on the overall assessment of which risks and rewards lie with the lessor. The underlying criteria are reviewed regularly. If a change to the overall assessment takes place, the lease is reclassified.

A lease is classified as a finance lease where essentially all risks and rewards incidental to ownership of an asset are transferred from the lessor to the lessee. In accordance with the principle of substance over form, beneficial ownership, not legal ownership, is the key factor here. An operating lease is referred to in all other situations.

LBBW's finance lease contracts include full amortization, partial amortization and hire purchase agreements. Depending on its form, a finance lease can be a cancelable agreement or an agreement with an option to sell. The lease payments must generally be made in advance.

In the case of operating lease transactions concluded at LBBW, beneficial ownership of the leased asset remains with the Group. The leased assets – mainly buildings and land – are recognized as assets and reported in the consolidated balance sheet under Property and equipment or Investment property. The leased assets are recognized in accordance with IAS 16 at (amortized) acquisition or production cost or are measured at fair value in accordance with IAS 40. Both the lease income and received special payments and prepayments are recognized over the lease term. All the depreciation, write-downs and impairment losses and the income earned are reported under Other operating income/expenses.

With a finance lease, the leased asset is derecognized and a receivable due from the lessee equivalent to the net investment value on the date on which the contract is concluded is shown under the item Loans and advances to customers or Loans and advances to banks. Lease payments received are broken down into an interest component recognized in income and a repayment component. While income is recognized on an accrual basis as interest income and is reported in net interest income, the repayment part reduces the receivables carried on the balance sheet.

The direct costs incurred by the lessor on the date on which the contract is concluded are assigned to the leasing contract. The internal interest rate underlying the lease term is determined in such a way that the initial direct costs are included automatically in the lease receivables.

IFRS 16 includes no special requirements for recognition of impairments and so the general regulations on impairment (IAS 36 and IFRS 9) also apply to leases.

15. Income taxes

IAS 12 governs the recognition and measurement of income taxes.

LBBW operates in several tax jurisdictions. The tax items shown in the financial statements are calculated taking into account the respective taxation laws and the relevant administrative interpretations. Due to their complexity, their interpretation by taxpayers may differ from that of the local tax authorities. As different interpretations of taxation laws as a result of company audits can lead to subsequent tax payments for past years, these are included in the analysis on the basis of the management's assessment.

Current income tax liabilities and assets are calculated at current tax rates and carried at the expected payment or refund amount. Current income tax assets and liabilities are offset under the requirements of IAS 12.71.

Deferred income tax assets and liabilities are recognized in respect of temporary differences. Taxable and deductible temporary differences are calculated as the difference between the IFRS carrying amount of an asset or liability and its local tax base (adjusted for permanent differences). The tax base is determined based on the tax regulations of the country in which the taxation occurs. Deferred income tax assets and liabilities are calculated at the tax rates that are expected to apply when the asset is realized or the liability is settled. The effect of tax rate changes on deferred taxes is recognized in the tax result during the period in which the changes were approved by legislative bodies.

Deferred tax liabilities are carried for temporary differences that will result in a tax expense when settled. Deferred tax assets are recognized if tax relief is expected and likely to be utilized when temporary differences are reversed. Deferred tax assets on temporary differences in equity are recognized in total comprehensive income in the subitem Valuation reserve or Retained earnings, depending on the underlying situation.

A deferred tax asset is recognized for a tax loss carryforward if it is probable that the carryforward will be used in a future period by reference to budget accounts. The tax planning is derived from current corporate planning approved by the Board of Managing Directors, which regularly covers a planning period of five years. The tax planning takes into account historical insights into profitability and taxable income. In recognizing deferred income tax assets owing to interest carryforwards, the same accounting policies and valuation methods are applied as for deferred income tax assets from tax loss carryforwards. Deferred tax assets arising from temporary differences and loss carryforwards are reviewed for impairment at each balance sheet date.

Deferred tax assets are set off against deferred tax liabilities in accordance with IAS 12.74.

16. Other assets and other liabilities

Other assets include assets which, considered separately, are not significant for the disclosure of balance sheet assets and cannot be allocated to any other balance sheet item. This also includes Inventories, which shows activities related to the real estate business of LBBW Immobilien Management GmbH. These include mainly specific land and similar rights with finished and/or unfinished buildings as well as project finance earmarked for sale in the course of ordinary business activities.

In accordance with IAS 2.9, inventories are measured at the lower of costs of inventories and net realizable value. The costs of purchase and production are calculated in accordance with IAS 2.10 et seqq.; the net realizable value is calculated pursuant to IAS 2.28 et seqq. The purchase and production costs of inventories that cannot be exchanged and of goods and products or services created and separated for special projects is calculated through allocation of their individual cost of purchase or production. The acquisition costs include the directly allocable costs of acquisitions and provision, the production costs include all directly allocable costs plus production and material costs. The expected, individually realizable sales proceeds less estimated completion costs and additional costs incurred until the sale are recognized as the net realizable value. The results of these operating activities are recognized under the Other operating income/expenses item, which also includes the changes in value.

The capitalization of borrowing costs on the basis of IAS 23 is conditional upon the property being a qualifying asset. These interest costs are largely incurred in connection with commercial project development, which can be attributed to the acquisition of land or the construction of buildings during the production period. Individual interest rates of between 0.85% p.a. and 2.50% p.a. (previous year: 0.85% and 2.25% p.a.) were applied.

Other liabilities include accruals and obligations which, considered separately, are not significant for the disclosure of balance sheet liabilities and cannot be allocated to any other balance sheet item.

Assets and liabilities in these items are measured at amortized cost.

17. Provisions

Provisions for pensions and other post-employment benefit obligations

General

Provisions for pensions and similar obligations primarily consist of provisions for the obligation to pay company pensions, on the occurrence of biometric risks (old age, invalidity, death) based on direct pension commitments. The nature and amount of the pension payable to employees entitled to pension benefits are governed by the applicable pension rules (including total commitments or company agreements), which depend largely on the date that employment commenced. Due to other commitments, further indirect entitlements or claims exist against LBBW's supplementary pension fund (Zusatzversorgungskasse - ZVK) and the benevolent fund (Unterstützungskasse LBBW e.V); both facilities are closed for new policies. All the aforementioned pension commitments are defined benefit plans within the meaning of IAS 19.

A unit-linked commitment (LBBW VorsorgeFonds Plus), which invests via a life-cycle model through a contractual trust arrangement (CTA), was introduced for new entrants after 31 December 2016. LBBW VorsorgeFonds Plus comprises an employer-funded Basiskonto (retirement account financed by the employer) and an employee-funded Aufbaukonto (retirement account to which contributions are made by the employee).

Furthermore there are indirect pension commitments from pension benefits from predecessor institutions which are taken over and continued and recognized as defined contribution plans within the meaning of IAS 19. To finance this, the relevant Group company contributes set amounts to external pension funds with individual participation by employees.

Employer-funded pension plans within Germany

As part of the merger that led to the creation of LBBW in 1999, all existing pension arrangements were closed for new policies and a standard pension fund was introduced for new entrants in the form of a service contract; this is the so-called LBBW capital account plan (2000 and 2005) that is classified and entered as a defined benefit plan within the meaning of IAS 19. The company pensions will be disbursed primarily in the form of a one-off payment or in installments. The lump-sum benefits comprise annual components that are arrived at by multiplying a salary-related contribution with an age-related factors, which takes into account risk and biometric risks. The obligation to extend contributions now applies for a limited period of time and features a dynamization proviso.

Following the integration of the former Landesbank Sachsen, its pension arrangements from 2006 were also closed for new policies as at 31 December 2008 through a service agreement and the active employees were transferred to the LBBW capital account plan with an unlimited period of contribution. The entitlements accrued up to the time of integration were credited to the Basiskonto of the LBBW capital account plan as an initial benefit module. Following the integration of the former Landesbank Rheinland Pfalz, its pension commitments were concluded as part of collective bargaining agreements and continued for the employees active at that time.

As at 1 January 2002, persons with compulsory ZVK insurance were transferred to the LBBW capital account plan ZVK by way of a service agreement. To protect the vested rights, the contribution payable to the Basiskonto for this group of employees equates to the minimum contribution payable by the Bank as an apportionment contribution when applying the collective labor agreement on the additional pension provision for public-sector employees in the respective calendar year (minimum contribution).

The capital account plan 2005 that had previously been in place for new entrants was closed for new employees as at 31 December 2016. At the same time, the period of contribution of capital account plans 2000 and 2005 was ended via a declaration of termination to the General Staff Council with effect from 31 December 2025. Employer contributions are made annually in the Basiskonto of LBBW VorsorgeFonds Plus on the effective provision date, since 1 January 2017 for new entrants and as at 1 January 2026 for existing members of staff from the capital account plans 2000 and 2005 that have ended.

The paid-in contributions in the LBBW VorsorgeFonds Plus are paid into a CTA once a year, which invests these in line with an investment concept. The obligation vis-à-vis the employees is guided by the performance of the investment. The paid-in amounts are guaranteed (so-called guaranteed minimum performance). In the event of the benefit case, the funds are divested or the fund units attributable to the employee are calculated and a choice may be made between different payout options (lump sum, installments, retirement). The investment in the CTA (plan assets) measured at fair value is offset with the obligation from the LBBW VorsorgeFonds Plus.

Employer-financed commitments within Germany from predecessor institutions, acquired institutions and integrated institutions

Various pension arrangements – closed to new entrants – exist from different predecessor, acquired and integrated institutions. These range from period of service and salary-dependent, total benefit

commitments that sometimes relate to individual contractual provisions (retirement pension guidelines), limitation commitment and commitments with a split pension formula, through to pension component plans. Defined benefit plans should therefore be understood as commitments to grant a defined level of benefit in relation to the active salaries, taking into account additional pension payments (e.g. statutory pension), whereas a limitation commitment sets a defined level of benefit that may be not exceeded by the pension payments plus qualifying pension benefits.

Some current and former employees are entitled to aid (medical support). This was entered as defined benefit plans and the corresponding provisions pursuant to IAS 19 were created for employees that are still entitled to aid after entering retirement.

Employer-financed commitments within Germany

In order to establish further entitlements and to implement the legal claim to salary conversion, LBBW offers the so-called Aufbaukonto (retirement account to which contributions are made by the employee) of the LBBW VorsorgeFonds Plus as a direct pension commitment. This has replaced the Aufbaukonto of the previous capital account plan as at 1 January 2018. The converted contributions of the employees are paid into a CTA twice a year, which invests these in line with an investment concept. The obligation vis-à-vis the employees is guided by the performance of the investment. The paid-in amounts are guaranteed (so-called guaranteed minimum performance). In the event of the benefit case, the funds are divested or the fund units attributable to the employee are calculated and a choice may be made between different payout options (lump sum, installments, retirement). The investment in the CTA (plan assets) measured at fair value is offset with the obligation from the LBBW VorsorgeFonds Plus.

There are also employer-financed entitlements from earlier conversions of earnings into pension contributions. Insurance agreements were concluded to fund the pension benefits in only a small number of cases. There are no provisioning requirements for the deferred compensation option that is also offered, as this is entered as a defined benefit plan within the meaning of IAS 19. Direct insurance agreements are concluded with a provider from the savings banks' environment to secure long-term performance.

Commitments outside of Germany

The employees of Landesbank Baden-Württemberg's London Branch were offered a direct final salary pension plan that is based on the number of years in service, which is closed for new policies and was replaced by a defined contribution plan within the meaning of IAS 19 for new employees. The pension plan's pension obligations are backed by plan assets managed by a pension trust. The pension plan as well as the pension trust are subject to UK regulations, according to which the Bank and the trustees responsible for the trust have to develop a funding strategy and plan contributions to the trust. The Bank bears the risks from the pension plan, including investment and demographic risks (longevity risk, in particular). Annuity contracts were concluded in the past to hedge risk when retirement began for those entitled to a pension. Term life insurance policies to cover mortality risk during active service exist for some beneficiaries. The pension plan bears the remaining risk.

The Bank and the trustees review the investment strategy every three years and adjust it if necessary. If there is a shortfall in cover, a contribution plan is agreed to reach the desired degree of cover. Some of the plan assets, such as the annuity contracts, are covered by the expected payment obligations with matching maturities (asset-liability matching).

For reasons of immateriality, the information in Note 42 is not differentiated for the foreign plans.

Valuation and recognition in the balance sheet

According to the provisions of IAS 19 and the LBBW VorsorgeFonds Plus, the total obligations for the defined benefit plans are calculated annually by an independent actuary. In this process, the present value of the defined benefit obligation is calculated at each reporting date using the projected unit credit method. This calculation takes into consideration not only the pensions and entitlements known at the balance sheet date, but also the future expected rates of increase of pensionable salaries and pensions, the expected benefit cases (old age, invalidity, death) as well as fluctuation rates. In addition to the benefits trend, it is assumed in the measurement of the pension obligations that the active employees' benefit trend will be slightly higher than the average trend up to their 50th year, on account of career development. The present value of the pension obligations is based on a calculatory interest rate derived from the Willis Towers Watson's RATE:Link methodology. The data basis for determining the interest rate is the AA- rated corporate bonds compiled in Bloomberg for the eurozone by at least half of the rating agencies. Using actuarial methods, a yield curve is derived from this data, and from this a calculatory interest rate of similar maturity to the obligations is established. The probabilities of death, invalidity and probabilities of marriage are found in the mortality tables compiled by Prof. Klaus Heubeck. The age used for the start of retirement is 64 years. The premises described above are reviewed annually and adjusted if necessary.

Deviations from the expected development of the pension obligations as well as changes to the calculation parameters (employee turnover rate, salary increase, pension increase or discount rate) lead to so-called actuarial gains or losses. These are recognized directly in Retained earnings or Other comprehensive income in their full amount in the year they arise, resulting in corresponding changes in equity.

The amount to be recorded as an asset or liability is calculated from the present value of the defined benefit obligation at the balance sheet date less the fair value of the plan assets (if any) at the balance sheet date. The past service cost arises due to changes in the defined benefit plan that impact on the pension entitlements accrued. Interest expense is the share of the increase in the present value of the defined benefit obligation, or the existing plan assets of the pension provisions, that arise because the benefits are closer to settlement. The staff costs equate to the present value of the annual increase in the pension entitlements accrued plus unrecognized past service costs.

The income expected from the plan assets is offset against the interest expense, so that only net interest expense is recognized. The calculatory interest rate is used for calculating net interest income. Service cost and net interest income are reported under Administrative expenses.

Risks and management

In the case of defined benefit plans and the LBBW VorsorgeFonds Plus, the relevant Group company is obligated to grant benefits pledged to former employees and their dependents. The associated risks are borne by the Group company in question. In individual cases the group parent has made commitments to employees of subsidiaries and is reimbursed by the companies for the cost of the setting aside of provisions on an intragroup basis.

Material risks are balance sheet, liquidity and investment risks. In accordance with IAS 19, balance sheet risks arise especially in relation to the impact of pension obligations on equity, as the difference between expected and actual pension obligations is recognized under Other comprehensive income and leads to changes in equity. The basis and amount of balance sheet risk determine the aforementioned actuarial gains or losses. They can therefore provide relief or be a burden. The main factor in relation to balance sheet risks are the calculatory interest rate, the yield of the plan assets, as well as the other economic and demographic measurement factors.

The calculatory interest rate plays a key role in determining the scope of obligations, not least on account of its volatility. The general lowering of interest rates in the last two years resulted in a markedly lower calculatory interest rate and therefore to a sharp increase in the pension obligations. Furthermore, portfolio and market developments that deviate from the measurement assumptions impact on the obligation amount and therefore on the corresponding balance sheet items. Actual salary and pension increases that are higher or lower than assumed are reflected accordingly in losses or gains. With the general contribution and limit systems, the performance of the entitlements and claims in the event of external providers, such as BVV or the statutory pension scheme, impact on the level of provision to be made by the Group company, which can have a relatively strong impact on the pension obligations, especially with lasting trend changes. Besides the economic risks stated, so-called biometric risks also exist. Since a large proportion of the pension obligations is attributable to lifelong benefit entitlements, the risk of longevity in particular must be stated. Deviations in the actual mortality rates observed from the mortality tables also result in gains or losses.

Sensitivity analyses were carried out for the material parameters. In addition to the calculatory interest rate, the most influential parameters examined were the impact of the salary, pension and career trend, as well as the staff turnover probability. The mortality, salary and pension trend impact on the obligations arising from the capital accounts (Basiskonto and Aufbaukonto) and the fluctuation have comparatively little impact, since pension entitlements for active employees do not grow dynamically with the salaries retroactively based on the number of years spent working at the company. This will gradually reduce the balance sheet risk for the Group companies over time. This does not generally impact the obligations from the LBBW VorsorgeFonds Plus due to offsetting.

Meeting pension obligations entails the payment of pensions and therefore a capital outflow. Save for the calculatory interest rate, which does not impact on the amount of benefit payments, the balance sheet risk factors described above also affect the liquidity requirements. Since no plan assets were separated for the direct pension obligations, with the exception of the LBBW VorsorgeFonds Plus, the benefit payments must be met from the assets of the Group companies. Plan assets that are produced from the pension payments are available for the indirect obligations of LBBW's benevolent fund and supplementary pension fund as well as the direct obligations of the LBBW VorsorgeFonds Plus. If sufficient cover is not available, the sponsoring undertakings are required to make additional contributions. The plan assets are subject to investment risk that is countered by careful asset management.

The mandatory protection against the insolvency of LBBW pension obligations applies to commitments given before the elimination of the guarantor's liability in 2005, via the pension insurance association. All pension commitments dating from before this date are insolvency-protected through the guarantor's liability and maintenance obligation.

Other provisions

Provisions are recognized for uncertain obligations to third parties and anticipated losses from onerous contracts. Provisions are carried at the best estimate. This is the amount required to settle the present obligation at the balance sheet date (amount that LBBW or a consolidated subsidiary would rationally pay to settle the obligation or to transfer it to a third party) and which is most likely to occur. In doing so, management included empirical values from similar transactions and may have drawn on opinions by independent experts.

The other personnel-related provisions include provisions for staff anniversaries, provisions for early retirement and partial retirement and performance-related remuneration.

According to the provisions governing long service awards, an anniversary bonus is awarded to employees who have been with the Company for 10, 25, 40 and 50 years, the amount of which is guided by company or collective bargaining agreements. The corresponding anniversary provisions are calculated and set aside.

Provisions are also created for concluded partial retirement agreements. The legally required capital preservation of accrued benefits in the case of partial retirement is covered by a two-sided trustee agreement. The appropriated assets held in the custodian accounts is mostly invested in the money market and offset against the corresponding provisions.

Similarly, provisions are created for concluded early retirement agreements.

LBBW offers its employees in the Bank and some subsidiaries a long-term account, the so-called LBBW FlexiWertkonto. It offers employees the opportunity to pay in part of their remuneration in the FlexiWertkonto, which they can use again in the form of time (withdrawal time). A two-sided trustee agreement was drawn up to secure these accrued retirement benefits as prescribed by law. Provisions are created for obligations arising from these accounts and offset against the accrued retirement benefits.

As a rule, the same risks apply to all other provisions as for the post-retirement obligations, albeit to a much lesser extent owing to the shorter obligation period.

Provisions for off-balance-sheet credit risks as well as other provisions that include provisions for restructuring and legal disputes are carried where LBBW has a legal or constructive obligation from a past event where fulfilling the obligation is likely to lead to an outflow of resources embodying economic benefits and a reliable estimate of the amount of the obligation can be made. Please see the risk and opportunity report for further details of the legal risks.

Non-current provisions are discounted where the effect is material. Negative interest rates could also be used here.

18. Equity

The share capital is the capital paid in by the owners of Landesbank Baden-Württemberg pursuant to Section 5 of the Landesbank Baden-Württemberg Act (Gesetz über die Landesbank Baden-Württemberg) in conjunction with Section 3 of the articles of association of Landesbank Baden-Württemberg. The following entities are holders of the share capital of LBBW:

- Sparkassenverband Baden-Württemberg (Savings Bank Association of Baden-Württemberg) with 40.53%,
- State of Baden-Württemberg (state) with 24.99%,
- State Capital of Stuttgart (city) with 18.93%,
- Landesbeteiligungen Baden-Württemberg GmbH (Landesbeteiligungen BW) with 15.55%.

The capital reserve includes the amount in excess of the (theoretical) nominal value that is achieved when issuing units (offering premium).

In addition to transfers from the net consolidated profit/loss, retained earnings include the Group's share in the unappropriated profit/loss of the consolidated subsidiaries to the extent that these profits were generated since their affiliation to the Group. The effect of first-time adoption of IFRS 16 also led to a change in retained earnings. In addition, retained earnings include the effects of actuarial gains/losses and the associated deferred taxes in connection with the recognition of provisions for pensions. This item also includes realized gains and losses from its own credit rating (own credit spread) and the associated deferred taxes.

Other comprehensive income includes valuation reserves from the measurement of debt and equity instruments, which are measured at fair value through other comprehensive income including the offsetting item from the recognition of deferred tax assets and liabilities. The measurement effects from debt instruments that were allocated to a portfolio with the business model Hold to Collect and Sell are transferred to the income statement in profit or loss upon realization. The measurement effects from equity instruments measured at fair value through other comprehensive income are, like current tax effects, also transferred to retained earnings upon realization.

In addition, the currency translation reserve is also recognized in »Other comprehensive income«. The balance of currency translation differences arising due to capital consolidation is allocated to the currency translation reserve. These amounts arise from the translation of the annual financial statements of an economically independent entity into the Group's reporting currency. Another element of Other comprehensive income is the unrealized Measurement gain or loss from the own credit rating (own credit spread) and the opposite item from the setting aside of deferred tax assets and liabilities.

LBBW issued an AT1 bond in the 2019 financial year. As LBBW is not contractually obliged to repay this or to make current payments, this bond meets the definition of an equity instrument. It is thus recognized under the new sub-item »additional equity components«.

Non-controlling interests are stated as a separate subitem in equity; besides the shareholders of the parent company, other shareholders hold a stake in the equity of individual subsidiaries.

Segment reporting

LBBW's segment reporting for the 2019 financial year is also drawn up 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.

LBBW's segment reporting is divided into the following segments:

- The »**Corporate Customers**« segment comprises business with SMEs, with a focus on the core markets of Baden-Württemberg, Saxony, Rhineland-Palatinate and other attractive economic areas, such as North Rhine-Westphalia, Bavaria and the greater Hamburg area. Business with our key accounts and the public sector are also bundled in this segment. On the financing side, the solutions offered range from classic to structured and off-balance-sheet financing. Furthermore, this segment provides services in the areas of cash management, interest rate, currency and commodities management in addition to asset and pension management. The results of capital market business products and foreign business products and those sourced from corporate customers are also reported here. In accordance with the business focus for corporate customers, the segment primarily includes the following subsidiaries: Süd Beteiligungen, SüdLeasing GmbH, MMV Bank GmbH and SüdFactoring GmbH.
- The »**Real Estate/Project Finance**« segment primarily focuses on commercial real estate business, including business with real estate and housing companies in addition to structured project finance. Alongside the core market of Germany, commercial real estate financing focuses on selected metropolitan areas in the US, Canada and the UK. Property, portfolio and corporate financing structures are offered to real estate clients as an arranger or syndicate bank with a supplementary range of liability, interest rate and currency management products. Project Finance offers financing solutions for major projects and infrastructure and transport financing. The segment also includes the subsidiary LBBW Immobilien Management GmbH.
- The »**Capital Markets Business**« segment offers products for the management of interest rate, currency and credit risk and liquidity management for institutional, banks and savings banks customer groups. In addition, the segment includes products and services for international business. Equity and debt financing solutions are also offered on the primary market, along with asset management services and custodian bank services. Besides all customer business with banks, states, insurance companies and pension funds, the segment also includes related trading activities. The »Corporate Customers« segment includes all results from financial market transactions with corporate customers. All treasury activities are also allocated to this segment. This essentially comprises the central investment of own funds, lending/deposit taking operations and balance sheet structure management, liquidity management, the specifics of IFRS in connection with refinancing, FX management and hedge accounting, not to mention the management of strategic investments and cover funds. The subsidiary LBBW Asset Management Investmentgesellschaft mbH is also allocated to this segment.

- The »**Private Customers/Savings Banks**« segment comprises all activities with private customers in retail banking in addition to services for high net-worth private clients with more extensive consultancy requirements. Business customers including non-medical practitioners, freelancers and tradespeople are also assigned to this segment. As part of a comprehensive customer management approach, the segment serves both the business and private requirements of its tradespeople customers. The product range extends from checking accounts and card business to financing solutions, investment advice and special services – in particular for high net-worth private clients – such as asset management, securities account management and foundation management. Selected business activities connected with the Bank's function as the central bank for savings banks are also included in this segment.
- The »**Corporate Items**« segment comprises all business activities not included in the above segments. In particular, these are the financial investments and the management of the Bank's portfolio of buildings. In addition, the previous year figures here also include the final earnings effects from the former Credit Investment portfolio.
- The »**Reconciliation/Consolidation**« column includes purely consolidation adjustments and also shows the reconciliation of internal financial control data to external financial reporting data.

Measurement methods

Segment information is based on the internal 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 before allowances for losses on loans and advances and other operating income/expenses.

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

The segment reporting also takes into account the retroactive adjustments to the income statement (see Note 2).

Segment results

01/01 - 31/12/2019 EUR million	Corporate Customers	Real Estate/ Project Finance	Capital Markets Business	Private Customers/ Savings Banks	Corporate Items/ Reconciliation/ Consolidation	LBBW Group
Net interest income	806	376	207	306	- 19	1,676
Net fee and commission income	177	20	130	244	- 13	558
Net gains/losses on remeasurement and disposal ¹	- 56	26	279	0	- 80	169
of which allowances for losses on loans and securities ²	- 128	21	1	- 4	- 42	- 151
Other operating income/expenses	13	98	8	9	20	148
Total operating income/expenses	941	520	624	558	- 92	2,551
Administrative expenses	- 608	- 156	- 463	- 527	- 52	- 1,806
Expenses for bank levy and deposit guarantee system	- 29	- 13	- 44	- 2	- 14	- 102
Net income/expenses from restructuring	0	0	0	- 2	- 29	- 31
Consolidated profit/loss before tax	303	351	117	28	- 186	612
Income taxes						- 167
Net consolidated profit/loss						444
Segment assets ³ (EUR billion)	62.5	28.6	126.0	35.0	4.5	256.6
Risk-weighted assets ⁴ (EUR billion)	36.7	12.6	16.8	8.5	5.8	80.5
Tied-up equity ⁴ (EUR billion)	4.9	1.7	2.2	1.1	3.3	13.2
RoE (in %)	6.2	20.9	4.7	2.6		4.6
CIR (in %)	59.7	33.9	81.4	94.4		71.8

1 Net income/investments from investments accounted for using the equity method allocated to the segments and results from the disposal of such companies amount to EUR 6 million for the »Corporate Customers« segment, EUR 0 million for the »Real Estate/Project« Finance segment and EUR 0 million for »Corporate Items«.

2 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 - 0.5 million.

3 The shares of investments accounted for using the equity method allocated to the segments amount to EUR 257 million for »Corporate Customers«, EUR 8 million for »Real Estate/Project Finance« and EUR 0 million for »Corporate Items«.

4 In accordance with CRR/CRD IV.

01/01 - 31/12/2018 EUR million	Corporate Customers	Real Estate/ Project Finance	Capital Markets Business ¹	Private Customers/ Savings Banks	Corporate Items/ Reconciliation/ Consolidation	LBBW Group ¹
Net interest income	789	278	158	316	18	1,558
Net fee and commission income	169	15	117	230	- 18	513
Net gains/losses on remeasurement and disposal ²	- 37	- 3	290	14	- 51	213
of which allowances for losses on loans and securities ³	- 88	- 6	2	6	- 56	- 142
Other operating income/expenses	20	101	3	- 1	17	140
Total operating income/expenses	941	391	569	558	- 34	2,424
Administrative expenses	- 616	- 150	- 456	- 517	- 34	- 1,773
Expenses for bank levy and deposit guarantee system	- 26	- 12	- 45	- 4	- 2	- 89
Net income/expenses from restructuring	0	0	- 15	1	2	- 12
Consolidated profit/loss before tax	298	228	54	38	- 69	549
Income taxes						- 136
Net consolidated profit/loss						413
Segment assets ⁴ (EUR billion)	60.1	28.0	113.9	33.7	5.5	241.2
Risk-weighted assets ⁵ (EUR billion)	36.1	13.1	16.7	8.3	6.2	80.3
Tied-up equity ⁵ (EUR billion)	4.5	1.4	2.5	1.0	3.4	12.9
RoE (in %)	6.6	15.9	2.0	3.3		4.3
CIR (in %)	62.4	40.8	91.0	94.2		73.1

1 Restatement of prior year amounts (see Note 2).

2 Net income/investments from investments accounted for using the equity method allocated to the segments and results from the disposal of such companies amount to EUR 26 million for the »Corporate Customers« segment, EUR 2 million for the »Real Estate/Project« Finance segment and EUR - 4 million for »Corporate Items«.

3 Relates to the category »Financial assets measured at amortized cost«. In addition, the allowances for losses on loans and advances for »Financial assets measured at fair value through other comprehensive income« is attributable to a net reversal of EUR 0.8 million.

4 The shares of investments accounted for using the equity method allocated to the segments amount to EUR 259 million for »Corporate Customers«, EUR 8 million for »Real Estate/Project Finance« and EUR 0 million for »Corporate Items«.

5 In accordance with CRR/CRD IV.

Details on Corporate Items, Reconciliation and Consolidation

EUR million	Corporate Items		Reconciliation/Consolidation		Corporate Items/Reconciliation/ Consolidation	
	01/01 - 31/12/2019	01/01 - 31/12/2018	01/01 - 31/12/2019	01/01 - 31/12/2018	01/01 - 31/12/2019	01/01 - 31/12/2018
Net interest income	6	35	- 25	- 16	- 19	18
Net fee and commission income	- 12	- 10	- 1	- 7	- 13	- 18
Net gains/losses on remeasurement and disposal ¹	- 80	- 30	0	- 21	- 80	- 51
of which allowances for losses on loans and securities ²	- 42	- 56	0	0	- 42	- 56
Other operating income/expenses	20	17	0	0	20	17
Total operating income/expenses	- 66	11	- 26	- 45	- 92	- 34
Administrative expenses	- 52	- 34	0	0	- 52	- 34
Expenses for bank levy and deposit guarantee system	- 14	- 2	0	0	- 14	- 2
Net income/expenses from restructuring	- 29	2	0	0	- 29	2
Consolidated profit/loss before tax	- 160	- 24	- 26	- 45	- 186	- 69
Segment assets ³ (EUR billion)	5.4	5.6	- 0.9	- 0.1	4.5	5.5
Risk-weighted assets ⁴ (EUR billion)	7.7	8.2	- 1.8	- 2.1	5.8	6.2
Tied-up equity ⁴ (EUR billion)	3.6	3.6	- 0.3	- 0.3	3.3	3.4

1 Net income/investments from investments accounted for using the equity method allocated to the segments and results from the disposal of such companies amount to EUR 0 million for Corporate Items (previous year: EUR - 4 million).

2 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 - 0.5 million in the current year (previous year: net reversal of EUR 0.8 million).

3 The shares of investments accounted for using the equity method allocated to the segments amount to EUR 0 million for »Corporate Items« (previous year: EUR 0 million).

4 In accordance with CRR/CRD IV.

Despite the environment remaining difficult, LBBW's »consolidated profit/loss before tax« amounted to EUR 612 million in the 2019 financial year, far above the previous year's result of EUR 549 million. Thanks to continuing to successfully generate profitable growth in business with customers, the operating segments »Corporate Customers«, »Real Estate/Project Finance«, »Capital Markets Business« and »Private Customers/Savings Banks« made a substantial contribution totaling EUR 798 million to consolidated profit/loss before tax in 2019. Thanks to cost discipline and higher income, LBBW's cost/income ratio (CIR) improved slightly to 71.8% despite expenses for further business optimization (previous year: 73.1%). LBBW's total assets picked up by EUR 15.4 billion to EUR 256.6 billion at the end of 2019 as a result of expanding operations across all operating segments. However, at EUR 80.5 billion, LBBW's risk weighted assets remained virtually on par with the previous year in the 2019 financial year (previous year: EUR 80.3 billion).

»Profit before tax« in the »Corporate Customers« segment was EUR 303 million, slightly up on the previous year. Volume growth in the lending business with SMEs and large corporate customers comfortably offset the ongoing pressure on margins resulting from low interest rates and intense competition. Cross selling proceeds also rose, especially in corporate finance business. Individual cases caused allowances for losses on loans and advances to increase to EUR - 128 million (previous year: EUR - 88 million). Administrative expenses declined moderately in the 2019 financial year from EUR - 616 million to EUR - 608 million. By contrast, »Expenses for the bank levy and deposit guarantee system« rose from EUR - 26 million to EUR - 29 million. Overall, this caused the CIR to improve to 59.7% (previous year: 62.4%). The increase in segment assets from EUR 60.1 billion to EUR 62.5 billion at the year-end is due mainly to the expansion of financing with SMEs. Risk weighted assets increased to EUR 36.7 billion (previous year: EUR 36.1 billion) due primarily to this business expansion.

In the Real Estate/Project Finance segment, profit before tax rose from EUR 228 million in the previous year to EUR 351 million, aided by non-recurring effects from early loan repayments. In operating

business, growth in commercial real estate financing and infrastructure and project financing comfortably offset the slight decline in margins in real estate financing. While allowances for losses on loans and advances were characterized by moderate provisioning requirements in the previous year (EUR - 6 million), the segment saw net reversals in the 2019 financial year, reflecting the ongoing good portfolio quality. Growth caused administrative expenses to increase slightly from EUR -150 million to EUR -156 million. Overall, this caused the CIR to improve substantially to 33.9% (previous year: 40.8%). The increase in segment assets from EUR 28.0 billion to EUR 28.6 billion at the year-end is due mainly to good new business in project financing. Risk-weighted assets fell to EUR 12.6 billion (previous year: EUR 13.1 billion), in particular a result of lower risk weightings in the portfolio.

Despite the ongoing challenging environment, profit/loss before tax in the Capital Markets Business segment was EUR 117 million in 2019, up significantly on the previous year's figure of EUR 54 million. The change in risk management in business with fixed-income securities, realigning and optimizing the sales approach in the previous year and the strengthened customer business resulting from this all played a particular role here. Administrative expenses saw moderate growth from EUR -456 million to EUR -463 million. In contrast, the absence of restructuring expenses (previous year: EUR -15 million) provided relief for the segment. Overall, this caused the CIR to improve substantially to 81.4% (previous year: 91.0%). The increase in segment assets from EUR 113.9 billion to EUR 126.0 billion is also due to purchasing debentures in connection with the LCR portfolio. At EUR 16.8 billion, risk-weighted assets were similar to the previous year's figure (EUR 16.7 billion).

Profit before tax in the Private Customers/Savings Banks segment fell in the 2019 financial year but remained positive at EUR 28 million (previous year: EUR 38 million). With pressure on margins remaining high in the deposit business on account of low interest rates, slight increases in revenues could be seen, above all in securities and brokerage business. Individual cases caused allowances for losses on loans and advances, which were marked by net reversals in the previous year, to increase to EUR -4 million (previous year: EUR 6 million). Despite cost discipline, administrative expenses also increased to EUR -527 million due to investment in a modern digital range (previous year: EUR -517 million). In total, the CIR remained on par with the previous year at 94.4% (previous year: 94.2%). The increase in segment assets from EUR 33.7 billion to EUR 35.0 billion is thanks in part to expanding wealth management. The segment's Group's risk weighted assets increased slightly to EUR 8.5 billion in 2019 (previous year: EUR 8.3 billion).

Profit/loss before tax in the Corporate Items segment was EUR -160 million in 2019, down significantly on the previous year's figure of EUR -24 million. The chief reasons for this were the EUR 33 million surplus generated in the previous year in connection with dissolving the Sealink structure, methodological developments in calculating funding valuation adjustments as part of measuring unsecured derivatives (EUR -37 million - relating to previous years), higher allocations to the guarantee system of the Sparkassen-Finanzgruppe (EUR -11 million) - especially in connection with supporting NordLB - and restructuring provisions for financing further efficiency measures (EUR -29 million). Segment assets amounted to EUR 5.4 billion (previous year: EUR 5.6 billion). Risk weighted assets during the 2019 financial year came to EUR 7.7 billion (previous year: EUR 8.2 billion).

Reconciliation of segment results to the consolidated income statement

In the 2019 financial year, the total of »Reconciliation/Consolidation« on the consolidated profit/loss before tax increased to EUR -26 million (previous year: EUR -45 million) and is essentially due to the following factor:

- 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.

Disclosures at the company level

Information about products and services

With regard to the allocation of income to products and services required under IFRS 8.32, please refer to the explanations entitled »Notes to the income statement« in the Notes.

Segmentation according to geographical region

The allocation of results to geographical regions is based on the head office of the branch or Group company and is as follows for LBBW:

01/01- 31/12/2019 EUR million	Germany	Europe (excl. Germany)	America	Asia	Reconciliation/ Consolidation	LBBW Group
Total operating income/expenses	2,268	105	134	45	- 1	2,551
Consolidated profit/loss before tax	418	75	94	24	1	612

01/01- 31/12/2018 EUR million	Germany ¹	Europe (excl. Germany)	America	Asia	Reconciliation/ Consolidation	LBBW Group ¹
Total operating income/expenses	2,169	76	129	30	20	2,424
Consolidated profit/loss before tax	383	44	88	12	22	549

¹ Restatement of prior year amounts (see Note 2).

Notes to the income statement

19. Net interest income

Net interest income also includes interest and dividend income and the associated refinancing expenses for financial instruments mandatorily measured at fair value through profit or loss and for financial instruments designated at fair value. In addition, the payments to typical silent partners are reported under Interest expense due to the classification of silent partners' contributions as debt in accordance with IAS 32.

EUR million	01/01- 31/12/2019	01/01 - 31/12/2018
<i>Interest income and current income from equity instruments</i>	14,051	13,966
Interest income	14,016	13,919
Trading derivatives	9,265	9,532
Lending and money market transactions	2,899	2,696
Hedging derivatives	822	793
Fixed-income securities and debentures	206	149
Early termination fees ¹	152	68
Leasing business	246	289
Other	427	392
Current income from equity instruments	36	47
Equities and other non-fixed-income securities	9	16
Equity investments and affiliates	25	30
Profit transfer agreements	2	1
Other	0	0
of which negative interest income	- 243	- 230
<i>Interest expenses and current expenses from equity instruments</i>	- 12,376	- 12,408
Interest expenses	- 12,373	- 12,406
Trading derivatives	- 8,900	- 9,258
Hedging derivatives	- 728	- 720
Deposits	- 1,186	- 1,035
Securitized liabilities	- 716	- 643
Leasing business	- 29	- 40
Lease liabilities	- 3	n/a
Subordinated capital	- 255	- 221
Other	- 558	- 489
Current expenses from equity instruments	- 3	- 2
Transfer of losses	- 3	- 2
of which positive interest expenses	225	220
Total	1,676	1,558

¹ The offsetting effect from refinancing costs is included in interest expenses.

Net interest income rose moderately, thanks primarily to business expansion and a rise in early termination fees resulting from early loan repayments. Expanding business with major corporate customers and in the area of real estate and project financing particularly benefited this item. Ongoing historically low interest rates particularly strained the deposit business. Pressure on margins in the sector was high and was also compounded by the ECB lowering the deposit rate from - 0.4% to - 0.5%.

The absence of the non-recurring effect seen in the previous year in connection with dissolving the Sealink portfolio, which bundled securities from the former Sachsen LB, also had a negative effect. After the sale of the final securities by the administrator and the repayment of loans extended by LBBW to Sealink, LBBW (Bank) booked a EUR 33 million share of the surplus as at 31 December 2018.

Net interest income for 2019 financial year included EUR 16 million (previous year: EUR 31 million) in connection with government grants under targeted longer-term refinancing operations II (TLTRO II).

The negative interest income results from reserve holdings with the ECB, banks and institutional customers that exceed the bank's reserve requirement. These customer groups also generate income through positive interest expenses.

Net interest income 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	01/01 - 31/12/2019	01/01 - 31/12/2018
Financial assets measured at amortized cost		
Interest income	3,013	2,709
of which negative interest income	- 240	- 224
Financial assets measured at fair value through other comprehensive income		
Interest income	290	270
of which negative interest income	- 3	- 5
Financial liabilities measured at amortized cost		
Interest expenses	- 1,980	- 1,825
of which positive interest expenses	225	220

20. Net fee and commission income

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Fee and commission income	688	643
Securities and custody business	271	251
Payments business	132	125
Brokerage business	56	53
Loans and guarantees ¹	130	117
Other	99	96
Fee and commission expenses	-130	-129
Securities and custody business	-76	-76
Payments business	-25	-27
Loans and guarantees ¹	-10	-10
Brokerage business	-8	-6
Leasing business	-3	-3
Other	-9	-8
Total	558	513

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 payment transactions, securities and custody business are recognized on a pro-rata basis over the performance period. The transaction price is determined on the basis of the agreed payment and is recognized in the amount at which no reimbursement is anticipated. These services include providing credit and debit cards and services as part of portfolio management and custodian business. Fees within the context of credit transactions and the guarantee business are recognized on a pro rata basis over the performance period. Services are billed either during the year or at the end of the year depending on the type of service provided.

Almost all types of commission increased. In particular, net fee and commission income from the securities and custody business climbed considerably. In particular, this rise reflects good performance in the securities and underwriting business as a result of issuing debt securities. In addition, net gains/losses from loans and guarantees also benefited from the operating performance in almost all areas of business, also increasingly significantly. High demand in real estate brokerage, insurance and for closed-end funds constituted the basis for slight growth in brokerage business. Net fee and commission income in the payments business also rose slightly.

»Other net fee and commission income« mainly comprises income and expenses from asset management and factoring fees.

Net fee and commission income resulted mainly from financial assets and financial liabilities not measured at fair value through profit or loss.

21. Net gains/losses on remeasurement and disposal

Net gains/losses on remeasurement break down as follows:

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Net income/expenses from investments accounted for using the equity method	6	24
Net gains/losses from financial assets measured at amortized cost	- 142	- 142
Net gains/losses from financial instruments measured at fair value through other comprehensive income	23	38
Net gains/losses from financial instruments measured at fair value through profit or loss	282	293
Total	169	213

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

»Net income/expenses from investments accounted for using the equity method« comprise the contributions to profit from joint ventures recognized through profit or loss and associates accounted for using the equity method. Changes recognized directly in equity in investments accounted for using the equity method are recognized directly in equity.

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Net gains/losses on measurement	6	24
Net gains/losses from investments in associates	6	26
Current income	23	11
Impairment	-16	-2
Reversals of impairment losses	0	17
Net gains/losses from shares in joint ventures	0	-2
Current expenses	0	-2
Current income	0	2
Impairment	0	-2
Total	6	24

The year-on-year decline in net consolidated total comprehensive income essentially reflects impairment at an associate, which stands in contrast to the previous year when write-downs were reversed.

Net gains/losses from financial assets measured at amortized cost

»Net gains/losses from financial assets measured at amortized cost« includes both net gains/losses on measurement and net gains/losses on disposal for transactions allocated to the business model »Hold« at LBBW that meet the contractual cash flow criterion:

EUR million	01/01 - 1/12/2019	01/01 - 31/12/2018
<i>Net gains/losses on remeasurement (allowances for losses on loans and securities)</i>	- 151	- 142
Reversal of/disposals from allowances for losses on loans and securities	243	249
Net gains/losses from provisions for lending business	- 24	- 29
Recoveries on loans and securities previously written off	20	24
Direct loan write-offs	- 11	- 20
Additions to allowances for losses on loans and securities	- 370	- 364
Other expenses for the lending business	- 9	- 3
<i>Realized gains/losses</i>	9	0
Lending business net gains/losses on disposal	9	0
Total	- 142	- 142

This mainly reflects allowances for losses on loans and securities. LBBW continues to enjoy good portfolio quality, as demonstrated by the very high exposure share in the investment grade range and a low default rate.

Determining losses on loans and advances under IFRS 9 may result in situations where the modeling no longer delivers unbiased results, for example in the event of significant disruptive elements due to macroeconomic, political or legal developments that cannot yet be sufficiently accounted for in the ratings on which the allowances for losses on loans and advances are based. As well as taking into account forward-looking information on a parameter-specific basis, qualitative information, estimates, scenario analyses and simulations were therefore also used to calculate losses on loans and advances. The situations described above were recognized in particular with regard to the consequences of a no-deal Brexit where no free trade agreement is reached with the European Union and of the transition to e-mobility, and were already taken into account in the allocation of allowances for losses on loans and advances in 2018. The estimates were reassessed at the end of 2019. However, there were changes within individual areas, in particular in relation to illustrating the impact of the move towards increased e-mobility.

Other expenses for the lending business in the reporting period, which came to EUR -9 million (previous year: EUR -3 million), included initial corrections to the carrying amounts for receivables impaired in the acquisition period in the amount of EUR 5 million (previous year: EUR 0 million).

Gains or losses recognized in profit or loss due to derecognizing financial assets measured at amortized cost resulted from the following:

31/12/2019	Derecognition	Derecognition
EUR million	gain	loss
Derecognition due to sale	10	0
Derecognition due to termination	0	- 1

31/12/2018	Derecognition	Derecognition
EUR million	gain	loss
Derecognition due to sale	1	0

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

»Net gains/losses from financial instruments measured at fair value through other comprehensive income« shows allowances for losses on loans and advances to be recognized in profit or loss for net gains/losses from financial instruments allocated to the LBBW business model »Hold to Collect and Sell« that meet the contractual cash flow criterion. The change in the fair value of these financial instruments is recognized through »other comprehensive income«.

EUR million	01/01 – 31/12/2019	01/01 – 31/12/2018
<i>Net gains/losses on remeasurement (allowances for losses on loans and securities)</i>	0	1
Reversal of/disposals from allowances for losses on loans and securities	1	2
Additions to allowances for losses on loans and securities	- 1	- 1
<i>Realized gains/losses</i>	23	37
Net gains/losses on disposal	23	37
Total	23	38

The decline in net gains/losses from financial instruments measured at fair value through other comprehensive income was caused in particular by lower contributions from the sale of debt instruments.

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

»Net gains/losses from financial instruments measured at fair value through profit or loss« includes the net gains/losses on remeasurement and disposal for financial assets allocated to the business model »Sell« and for transactions that do not meet the contractual cash flow criterion. In addition, this reports net gains/losses from hedging transactions, net gains/losses from financial instruments designated at fair value and net gains/losses from non-consolidated equity investments and affiliates for which the option to measure through other comprehensive income at fair value was not exercised.

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Net gains/losses from hedging transactions	- 33	- 12
Portfolio fair value hedge	- 31	- 12
of which hedged items	414	38
of which hedging instruments	- 444	- 51
Micro fair value hedge	- 3	0
of which hedged items	86	45
of which hedging instruments	- 88	- 45
Net trading gains/losses	260	232
Lending business	- 14	- 4
Equity transactions	739	- 506
Foreign exchange transact	28	12
Economic hedging derivatives	135	128
Interest rate transactions	- 635	595
Gains/losses from foreign exchange/commodity products	8	7
Net income/loss from financial instruments designated at fair value	- 70	18
Realized gains/losses	- 3	- 2
Unrealized gains/losses	- 67	20
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	125	55
Net gains/losses from bills	0	- 1
Net gains/losses from credits and loans	97	24
Net gains/losses from equity investments	25	11
Net gains/losses from investments in affiliates	- 1	3
Net gains/losses from shares and other equity instruments	4	18
Total	282	293

The item's performance was mixed in the last reporting year. Measurement effects from hedging transactions for hedging items designated at fair value had an impact on net trading gains/losses, which were improved overall. The offsetting effect from hedged items is presented in net gains/losses from financial instruments designated at fair value. Expenses of EUR 52 million were also incurred as a result of methodological developments in calculating funding valuation adjustments (FVA) as part of measuring unsecured derivatives.

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.

Net gains/losses from equity investments benefited from the sale of a non-strategic equity investment at a subsidiary. 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.

Currency translation differences recognized in currency gains/losses from financial instruments not measured at fair value through profit or loss amounted to EUR 30 million (previous year: EUR - 300 million).

22. Other operating income/expenses

The key components of »other operating income/expenses« are income or expenses from investment property, inventories and provisions.

EUR million	01/01- 31/12/2019	01/01- 31/12/2018
Other operating income	531	425
Disposal of inventories	134	159
Reversal of other provisions	111	42
Revenue from property services	16	15
Income from cost refunds by third parties	31	32
Management of other property portfolios	3	3
Operating leases	22	20
Fixed assets and intangible assets	1	1
Lease income from investment property	53	52
Net income from the fair value measurement of investment property	43	32
Miscellaneous operating income	117	70
Other operating expenses	- 383	- 285
Disposal of inventories	- 106	- 135
Addition to other provisions	- 149	- 39
Management of other property portfolios	- 1	0
Operating leases	- 4	- 6
Operating expenses for leased properties	- 14	- 13
Net losses from the fair value measurement of investment property	- 8	- 1
Foreign currency translation on investment property	- 2	0
Miscellaneous operating expenses	- 100	- 91
Total	148	140

Miscellaneous operating income included contributions from concluded settlement negotiations. The first-time consolidation of a subsidiary also boosted income from construction contracts by EUR 8 million (previous year: EUR 1 million).

In addition, income from investment properties also increased, mostly by way of fair value adjustments.

Increase in/reversal of other provisions resulted in net expenses of EUR - 37 million (previous year: EUR 3 million), chiefly a result of the increase in provisions for legal risks.

The sub-item income and expenses from the disposal of inventories includes revenues in girder fabrication, revenues from real estate business, revenues from the sale of new properties, revenues from construction services, revenues from development measures and revenues from the sale of undeveloped land.

23. Administrative expenses

LBBW's »administrative expenses« comprise staff costs and other administrative expenses, depreciation and write-downs of property and equipment and amortization and write-downs of intangible assets and right-of-use assets.

EUR million	01/01- 31/12/2019	01/01- 31/12/2018
Staff costs	- 1,034	- 1,002
Wages and salaries	- 718	- 700
Expenses for pensions and benefits	- 122	- 130
Social security contributions	- 116	- 111
Other staff costs	- 78	- 61
Other administrative expenses	- 632	- 667
IT costs	- 312	- 311
Legal and consulting expenses	- 67	- 70
Expenses from operating leases	n/a	- 52
Expenses from leases	- 2	n/a
Buildings expenses	- 60	- 56
Association and other contributions	- 40	- 36
Advertising, public relations and representation costs	- 31	- 30
Audit costs	- 13	- 12
Miscellaneous administrative expenses	- 107	- 99
Depreciation, amortization and write-downs¹	- 141	- 104
Amortization and write-downs of intangible assets	- 67	- 69
Depreciation and write-downs of property and equipment	- 33	- 35
Depreciation and write-downs on rights-of-use	- 41	n/a
Total	- 1,806	- 1,773

¹ This includes scheduled and unscheduled write-downs. The partial amount of the unscheduled write-downs can be found in Notes 34 and 36.

Administrative expenses rose marginally year-on-year, essentially as a result of the rise in staff costs due to consolidating a subsidiary.

By contrast, other administrative expenses decreased slightly against the previous year. As well as lower legal and consulting costs, this chiefly reflected 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 (expenses from operating leases) to be shifted to write-downs on right-of-use assets 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 explains the substantial increase in depreciation.

With investment for restructuring and modernization remaining high, IT expenses were up marginally on the previous year.

For further explanations on leasing business, please see Note 61.

Expenses for pensions and other benefits included:

EUR million	01/01- 31/12/2019	01/01- 31/12/2018
<i>Expenses for defined benefit obligations</i>	- 113	- 121
Net interest income from defined benefit plans	- 55	- 54
Service cost	- 58	- 67
<i>Other expenses for pensions and benefits</i>	- 7	- 6
<i>Expenses for defined contribution obligations</i>	- 3	- 2
Total	- 122	- 130

In addition to the expenses for pensions, LBBW paid EUR - 59 million (previous year: EUR - 57 million) in the 2018 financial year into the German pension fund for employees and recorded this as an expense under social security contributions.

The fee for audit costs came to EUR - 13 million for the year as whole (previous year: EUR - 12 million). The fees for audit costs in accordance with IDW RS HFA 36 broke down as follows:

EUR million	01/01- 31/12/2019	01/01- 31/12/2018
Audit services	- 10	- 10
Other audit-related services	- 1	- 1
Other services	0	0
Total	- 11	- 11

The audit services related above all to the audits of the annual financial statements and the consolidated financial statements of the parent company, as well as various audits of the annual financial statements of its subsidiaries including mandatory extensions of contract and key points of the audit agreed with the Supervisory Board. Audit reviews of financial statements and project-related audits of IT-supported accounting-related systems and project-related audits on the introduction of new accounting-related standards were integrated in the audit.

The other audit-related services concern the issue of a comfort letter in conjunction with the issue of debentures and mandatory or contractually-agreed audits, such as the audit pursuant to Section 16j (2) sentence 2 of the German Act Establishing the Federal Financial Supervisory Authority (Gesetz über die Bundesanstalt für Finanzdienstleistungsaufsicht - FinDAG), the audit pursuant to Section 36 German Securities Trading Act (Wertpapierhandelsgesetz - WpHG) and Section 68 (7) of the German Capital Investment Code (Kapitalanlagegesetzbuch - KAGB), and the audit for assessing the contribution for the bank-related guarantee system of the Sparkassen-Finanzgruppe, which is recognized as a deposit guarantee system under Section 5 (1) of the German Deposit Guarantee Act (Einlagensicherungsgesetz - EinSiG).

Other services include quality assurance activities and training courses.

24. Expenses for bank levy and deposit guarantee system

This item includes expenses for the European bank levy in accordance with the Single Resolution Mechanism (SRM) and expenses for the deposit guarantee system in accordance with the German Deposit Guarantee and Investor Compensation Act (*Einlagensicherungs- und Anwenderentschädigungsgesetz (EAEG)*).

EUR million	01/01 - 30/12/2019	01/01 - 31/12/2018
Expenses for bank levy	- 69	- 64
Expenses for deposit guarantee system	- 33	- 25
Total	- 102	- 89

The rise in expenses for the bank levy and 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. 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.

25. Net income/expenses from restructuring

Expenses for restructuring measures are reported in this item. Provisions are only recognized if the general criteria for creating provisions in accordance with IAS 37 are fulfilled.

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Reversal of provisions for restructuring measures	0	3
Additions to restructuring provisions	-31	-15
Total	-31	-12

Expenses from restructuring rose on account of a follow-up program to reduce remaining structural surpluses and a program to adjust sales structures in the lending business.

26. Income taxes

Income and expenses from income taxes are broken down as follows:

EUR million	01/01- 31/12/2019	01/01- 31/12/2018
Current income taxes in the reporting period	- 91	- 56
Current income taxes from previous years	58	- 38
Current income taxes	- 33	- 94
of which decrease in actual income tax expense from utilization of previously unrecognized loss carryforwards and tax credits	9	7
Deferred income taxes	- 135	- 42
of which deferred income tax expense/income from change in temporary differences	- 157	187
of which deferred income tax expense/income from change in deferred tax assets from loss carryforwards	22	- 229
of which deferred tax expense/income from change in tax rates	5	0
of which deferred tax expense from write-downs or the reversal of earlier write-downs	59	15
of which decrease in deferred income tax expense from previously unrecognized loss carryforwards and tax credits	30	12
Total	- 167	- 136

The following reconciliation shows the relationship between reported and expected income taxes:

EUR million	01/01- 31/12/2019	01/01- 31/12/2018
Consolidated profit/loss before tax	612	549
Applicable tax rate	30.42%	30.42%
Expected income taxes	- 186	- 167
Tax effects		
from non-deductible operating expenses	- 22	- 43
from tax-free income	16	33
from change to value adjustments	17	2
from taxes from the previous year recorded in the financial year	- 10	34
from permanent tax effects	10	9
from changes in tax rates	- 5	0
from differing tax rates affecting on deferred taxes as shown in profit or loss	26	0
from other differences	- 13	- 3
Total	- 167	- 136

The applicable tax rate for the reconciliation is calculated as the combined corporate income tax rate including the solidarity surcharge of 15.825% applicable in Germany at the reporting date (previous year: 15.825%) and the trade tax rate (average: 14.59%, previous year: 14.59%) depending on the relevant multiplier (Hebesatz). This results in a total domestic tax rate of 30.42% for the Group (previous year: 30.42%).

The tax effect of non-deductible operating expenses is influenced primarily by the bank levy. Tax-free income includes in particular effects from tax-free dividend income.

The item tax effects from taxes from previous years recorded in the financial year essentially comprises the adjustment to the provision for the company audit at the domestic bank level.

The volume of tax loss and interest carryforwards, as well as the installments for which deferred tax assets are not recognized or for which value adjustments were made, are shown in the following table. It is stated whether the loss and interest carryforwards not recognized can still be used in subsequent years according to the relevant tax law. Loss and interest carryforwards in companies subject to tax in Germany can be used for an indefinite period.

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Loss and interest carryforwards	4,234	4,119
of which loss and interest carryforwards for which deferred tax assets were created	768	575
of which loss and interest carryforwards for which no deferred tax assets were recognized	3,466	3,544
of which expire in 2019 and thereafter	11	11
of which non-forfeitable	3,455	3,533
Unrecognized temporary differences at the balance sheet date	0	2

Deferred tax assets of EUR 1 million (previous year: EUR 1 million) were recognized for Group companies that incurred a tax loss in the current or previous financial year that depends on the realization of future taxable results that are higher than the impact on earnings from the reversal of existing to taxable temporary differences. The approach is based on a tax planning calculation for the respective company or for the consolidated group.

Deferred tax assets are potential tax benefits arising from temporary differences between the carrying amounts of the assets and liabilities in the IFRS consolidated balance sheet and the national tax base. Deferred income tax liabilities are potential income taxes payable arising from temporary differences between the carrying amounts of assets and liabilities in the IFRS balance sheet and the national tax base.

Deferred tax assets and liabilities were recognized in connection with the following items in the 2019 financial year:

EUR million	Deferred tax assets		Deferred tax liabilities	
	2019	2018	2019	2018
Assets				
Financial assets measured at amortized cost	143	838	- 797	- 451
Financial assets measured at fair value through other comprehensive income	19	85	- 113	0
Financial assets designated at fair value	15	0	- 36	- 34
Financial assets mandatorily measured at fair value through profit or loss	6,027	2,797	- 415	- 163
Portfolio hedge adjustment attributable to assets	0	0	- 254	- 174
Non-current assets held for sale and disposal groups	0	0	- 8	0
Intangible assets	1	2	- 29	- 26
Property and equipment/investment property	33	21	- 193	- 90
Other assets	111	124	- 59	- 7
Equity and liabilities				
Financial liabilities measured at amortized cost	662	591	- 248	- 704
Financial assets designated at fair value	202	224	0	0
Financial liabilities mandatorily measured at fair value through profit or loss	2	1	- 5,077	- 2,703
Portfolio hedge adjustment attributable to liabilities	150	78	0	- 60
Provisions	768	644	- 4	- 1
Other liabilities	80	42	- 30	- 4
Loss and interest carryforwards	109	86	0	0
Outside basis differences	0	0	- 3	- 3
Net amount	- 7,233	- 4,393	7,233	4,393
Total	1,089	1,140	- 33	- 27
Change in the balance from deferred taxes				
of which changes recognized in profit or loss	- 135	- 42		
of which from valuation reserves (from FVOCI financial instruments)	- 59	76		
of which measurement gains/losses of financial liabilities	6	- 12		
of which retained earnings (provisions - actuarial gains/losses)	125	16		
of which other changes recognized directly in equity (first-time adoption IFRS 9)	6	82		

In the financial year, the valuation reserve (gains/losses on financial instruments measured at fair value through other comprehensive income) recognized tax effects totaling EUR 0 million (previous year: EUR 1 million) for deferred tax assets from loss carryforwards.

No deferred tax liabilities were recognized for taxable temporary differences of EUR 5 million (previous year: EUR 5 million) from shares in subsidiaries and joint ventures, since a reversal of the temporary differences is not expected in the near future.

Notes to the balance sheet

27. Cash and cash equivalents

EUR million	31/12/2019	31/12/2018
Balances with central banks	18,180	24,540
Cash	151	181
Total, gross	18,331	24,721
Total, net	18,331	24,721

This decline was essentially a result of lower central bank balances. Balances with central banks included balances with Deutsche Bundesbank of EUR 16,166 million (previous year: EUR 24,418 million).

28. Financial assets measured at amortized cost

Financial assets belonging to portfolios with the »Hold« business model and which meet the requirements for a simple loan agreement are reported in this balance sheet item. The item exclusively comprises non-derivative debt instruments such as receivables and securities.

Loans and advances to banks

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

EUR million	31/12/2019	31/12/2018
Public-sector loans	31,655	27,813
Current account claims	1,703	1,169
Securities repurchase transactions	11,392	7,673
Other loans	2,687	2,919
Borrower's note loans	70	70
Overnight and term money	6,881	5,680
Mortgage loans	597	565
Other receivables	834	867
Total, gross	55,819	46,756
Allowances for losses on loans and securities	- 19	- 6
Total, net	55,801	46,749

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

EUR million	31/12/2019	31/12/2018
Banks within Germany	37,223	33,541
Banks outside Germany	18,597	13,215
Total, gross	55,819	46,756
Allowances for losses on loans and securities	- 19	- 6
Total, net	55,801	46,749

An upturn in business with major European banks led in particular to a rise in securities repurchase business and overnight and term deposits. The stronger development in loan business with savings banks also allowed public-sector loans to rise.

Of loans and advances to banks (gross), EUR 22,469 million (previous year: EUR 22,353 million) had a term of over twelve months as at the reporting date.

Loans and advances to customers

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

EUR million	31/12/2019	31/12/2018
Other loans	28,446	24,493
Mortgage loans	31,782	32,219
Public-sector loans	11,492	12,308
Receivables from finance leases	5,828	5,307
Transmitted loans	3,760	3,308
Securities repurchase transactions	8,423	11,947
Current account claims	2,861	2,870
Overnight and term money	6,357	6,240
Borrower's note loans	7,312	6,298
Other receivables	4,935	5,091
Total, gross	111,197	110,080
Allowances for losses on loans and securities	- 877	- 849
Total, net	110,320	109,231

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

EUR million	31/12/2019	31/12/2018
Customers within Germany	76,679	75,332
Customers outside Germany	34,517	34,748
Total, gross	111,197	110,080
Allowances for losses on loans and securities	- 877	- 849
Total, net	110,320	109,231

Other loans increased thanks to successfully adopting the growth strategy by expanding financing business with major corporate customers and real estate financing. This was offset by a fall in securities repurchase transactions due to a reduction in business with clearing houses.

Loans and advances to customers (gross) amounting to EUR 73,525 million (previous year: EUR 69,926 million) had a term of over twelve months as at the reporting date.

For explanations on leasing business, see Note 61.

Debentures and other fixed-income securities

EUR million	31/12/2019	31/12/2018
Money market instruments	160	0
Government bonds and government debentures	394	394
Other bonds and debentures	536	762
<i>Total, gross</i>	<i>1,090</i>	<i>1,155</i>
Allowances for losses on loans and securities	- 8	- 10
<i>Total, net</i>	<i>1,082</i>	<i>1,146</i>

The item contains EUR 0 million (previous year: EUR 43 million) in total collateral provided with the protection buyer's right to resell or repledge.

Debentures and other fixed-income securities amounting to EUR 857 million (previous year: EUR 1,027 million) had a term of over twelve months as at the reporting date.

Further information on allowances for losses on loans and advances for »financial assets measured at amortized cost« are shown under Note 46.

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

The balance sheet item »Financial assets measured at fair value through other comprehensive income« includes debt instruments allocated to the LBBW business model »Hold to Collect and Sell« that meet the contractual cash flow criterion. This item also contains equity instruments for which the option of measurement at fair value through other comprehensive income in accordance with IFRS 9.4.1.4 was exercised.

EUR million	31/12/2019	31/12/2018
<i>Debentures and other fixed-income securities</i>	<i>25,045</i>	<i>19,487</i>
Money market instruments	1,488	963
Bonds and debentures	23,557	18,523
<i>Receivables</i>	<i>3,116</i>	<i>2,825</i>
<i>Equity instruments</i>	<i>487</i>	<i>509</i>
Equity investments	485	507
Shares in affiliates	2	2
<i>Total</i>	<i>28,648</i>	<i>22,821</i>

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.

The item contains EUR 483 million (previous year: EUR 825 million) in total collateral provided with the protection buyer's right to resell or repledge.

»Financial assets measured at fair value through other comprehensive income« amounting to EUR 25,198 million (previous year: EUR 19,341 million) had a term of over twelve months as at the reporting date.

Allowances for losses on loans and securities for financial assets measured at fair value through other comprehensive income are included in the Equity item. Further information can be found in note 46.

30. Financial assets designated at fair value

»Financial assets designated at fair value« comprise financial assets that are voluntarily recognized at fair value through profit or loss. The balance sheet item exclusively comprises debt instruments that meet the requirements for a simple loan agreement and which belong to portfolios with the »Hold« or »Hold to collect and sell« business models.

EUR million	31/12/2019	31/12/2018
<i>Debentures and other fixed-income securities</i>	61	44
Bonds and debentures	61	44
<i>Receivables</i>	1,109	1,163
Total	1,170	1,207

»Financial assets designated at fair value« amounting to EUR 1,150 million (previous year: EUR 1,146 million) had a term of over twelve months as at the reporting date.

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

This balance sheet item includes hedging instruments of hedge relationships that are active as at the reporting date with positive market values, financial instruments allocated to the business model »Sell« and transactions that do not meet the contractual cash flow criterion. Non-consolidated equity investments and affiliates for which the option to measure through other comprehensive income at fair value was not exercised are also reported here.

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

EUR million	31/12/2019	31/12/2018
Positive fair values from hedging derivatives	1,374	1,969
Trading assets	32,018	26,435
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and financial investments in equity instruments	1,218	1,375
Total	34,610	29,779

Positive fair values from hedging derivatives

The positive fair values from derivatives which are essentially used to secure hedged items against the interest rate risk and meet the requirements of IFRS hedge accounting are included in this item. Interest rate swaps and cross-currency interest rate swaps were designated as hedging instruments.

EUR million	31/12/2019	31/12/2018
Positive fair values from portfolio fair value hedges	986	1,625
Positive fair values from micro fair value hedges	389	344
Total	1,374	1,969

Positive fair values from portfolio fair value hedges declined on account of disposals.

Positive fair values from derivative hedging instruments amounting to EUR 1,303 million (previous year: EUR 1,764 million) had a term of over twelve months as at the reporting date.

The »positive fair values from derivative hedging instruments« were broken down by hedged items as follows:

EUR million	31/12/2019	31/12/2018
Assets		
Debentures and other fixed-income securities FVOCR	0	3
Equity and liabilities		
Derivative hedging instruments on deposits from banks	18	17
Derivative hedging instruments on deposits from customers	105	80
Derivative hedging instruments on securitized liabilities	32	33
Derivative hedging instruments on subordinated liabilities	234	211
Derivative hedging instruments on portfolio fair value hedges	986	1,625
Total	1,374	1,969

Trading assets

This shows financial assets allocated to the LBBW business model »Sell«.

EUR million	31/12/2019	31/12/2018
<i>Positive fair values from derivative financial instruments</i>	19,834	15,474
<i>Debentures and other fixed-income securities</i>	6,349	5,531
Money market instruments	399	320
Bonds and debentures	5,950	5,211
<i>Receivables</i>	4,925	4,344
Borrower's note loans	3,318	3,235
Other money market transactions	158	17
Receivables from securities repurchase agreements	800	0
Other receivables	649	1,092
<i>Equity instruments</i>	910	1,087
Equities	302	402
Investment fund units	607	685
Total	32,018	26,435

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

The item contains EUR 297 million (previous year: EUR 283 million) in total collateral provided with the protection buyer's right to resell or repledge.

Trading assets amounting to EUR 24,786 million (previous year: EUR 19,810 million) had a term of over twelve months as at the reporting date.

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

This subitem includes transactions that do not meet the contractual cash flow criterion and nonconsolidated equity investments and affiliates for which the option to measure through other comprehensive income at fair value was not exercised.

EUR million	31/12/2019	31/12/2018
<i>Debentures and other fixed-income securities</i>	16	18
Bonds	10	13
Silent partner contributions	5	5
<i>Receivables</i>	707	890
Loans and advances to customers	707	890
<i>Equity instruments</i>	495	467
Equities	12	12
Investment fund units	304	269
Equity investments	151	155
Shares in affiliates	27	31
Total	1,218	1,375

Assets of EUR 703 million (previous year: EUR 689 million) had a term of over twelve months as at the reporting date.

32. Shares in investments accounted for using the equity method

EUR million	31/12/2019	31/12/2018
Associates	260	262
Joint ventures	5	5
Total	265	266

33. 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.

Compared with the previous year, the following changes arose in relation to the non-current assets and disposal groups classified as held for sale:

- Sales negotiations began for three investment properties in the second half of 2018. The properties were sold in the first half of 2019. This affected the »Corporate Items« and »Real Estate/Project Finance« segments.
- In addition, sales negotiations began for two investment properties in the second half of 2019. The contract has already been signed for both properties. This relates to the »Corporate Items« reporting segment.
- Sales negotiations for a disposal group assigned to the »Corporate Items« reporting group also began in the reporting period. The contract has also been signed.
- Sales negotiations for two properties reported as property and equipment began in the second half of 2018. One property was sold in the first half of 2019 and the second in the second half of 2019. Both properties were assigned to the »Corporate Items« reporting segment.
- Sales negotiations were also conducted in the second half of 2019 for another property reported as property and equipment. The contract has already been signed. 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.

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

EUR million	31/12/2019	31/12/2018
Assets		
Investment property	57	23
Property and equipment	8	1
Total	65	24
Equity and liabilities		
Other liabilities	4	0
Total	4	0

34. Intangible assets

The changes in »intangible assets« are shown in the following tables for 2019 and 2018:

EUR million	Purchased software	Goodwill	Advance payments and cost for development and preparation	Other intangible assets	Internally generated intangible assets	Total
Historical cost						
Balance as at 1 January 2019	862	0	20	87	70	1,039
Additions	10	0	13	0	21	43
Transfers	3	0	- 16	0	13	0
Disposals	- 51	0	0	0	- 2	- 53
Balance as at 31 December 2019	824	0	17	87	102	1,030
Amortization and impairment losses/reversals of impairment losses						
Balance as at 1 January 2019	- 744	0	0	- 40	- 31	- 815
Scheduled amortization	- 44	0	0	- 4	- 16	- 64
Unscheduled write-downs	0	0	0	0	- 3	- 3
Disposals	49	0	0	0	2	50
Balance as at 31 December 2019	- 740	0	0	- 44	- 48	- 832
Carrying amounts						
Balance as at 1 January 2019	118	0	20	47	39	224
Balance as at 31 December 2019	84	0	17	43	53	198

EUR million	Purchased software	Goodwill	Advance payments and cost for development and preparation	Other intangible assets	Internally generated intangible assets	Total
Historical cost						
<i>Balance as at 1 January 2018</i>	857	0	20	88	46	1,010
Changes in the basis of consolidation	1	0	0	0	0	1
Additions	12	0	20	0	18	49
Transfers	12	0	- 19	0	7	0
Disposals	- 20	0	0	- 1	- 1	- 21
<i>Balance as at 31 December 2018</i>	862	0	20	87	70	1,039
Amortization and impairment losses/reversals of impairment losses						
<i>Balance as at 1 January 2018</i>	- 710	0	0	- 37	- 19	- 766
Scheduled amortization	- 53	0	0	- 4	- 13	- 69
Unscheduled write-downs	0	0	0	0	0	0
Disposals	19	0	0	1	1	21
<i>Balance as at 31 December 2018</i>	- 744	0	0	- 40	- 31	- 815
Carrying amounts						
Balance as at 1 January 2018	147	0	20	51	27	244
Balance as at 31 December 2018	118	0	20	47	39	224

Intangible assets of EUR 127 million (previous year: EUR 162 million) had a remaining useful life of more than twelve months as at the reporting date.

Amortization and write-downs (both scheduled and unscheduled) are recognized under the »Amortization and write-downs of intangible assets« item in »administrative expenses«.

35. Investment property

The carrying amounts of the investment property measured at fair value developed as follows in the year under review:

EUR million	Investment property	Rights-of-use from leases	Total
Carrying amount as at 31 December 2018	697	0	697
Initial adoption of IFRS 16	- 10	35	26
Carrying amount as at 1 January 2019	688	35	723
Additions	4	0	4
Disposals	- 2	0	- 2
Reclassification to non-current assets or disposal groups held for sale	- 108	- 4	- 112
Currency translation differences	5	1	6
Changes in fair value from assets (through profit or loss)	37	- 2	34
Reclassification from/to inventories and property and equipment	1	0	1
Carrying amount as at 31 December 2019	624	30	655

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

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

»Investment property« of EUR 654 million (previous year: EUR 697 million) had a remaining useful life of more than twelve months as at the reporting date.

See Note 50 ff. for additional quantitative information, in particular relating to the requirements under IFRS 13.

36. Property and equipment

Amortization and write-downs (both scheduled and unscheduled) are recognized under the »depreciation and write-downs of property and equipment« item in »administrative expenses«.

The following table shows the changes in »property and equipment« in the year under review and the previous year:

EUR million	Land and buildings	Technical equipment and machinery	Operating and office equipment	Advance payments and assets under construction	Leased assets under finance leases	Leased assets under operating leases	Rights-of-use from leases	Total
Historical cost								
Balance as at 31 December 2018	949	132	252	2	9	197	0	1,541
Initial adoption of IFRS 16	0	0	0	0	- 9	0	354	354
Balance as at 1 January 2019	949	132	252	2	n/a	197	354	1,886
Currency translation differences	1	0	1	0	n/a	0	0	2
Additions	11	1	13	24	n/a	13	27	89
Transfers	- 7	0	0	- 1	n/a	1	0	- 6
Disposals	0	- 1	- 14	- 1	n/a	0	- 6	- 21
Transfers to non-current assets and disposal groups held for sale	- 12	0	0	0	n/a	- 3	0	- 15
Balance as at 31 December 2019	942	133	251	25	n/a	208	376	1,934
Amortization and impairment losses/reversals of impairment losses								
Balance as at 31 December 2018	- 627	- 121	- 180	0	- 8	- 143	0	- 1,078
Initial adoption of IFRS 16	0	0	0	0	8	0	0	0
Balance as at 1 January 2019	- 627	- 121	- 180	0	n/a	- 143	0	- 1,070
Scheduled amortization	- 21	- 2	- 9	0	n/a	- 4	- 40	- 78
Transfers	4	0	0	0	n/a	1	0	5
Disposals	0	1	13	0	n/a	0	2	16
Transfers to non-current assets and disposal groups held for sale	5	0	0	0	n/a	2	0	7
Balance as at 31 December 2019	- 640	- 122	- 176	0	n/a	- 144	- 38	- 1,120
Carrying amounts								
Balance as at 1 January 2019	322	11	72	2	n/a	54	354	816
Balance as at 31 December 2019	302	10	75	25	n/a	64	338	814

EUR million	Land and buildings	Technical equipment and machinery	Operating and office equipment	Advance payments and assets under construction	Leased assets under finance leases	Leased assets under operating leases	Rights-of-use from leases	Total
Historical cost								
<i>Balance as at 1 January 2018</i>	880	132	255	1	9	258	n/a	1,535
Changes in the basis of consolidation	0	0	1	0	0	0	n/a	1
Currency translation differences	- 1	0	0	0	0	0	n/a	- 1
Additions	12	1	9	2	0	0	n/a	24
Transfers	61	0	0	0	0	- 61	n/a	0
Disposals	0	- 1	- 13	0	0	0	n/a	- 14
Transfers to non-current assets held for sale and disposal groups	- 3	0	0	0	0	- 1	n/a	- 4
<i>Balance as at 31 December 2018</i>	949	132	252	2	9	197	n/a	1,541
Amortization and impairment losses/reversals of impairment losses								
<i>Balance as at 1 January 2018</i>	- 582	- 119	- 180	0	- 7	- 165	n/a	- 1,053
Scheduled amortization	- 20	- 3	- 11	0	- 1	- 6	n/a	- 40
Unscheduled write-downs	- 1	0	0	0	0	0	n/a	- 1
Transfers	- 28	0	0	0	0	28	n/a	0
Disposals	0	1	12	0	0	0	n/a	12
Transfers to non-current assets and disposal groups held for sale	2	0	0	0	0	0	n/a	3
<i>Balance as at 31 December 2018</i>	- 627	- 121	- 180	0	- 8	- 143	n/a	- 1,078
Carrying amounts								
Balance as at 1 January 2018	299	13	75	1	2	93	n/a	482
Balance as at 31 December 2018	322	11	72	2	1	54	n/a	463

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

More details on leases can be found in Note 61.

As at the reporting date, »property and equipment« in the amount of EUR 711 million (previous year: EUR 366 million) had a remaining useful life of more than twelve months.

37. Income tax assets

EUR million	31/12/2019	31/12/2018
Current income tax assets	126	142
Domestic	110	138
Abroad	16	4
Deferred income tax assets	1,089	1,140
Total	1,215	1,282

Of the current income tax assets, EUR 126 million (previous year: EUR 142 million) is due within one year.

For a detailed description of income tax assets, see Note 26.

38. Other assets

Scheduled and unscheduled impairments are reported under the item »other operating income/expenses«.

EUR million	31/12/2019	31/12/2018
Inventories	762	669
Receivables from tax authorities	61	54
Other miscellaneous assets	1,797	1,294
Total	2,619	2,017

The rise in other miscellaneous assets is partly related to higher margin holdings. This also affected »Other liabilities« (see note 44).

»Other assets« included assets amounting to EUR 610 million (previous year: EUR 552 million) with a remaining useful life of more than twelve months.

»Inventories« increased primarily due to additions to various real estate projects and can be broken down as follows:

EUR million	31/12/2019	31/12/2018
Land and land rights, with unfinished buildings	434	244
Work in progress and development measures	89	77
Land and land rights, with finished buildings	0	1
Land and land rights, without buildings	110	214
Other inventories	128	133
Total	762	669

The carrying amount of »inventories« recognized at fair value less costs to sell was EUR 46 million (previous year: EUR 40 million).

The carrying amount of »inventories« pledged as collateral for liabilities amounted to EUR 289 million (previous year: EUR 216 million).

Borrowing costs of EUR 11 million (previous year: EUR 4 million) were capitalized.

LBBW recognizes precious metal portfolios, among other things, under »other inventories«.

39. Financial liabilities measured at amortized cost

Financial liabilities resulting from banking activities are recognized in this balance sheet item. As well as deposits from banks and customers, this item includes securitized liabilities and subordinated capital, comprising subordinated liabilities, capital generated from profit-participation rights and typical silent partners' contributions.

Deposits from banks

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

EUR million	31/12/2019	31/12/2018
Securities repurchase transactions	1,932	3,434
Transmitted loans	28,698	26,899
Borrower's note loans	3,152	3,157
Overnight and term money	27,733	25,390
Public-sector registered covered bonds issued	347	484
Current account liabilities	1,690	1,918
Mortgage-backed registered covered bonds issued	133	224
Other liabilities	2,947	2,080
Total	66,633	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. At the same time, securities repurchase transactions declined.

The item »deposits from banks« amounting to EUR 32,733 million (previous year: EUR 33,371 million) had a term of over twelve months as at the reporting date.

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

EUR million	31/12/2019	31/12/2018
Banks within Germany	45,700	43,467
Banks outside Germany	20,933	20,119
Total	66,633	63,585

Deposits from customers

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

EUR million	31/12/2019	31/12/2018
Current account liabilities	46,194	42,987
Overnight and term money	29,530	24,639
Borrower's note loans	2,163	1,922
Securities repurchase transactions	1,916	1,004
Public-sector registered covered bonds issued	2,195	2,540
Savings deposits	5,595	6,439
Mortgage-backed registered covered bonds issued	219	513
Other liabilities	2,507	2,437
Total	90,319	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. Securities repurchasing business also saw growth.

As at the reporting date, the item included liabilities of EUR 6,673 million (previous year: EUR 8,773 million) with a remaining term to maturity of over twelve months.

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

EUR million	31/12/2019	31/12/2018
Customers within Germany	79,235	74,029
Customers outside Germany	11,084	8,451
Total	90,319	82,481

Securitized liabilities

»Securitized liabilities« primarily comprise issued debentures and other liabilities securitized in the form of transferable instruments.

EUR million	31/12/2019	31/12/2018
Issued debentures	28,536	27,246
Mortgage-backed covered bonds	9,436	9,372
Public-sector covered bonds	4,867	3,900
Other debentures	14,233	13,974
Other securitized liabilities	10,280	11,581
Total	38,815	38,827

The increase in debentures issued is in part due to placing the first social bond and issuing further green senior non-preferred bonds. LBBW also issued the first step-up sustainability bonds for private investors. This was countered by maturities and a decline in securitized money market transactions.

The item »securitized liabilities« amounting to EUR 23,389 million (previous year: EUR 21,682 million) had a term of over twelve months as at the reporting date.

Subordinated capital

In the event of insolvency proceedings or liquidation, the reported »subordinated capital« may not be repaid until all non-subordinated creditors have been satisfied.

»Subordinated capital« is broken down as follows:

EUR million	31/12/2019	31/12/2018
Typical silent partners' contributions	1,085	1,081
Subordinated liabilities	4,927	4,308
Capital generated from profit participation rights	111	106
Total	6,123	5,495

During the calendar year subordinated liabilities of EUR 574 million (nominal amount) were newly raised. This figure compared with repayments of EUR 10 million (nominal amount).

»Subordinated capital« of EUR 5,382 million (previous year: EUR 5,096 million) had a term of over twelve months as the reporting date.

Subordinated liabilities

The following subordinated liabilities (incl. subordinated liabilities designated at fair value) existed at the balance sheet date, broken down according to product type.

EUR million	31/12/2019			31/12/2018		
	Capital	Interest accrued in year under review	Total	Capital	Interest accrued in year under review	Total
Subordinated EUR bearer notes	2,858	41	2,899	2,358	34	2,392
Subordinated EUR registered securities	1,089	11	1,100	1,025	10	1,035
Subordinated foreign currency bearer bonds	1,448	35	1,483	1,338	32	1,370
Total	5,395	87	5,482	4,721	76	4,797

The table above includes subordinated registered securities and bonds designated at fair value with nominal capital in the amount of EUR 687 million (previous year: EUR 597 million). During the calendar year, subordinated liabilities »designated at fair value« were newly raised with nominal capital of EUR 79 million.

The interest expense on subordinated liabilities (incl. subordinated liabilities designated at fair value) was EUR - 191 million (previous year: EUR - 161 million).

Capital generated from profit participation rights

The capital generated from profit-participation rights fulfills the requirements of Article 63 CRR for Tier 2 instruments. Pursuant to Article 64 CRR, amortization of the Tier 2 instruments shall occur on the basis of the number of days that have passed in the last five years of their term.

The terms of material profit-participation rights (incl. profit-participation rights designated at fair value) were as follows at the balance sheet date:

31/12/2019 EUR million	Nominal amount	Interest rate in % p. a.	End of term
Registered participation rights			
Corporates	206	4.77 to 7.18	until 31/12/2022
Banks	10	4.82	31/12/2020
Total	216		

The table above include registered participation rights »designated at fair value« with nominal capital in the amount of EUR 101 million (previous year: EUR 101 million).

Net interest income for capital generated from profit-participation rights for the financial year (including profit-participation rights designated at fair value) totaled EUR - 18 million (previous year: EUR - 16 million).

Typical silent partners' contributions

The silent partners' contributions do not meet the requirements of Article 52 CRR for additional Tier 1 instruments (AT 1). However, due to the transitional provisions of Article 484 CRR, they may continue to be included within the limits of Article 486 CRR. As the relevant threshold was not reached for the first time in 2019, these transitional provisions became relevant to LBBW for the first time in 2019. Accordingly, only part of the silent partners' contributions can be considered as AT 1, with the other part considered in accordance with the applicable provisions, provided the conditions in place here for supplementary capital are met.

At the end of the financial year, the following contributions had been made by silent partners:

Duration ¹	Dividend payout as a percentage of the nominal amount	Nominal amount	
		31/12/2019 EUR million	31/12/2018 EUR million
15/11/1999 - 31/12/2019	7.87	10.0	10.0
25/04/1999 - 31/12/2019	5.05	30.0	30.0
29/10/2001-31/12/2019 (terminated)	3.92	3.2	3.2
29/10/2001-31/12/2019 (terminated)	3.92	86.3	86.3
05/01/2000 - 31/12/2020	8.25	30.0	30.0
19/05/1999 - 31/12/2024	7.11	20.0	20.0
13/07/2001-31/12/2026 ²	1.98	15.0	15.0
01/10/1999 - 31/12/2029	8.03 - 8.20	49.0	49.0
10/03/2000 - 31/12/2030	8.05 - 8.25	10.0	10.0
02/07/2001 - 31/12/2031	8.46	20.0	20.0
<i>Silent partners contributions with a fixed end of term</i>		273.5	273.5

Expiry of the fixed interest period	Dividend payout as a percentage of the nominal amount	Nominal amount	
		31/12/2019 EUR million	31/12/2018 EUR million
31/12/2021	3.93	8.9	8.9
31/12/2022	3.74	4.7	4.7
31/12/2023	3.81	222.7	222.7
27/06/2027	2.24	200.0	200.0
No expiry of the fixed interest period ³	4.56	300.0	300.0
<i>Silent partners' contributions without a fixed end of term</i>		736.3	736.3
Total		1,009.8	1,009.8

1 Repayment takes place after approval of the annual financial statements in accordance with HGB at a contractually fixed date. Provided the start of the term is stated, the information relates to the first agreement entered into in a group of agreements with similar terms.

2 Annual adjustment of interest rates.

3 Interest rate is fixed. Only specific changes in the tax legislation have an impact on the interest rate.

The interest expense for silent partners' contributions totaled EUR -45 million (previous year: EUR -43 million).

40. Financial liabilities designated at fair value

»Financial liabilities designated at fair value« comprise financial liabilities that are voluntarily measured at fair value through profit or loss. In the event of insolvency proceedings or liquidation, the subordinated liabilities recognized may not be repaid until all non-subordinated creditors have been satisfied.

EUR million	31/12/2019	31/12/2018
Borrower's note loans	825	789
Securitized liabilities	4,011	5,077
Subordinated deposits	170	167
Junior bonds	726	568
Money market transactions	115	100
Other	909	912
Total	6,757	7,613

This decrease can be attributed to a few large-volume floaters, which reached the end of their term in the second half of 2019.

The item liabilities amounting to EUR 5,524 million (previous year: EUR 6,237 million) had a term of over twelve months as at the reporting date.

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

All financial liabilities that must be recognized at fair value are reported in this balance sheet item. »Financial liabilities mandatorily measured at fair value through profit or loss« break down as follows:

EUR million	31/12/2019	31/12/2018
Negative fair values from derivative hedging instruments	2,537	3,062
Trading liabilities	24,422	21,416
Total	26,959	24,478

Negative fair values from derivative hedging instruments

The negative fair values from derivatives that are used to secure hedged items against interest rate risks are reported in this item and meet the requirements of IFRS hedge accounting. Interest rate swaps and cross-currency interest rate swaps were designated as hedging instruments.

EUR million	31/12/2019	31/12/2018
Negative fair values from portfolio fair value hedges	1,760	2,225
Negative fair values from micro fair value hedges	777	838
Total	2,537	3,062

Negative fair values from portfolio fair value hedges declined on account of disposals.

»Negative fair values from derivative hedging instruments« amounting to EUR 2,387 million (previous year: EUR 2,739 million) had a term of over twelve months as at the reporting date.

The »negative fair values from derivative hedging instruments« were broken down by hedged item as follows:

EUR million	31/12/2019	31/12/2018
Assets		
Derivative hedging instruments on loans and advances to banks	22	19
Derivative hedging instruments on loans and advances to customers	196	190
Derivative hedging instruments on debt instruments (FVOCR)	473	537
Derivative hedging instruments on debt instruments (AC)	85	74
Equity and liabilities		
Derivative hedging instruments on securitized liabilities	1	4
Derivative hedging instruments on subordinated capital	0	13
Derivative hedging instruments on portfolio fair value hedges	1,760	2,225
Total	2,537	3,062

Trading liabilities

This shows financial liabilities held for trading.

EUR million	31/12/2019	31/12/2018
<i>Negative fair values from derivatives</i>	17,035	14,292
Other trading liabilities	7,387	7,124
Delivery obligations from short sales of securities	827	1,559
Securitized liabilities	6,368	5,436
Borrower's note loans	192	127
Other	0	1
Total	24,422	21,416

In addition to the expansion of new business, the sharp decline in interest rates in 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.

»Trading liabilities« amounting to EUR 18,365 million (previous year: EUR 16,203 million) had a term of over twelve months as at the reporting date.

42. Provisions

EUR million	31/12/2019	31/12/2018
Provisions for pensions	3,652	3,235
Provisions for litigation and recourse risk	222	188
Provisions for lending business	146	121
Other personnel-related provisions	140	124
Other provisions	251	248
Total	4,410	3,916

As at the reporting date, »provisions« of EUR 3,999 million (previous year: EUR 3,564 million) had a remaining term to maturity of over twelve months.

Provisions for pensions

The present value of the defined benefit obligations is broken down into the following components:

EUR million	2019	2018
Balance as at 31 December	3,435	3,376
Restatement of prior year amounts including changes in the scope of consolidation	0	0
Balance as at 1 January	3,435	3,376
Changes recognized in the income statement	116	125
Interest expense/income	59	58
Current service cost including the release of pension liabilities	58	67
Changes recognized in Other comprehensive income	414	46
Actuarial gains(+)/losses(-) from changes to the demographic assumptions	3	38
Actuarial gains(+)/losses(-) from changes to the financial assumptions	404	- 2
Experience-based actuarial gains(+)/losses(-)	4	10
Changes in exchange rates	2	- 1
Other changes	- 118	- 112
Pension benefits paid	- 117	- 112
Balance as at 31 December	3,847	3,435

Current interest rate developments caused the interest rate for discounting pension obligations to fall again year on year, decreasing from 1.73% to 0.97% and resulting in an increase in pension provisions.

The present value of the defined pension obligations was classified as follows by the type of beneficiary:

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Present value of the pension obligations for active employers	1,450	1,263
Present value of the pension obligations for candidates	571	483
Present value of the pension obligations for retirees	1,825	1,690
Total	3,847	3,435

This present value was broken down as follows by type of benefit:

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Present value of the accrued but non-vested pension obligations	288	276
Present value of the vested pension obligations	3,559	3,159
Total	3,847	3,435

The present value of the defined benefit plans arose from the following commitments or benefits:

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Present value of the pension obligations based on conditional benefits	4	3
Present value of the pension obligations based on future salary increases	291	275
Present value of the pension obligations based on other benefits	3,552	3,156
Total	3,847	3,435

Obligations under defined benefit plans were calculated using the following actuarial assumptions:

in %	31/12/2019	31/12/2018
Fluctuation	4.00	4.00
Discount rate	0.97	1.73
Expected change in income	1.85	1.85
Expected change in pensions	1.70	1.70
Career dynamics	0.50	0.50

Life expectancy, marriage probability and disability were calculated using the current 2018G Heubeck mortality tables. Commencement of retirement is determined using the retirement age in accordance with actuarial assumptions.

The following overview shows the sensitivity of the pension obligation as at the balance sheet date with regard to each isolated change to important assumptions. A change in the individual parameters of 0.5 percentage points would have had the following impact on the pension obligation at the end of the year under review, if all other assumptions remained constant:

31/12/2019			
EUR million		Increase of 0.5 pp	Decrease of 0.5 pp
Defined benefit pensions			
Change in discount rate		- 282	318
Change in expected income development		114	- 100
Change in expected pension growth		86	- 77
Change in career dynamics		4	- 4
Change in fluctuation		- 1	1

31/12/2018			
EUR million		Increase of 0.5 pp	Decrease of 0.5 pp
Defined benefit pensions			
Change in discount rate		- 242	273
Change in expected income development		85	- 78
Change in expected pension growth		71	- 64
Change in career dynamics		4	- 4
Change in fluctuation		- 1	1

A one-year increase in life expectancy would lead to a EUR 144 million (previous year: EUR 121 million) increase in the defined benefits.

When calculating the sensitivities, each parameter was stressed, all other things remaining equal. A correlation between the valuation assumptions was therefore not taken into account.

The fair value of the plan assets consisted of the following at year-end:

EUR million	31/12/2019	31/12/2018
<i>Time deposits and other cash and cash equivalents</i>	8	27
Level I measurement	4	18
Level II measurement	4	8
<i>Securities</i>	185	169
<i>Securities - equity instruments</i>	45	22
<i>Equity instruments from banks</i>	45	11
Level I measurement	32	11
Level II measurement	13	0
<i>Equity instruments from other financial corporations</i>	0	10
Level II measurement	0	10
<i>Securities - debt instruments</i>	139	148
<i>Debt instruments from financial institutions</i>	139	140
Level I measurement	129	140
Level II measurement	10	0
<i>Debt instruments from other financial corporations</i>	0	8
Level II measurement	0	8
<i>Real Estate</i>	3	3
Plan assets	195	199

The plan assets listed above do not include any transferable financial instruments from LBBW or from real estate used by LBBW.

The fair value of the plan assets changed as follows during the financial year:

EUR million	2019	2018
Balance as at 31 December	199	210
Balance as at 1 January	199	210
<i>Changes recognized in the income statement</i>	4	4
Interest income/expense	4	4
<i>Changes recognized in Other comprehensive income</i>	4	- 7
Income/expense from the plan assets (less the income included in net interest income)	2	- 7
Changes in exchange rates	2	- 1
<i>Other changes</i>	- 12	- 7
Employer contributions	7	8
Pension benefits paid	- 19	- 15
Balance as at 31 December	195	199

Estimated contributions to plan assets to be paid by LBBW for the coming financial year amount to approximately EUR 7 million (previous year: EUR 7 million).

The present value of defined benefit obligations and the fair value of plan assets can be reconciled with the assets and liabilities as reported in the balance sheet as follows:

EUR million	31/12/2019	31/12/2018
Present value of defined benefit obligations	3,847	3,435
of which present value of defined benefit obligations from unfunded plans	3,378	3,017
of which present value of defined benefit obligations from wholly or partially funded plans	469	418
Fair value of plan assets	- 195	- 199
Obligations not covered by plan assets	3,652	3,235
Provisions for pensions	3,652	3,235

The weighted average maturity of the defined benefit obligation is 15.9 years (previous year: 15.5 years).

The following table shows the maturity analysis of the benefit payments in the current financial year:

EUR million	31/12/2019	31/12/2018
Maturity analysis		
Up to 1 year	114	112
More than 1 year to 5 years	529	514
More than 5 years to 10 years	753	732
More than 10 years to 15 years	768	817
More than 15 years	2,850	3,034

Other provisions

The following table shows changes in other provisions in the year under review:

EUR million	Other personnel-related provisions	Provisions for litigation and recourse risk	Other provisions	Total
Balance as at 1 January 2019	124	188	248	560
Additions	77	139	62	278
Reversals	- 4	- 84	- 15	- 104
Utilization	- 49	- 22	- 41	- 112
Discounting of non-current provisions	0	1	0	1
Other changes	- 8	0	- 3	- 11
Balance as at 31 December 2019	140	222	251	612

The other personnel-related provisions included mainly provisions for staff anniversaries and provisions for performance-related remuneration.

LBBW was faced with various legal proceedings and court actions arising in the ordinary course of business. Provisions were recognized for the risks involved in the management and the Group's legal advisors deem payments to be made by LBBW likely and the amounts involved can be estimated with sufficient reliability. There are other legal disputes where the Board of Managing Directors, after consultation with its legal advisors, holds the view that a payment by the Bank is unlikely (recognition as a contingent liability if necessary) or that the final settlement of these disputes does not affect the present consolidated financial statements in any material way.

In total, »other provisions« with a term of over twelve months in the amount of EUR 351 million were discounted.

Allowances for losses on loans and securities for financial guarantees and off-balance-sheet transactions recognized in accordance with IFRS 9 are included in provisions for credit risks (for information on calculating allowances for losses on loans see Note 8).

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	Credit impairment at recognition	Total
<i>Balance as at 1 January 2019</i>	23	39	59	0	121
Changes	- 8	- 8	33	0	17
Transfer to stage 1	7	- 7	0	0	0
Transfer to stage 2	- 2	2	0	0	0
Transfer to stage 3	0	- 4	4	0	0
Additions	3	16	61	0	80
Reversals	- 16	- 16	- 31	0	- 63
Additions	6	2	20	0	29
Disposals	- 3	- 3	- 16	0	- 22
<i>Balance as at 31 December 2019</i>	18	30	97	0	146

43. Income tax liabilities

EUR million	31/12/2019	31/12/2018
Current income tax liabilities	55	32
of which provisions for income tax	52	29
of which income tax liabilities to tax authorities	4	3
Deferred income tax liabilities	33	27
<i>Total</i>	89	58

Of the current income tax liabilities, EUR 55 million (previous year: EUR 32 million) is due within one year.

For a detailed description of income tax liabilities, see Note 26.

44. Other liabilities

EUR million	31/12/2019	31/12/2018
Liabilities from		
Other taxes	51	48
Employment	37	36
Trade payables	71	78
Non-controlling interests	3	2
Finance leases	n/a	2
Leasing	381	n/a
Advances received	146	96
Other miscellaneous liabilities	1,424	1,021
Total	2,113	1,283

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.

The increase in other miscellaneous liabilities essentially resulted from higher margin holdings. This also affected »Other assets« (see note 38).

Other liabilities with maturities of more than twelve months amounted to EUR 347 million (previous year: EUR 7 million) as at the reporting date.

For a detailed description of leasing business, see Note 61.

45. Equity

EUR million	31/12/2019	31/12/2018
Share capital	3,484	3,484
Capital reserve	8,240	8,240
Retained earnings	824	960
Other comprehensive income	155	45
Unappropriated profit/loss	443	413
Shareholders' equity	13,146	13,142
Additional equity components	745	0
Equity attributable to non-controlling interests	32	20
Total	13,923	13,163

The rise in »Equity« is essentially due to issuing an AT1 bond of EUR 750 million less issuing costs of EUR - 5 million. The subordinated bond meets the requirements for additional Tier 1 capital under the Capital Requirements Regulation (CRR) and is recognized under the new sub-item »additional equity components«.

Current net income of EUR 444 million offset the distribution of dividends to shareholders of EUR - 250 million.

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 - 1,143 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 4 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 519 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

46. Allowances for losses on loans and advances and gross carrying amounts

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

EUR million	31/12/2019	31/12/2018
<i>Financial assets measured at amortized cost</i>	904	865
Loans and advances to banks	19	6
Loans and advances to customers	877	849
Debentures and other fixed-income securities	8	10
<i>Financial assets measured at fair value through other comprehensive income</i>	3	2
Debentures and other fixed-income securities	3	2
Total	906	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
<i>Balance as at 1 January 2019</i>	59	287	499	21	865
Changes	- 13	11	29	- 18	9
Transfer to stage 1	20	- 19	- 1	0	0
Transfer to stage 2	- 7	15	- 8	0	0
Transfer to stage 3	- 4	- 9	12	0	0
Additions	11	75	202	2	290
Reversals	- 33	- 52	- 89	- 1	- 175
Utilization	0	0	- 86	- 19	- 106
Additions	24	7	50	0	81
Disposals	- 10	- 11	- 45	- 2	- 68
Other changes	0	0	16	1	17
<i>Balance as at 31 December 2019</i>	59	294	549	1	904

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 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

Gross carrying amounts 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	142,436	14,537	957	61	157,991
Changes	- 12,182	933	411	- 2	- 10,841
Transfer to stage 1	2,220	- 2,204	- 16	0	0
Transfer to stage 2	- 4,213	4,256	- 43	0	0
Transfer to stage 3	- 534	- 177	712	0	0
Repayments	- 9,654	- 942	- 242	- 2	- 10,841
Additions	106,167	445	1	1	106,614
Disposals	- 90,726	- 2,545	- 239	- 9	- 93,519
Write-downs through profit or loss (direct write-down)	0	0	- 11	0	- 11
Write-downs through other comprehensive income (use of allowances for losses on loans and advances)	0	0	- 81	- 19	- 101
Changes in the basis of consolidation	- 1	0	0	0	- 1
Other changes	7,428	518	27	0	7,973
Balance as at 31 December 2019	153,122	13,888	1,064	31	168,106

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 2018	141,814	9,553	1,156	79	152,602
Changes	- 17,218	6,381	116	- 8	- 10,729
Transfer to stage 1	1,010	- 1,003	- 8	0	0
Transfer to stage 2	- 8,275	8,300	- 25	0	0
Transfer to stage 3	- 257	- 109	366	0	0
Repayments	- 9,696	- 807	- 218	- 8	- 10,729
Additions	94,666	0	0	0	94,666
Disposals	- 80,988	- 945	- 171	- 6	- 82,110
Write-downs through profit or loss (direct write-down)	0	0	- 20	0	- 20
Write-downs through other comprehensive income (use of allowances for losses on loans and advances)	0	0	- 117	- 5	- 122
Changes in the basis of consolidation	1	0	0	0	1
Other changes	4,162	- 452	- 7	0	3,704
Balance as at 31 December 2018	142,436	14,537	957	61	157,991

In accordance with IFRS 9, adjustments to the terms of a transaction that do not have a material impact on its fair value do not mean it must be derecognized from the balance sheet.

Stage 2 and 3 financial assets for which adjustments were made to the contract during the reporting period and that were not derecognized are as follows:

31/12/2019 EUR million	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment after recognition	Credit impairment at recognition	Total
Amortized cost before contract amendment in the current financial year	301	142	3	446

31/12/2018 EUR million	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment after recognition	Credit impairment at recognition	Total
Amortized cost before contract amendment in the current financial year	82	121	7	210

As in the previous year, in the reporting period no financial assets of stage 2 or 3 were allocated to stage 1 after adjustments were made to the contract.

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	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment after recognition	Credit impairment at recognition	Total
<i>Balance as at 1 January 2019</i>	2	0	0	0	2
Changes	0	0	0	0	0
Reversals	-1	0	0	0	-1
Additions	1	0	0	0	1
<i>Balance as at 31 December 2019</i>	3	0	0	0	3

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
<i>Balance as at 1 January 2018</i>	3	0	0	0	3
Changes	-1	0	0	0	-1
Additions	1	0	0	0	1
Reversals	-2	0	0	0	-2
Additions	1	0	0	0	1
<i>Balance as at 31 December 2018</i>	2	0	0	0	2

Gross carrying amounts 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
<i>Balance as at 1 January 2019</i>	22,302	10	0	0	22,312
Changes	-117	0	0	0	-117
Transfer to stage 1	10	-10	0	0	0
Transfer to stage 2	-10	10	0	0	0
Repayments	-117	0	0	0	-117
Additions	19,991	0	0	0	19,991
Disposals	-14,594	0	0	0	-14,594
Other changes	568	0	0	0	568
<i>Balance as at 31 December 2019</i>	28,151	10	0	0	28,161

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
<i>Balance as at 1 January 2018</i>	22,590	115	0	0	22,705
Changes	- 628	- 11	0	0	- 639
Transfer to stage 1	21	- 21	0	0	0
Transfer to stage 2	- 10	10	0	0	0
Transfer to stage 3	- 2	0	2	0	0
Repayments	- 637	0	- 2	0	- 639
Additions	7,959	0	0	0	7,959
Disposals	- 7,485	- 98	0	0	- 7,583
Other changes	- 134	4	0	0	- 130
<i>Balance as at 31 December 2018</i>	22,302	10	0	0	22,312

47. 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 and, for the first time in 2019, LBBW México SOFOM are included in consolidation under the management approach. The prior-year amounts shown were restated accordingly. 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.

31/12/2019 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	83,759	59,324	6,620	530	17,286
Trading assets	76,164	52,988	6,620	521	16,035
Derivatives	60,627	47,369	5,316	494	7,448
Equity instruments	916	912	0	0	4
Debentures and other fixed-income securities	6,494	1,163	219	0	5,112
Receivables	8,128	3,544	1,085	27	3,471
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	1,364	210	0	1	1,153
Equity instruments	649	210	0	0	440
Debentures and other fixed-income securities	10	0	0	0	10
Receivables	704	0	0	1	703
Positive fair values from hedging derivatives	6,231	6,126	0	8	97
Financial assets designated at fair value	959	0	0	4	955
Debentures and other fixed-income securities	60	0	0	0	60
Receivables	899	0	0	4	895
Financial assets measured at fair value through other comprehensive income	28,627	0	0	0	28,627
Equity instruments	1,920	0	0	0	1,920
Debentures and other fixed-income securities	24,185	0	0	0	24,185
Receivables	2,522	0	0	0	2,522
Financial assets measured at amortized cost					
Cash and cash equivalents	3,121	0	0	0	3,121
Loans and advances to banks	66,831	25,872	0	531	40,428
Loans and advances to customers	110,368	13,715	0	37,563	59,090
Debentures and other fixed-income securities	1,015	0	0	0	1,015
Total	294,680	98,911	6,620	38,628	150,522
Loan commitments and other agreements	58,651	0	0	3,148	55,503
Total exposure	353,332	98,911	6,620	41,776	206,025

31/12/2018 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	63,709	40,181	7,210	540	15,778
Trading assets	57,167	34,987	7,210	458	14,512
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	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	1,341	211	0	59	1,071
Equity instruments	597	211	0	0	386
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	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	112,524	19,437	0	37,377	55,710
Debentures and other fixed-income securities	1,041	0	0	0	1,041
Total	259,644	79,608	7,210	38,596	134,229
Loan commitments and other agreements	57,701	0	0	2,951	54,751
Total exposure¹	317,345	79,608	7,210	41,547	188,980

¹ Restatement of prior year amounts

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 353 billion as at 31 December 2019 was EUR 147 billion or 41.7% in total (previous year: 40.4%). The increased share of risk mitigation was 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.

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

Of the total portfolio of EUR 353 billion as at 31 December 2019, transactions with a gross exposure of EUR 259 billion were subject to the provisions for allowances for losses on loans and securities set out in IFRS 9. The overwhelming portion of these assets (99.5%) was 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 1.2 billion as at 31 December 2019.

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

31/12/2019 EUR million	Gross exposure	Netting/ Collateral	Credit derivatives (protection buy)	Credit collateral	Net exposure
Financial assets measured at amortized cost					
Loans and advances to banks	19	0	0	1	18
Loans and advances to customers	968	0	0	268	700
Total	987	0	0	270	718
Loan commitments and other agreements	238	0	0	25	213
Total exposure	1,226	0	0	295	931

31/12/2018 EUR million	Gross exposure	Netting/ Collateral	Credit derivatives (protection buy)	Credit collateral	Net exposure
Financial assets measured at amortized cost					
Loans and advances to banks	1	0	0	0	1
Loans and advances to customers	854	0	0	243	611
Total	855	0	0	243	612
Loan commitments and other agreements	215	0	0	36	179
Total exposure	1,070	0	0	279	791

The outstanding contract value for financial assets that were written down during the reporting period but for which enforcement proceedings are still pending amounted to EUR 26 million (previous year: EUR 29 million).

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 impairment provisions of IFRS 9 are presented here.

The following table presents gross exposure by rating class:

31/12/2019 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
1 (AAAA)	21,034	0	0	0	21,034
1 (AAA)- 1 (A-)	139,545	709	0	2	140,256
2-5	59,356	7,992	0	17	67,365
6-8	13,473	5,139	0	0	18,612
9-10	1,722	2,092	0	0	3,814
11-15	1,125	2,426	0	5	3,557
16-18 (default) ¹	0	0	1,200	26	1,226
Other ²	3,409	13	0	0	3,422
Total	239,664	18,371	1,200	49	259,285

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

2 Includes non-rated transactions, in particular rating waivers. The probability of default is appropriately segmented and calculated at a flat rate.

31/12/2018 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 ¹
1 (AAAA)	20,938	0	0	0	20,939
1 (AAA)- 1 (A-)	127,512	497	0	2	128,011
2-5	56,228	9,583	0	17	65,828
6-8	14,041	4,052	0	0	18,093
9-10	2,458	1,996	0	7	4,462
11-15	1,111	2,515	0	8	3,633
16-18 (default) ²	0	0	1,042	28	1,070
Other ³	3,357	16	0	0	3,373
Total	225,646	18,658	1,043	63	245,409

1 Restatement of prior year amounts

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

3 Includes non-rated transactions, in particular rating waivers. The probability of default is appropriately segmented and calculated at a flat rate.

As at the reporting date 31 December 2019, 92.4% of assets were assigned to stage 1 and another 7.1% to stage 2. Stage 3 and the category »Credit impairment at recognition« were not significant.

The following table presents gross exposure by sector:

31/12/2019 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
<i>Financials</i>	110,372	1,007	32	1	111,411
of which transactions under specific state liability ¹	7,947	0	0	0	7,947
<i>Corporates</i>	79,429	10,561	1,072	27	91,089
Automotive	9,018	3,007	404	0	12,429
Construction	7,463	699	90	3	8,255
Chemicals and commodities	6,874	696	77	0	7,648
of which chemicals	3,485	207	1	0	3,693
of which commodities	3,390	489	77	0	3,955
Retail and consumer goods	13,987	1,851	242	0	16,079
of which consumer goods	10,099	891	75	0	11,065
of which durables	3,888	960	167	0	5,014
Industry	9,565	1,482	114	0	11,161
Pharmaceuticals and healthcare	4,774	383	9	3	5,169
TM and electronics/IT	7,054	443	10	0	7,507
Transport and logistics	6,437	389	27	0	6,853
Utilities and energy	7,630	992	48	3	8,674
of which utilities and disposal companies	4,638	268	36	3	4,945
of which renewable energies	2,993	724	12	0	3,729
Other	6,626	618	50	18	7,313
<i>Real Estate</i>	25,885	5,056	44	10	30,995
Commercial real estate (CRE)	18,660	4,725	34	8	23,428
Housing	7,225	330	10	2	7,567
<i>Public sector</i>	13,934	97	0	0	14,031
<i>Private individuals</i>	10,044	1,651	52	11	11,758
Total	239,664	18,371	1,200	49	259,285

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

31/12/2018 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 ¹
Financials	98,502	1,186	33	2	99,724
of which transactions under specific state liability ²	5,860	0	0	2	5,862
Corporates	76,658	10,448	857	35	87,998
Automotive	10,656	3,193	153	0	14,002
Construction	6,495	911	114	3	7,522
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	14,086	1,764	205	5	16,060
of which consumer goods	10,360	822	84	0	11,268
of which durables	3,712	942	120	4	4,779
Industry	9,030	1,191	118	3	10,343
Pharmaceuticals and healthcare	4,289	445	11	3	4,747
TM and electronics/IT	6,058	514	9	0	6,581
Transport and logistics	6,597	348	66	0	7,011
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	6,222	585	47	18	6,872
Real Estate	24,398	4,984	75	11	29,467
Commercial real estate (CRE)	17,396	4,606	50	9	22,061
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	225,646	18,658	1,043	63	245,409

¹ Restatement of prior year amounts

² 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 had very good, stable credit quality with a low exposure share in stage 2. There was a slightly higher share of stage 2 exposure in the corporates and real estate portfolio. In the automotive sector, this was 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:

31/12/2019 EUR million	Stage 1 12-month expected c credit loss	Stage 2 Life-time expected credit loss	Stage 3 Credit impairment after recognition	Credit impairment at recognition	Total
Germany	145,591	11,570	1,044	25	158,230
Western Europe (excluding Germany)	63,892	4,008	30	23	67,954
North America	18,358	1,335	19	0	19,713
Asia/Pacific	7,057	211	1	0	7,269
Eastern Europe	2,624	685	54	0	3,363
Latin America	1,164	551	50	2	1,766
Africa	377	12	0	0	389
Other ¹	601	0	0	0	601
Total	239,664	18,371	1,200	49	259,285

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

31/12/2018 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 ¹
Germany	139,868	11,485	871	33	152,257
Western Europe (excluding Germany)	59,210	4,189	55	23	63,478
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	1,527	333	38	6	1,903
Africa	367	64	0	0	431
Other ²	833	0	0	0	833
Total	225,646	18,658	1,043	63	245,409

1 Restatement of prior year amounts

2 Transactions not allocated to a particular country (e.g. transactions with supranational institutions).

In particular, Eastern Europe and Latin America had higher stage 2 exposure shares as at 31 December 2019 than the average for the overall portfolio. However, these regions accounted for only a small share of the portfolio.

The following table presents gross exposure by size class:

31/12/2019 EUR million	Stage 1 12-month expected c 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	26,418	4,155	508	16	31,098
Up to EUR 50 million	27,471	3,811	518	33	31,834
Up to EUR 100 million	20,553	3,533	132	0	24,218
Up to EUR 500 million	76,012	6,427	38	0	82,476
Up to EUR 1 billion	32,555	147	0	0	32,701
Over EUR 1 billion	53,350	197	0	0	53,547
LBBW Group companies	3,305	102	4	0	3,411
Total	239,664	18,371	1,200	49	259,285

31/12/2018 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 ¹
Up to EUR 10 million	26,125	4,722	570	26	31,443
Up to EUR 50 million	27,368	3,934	397	37	31,736
Up to EUR 100 million	20,844	3,098	72	0	24,013
Up to EUR 500 million	74,439	6,650	4	0	81,093
Up to EUR 1 billion	25,705	48	0	0	25,753
Over EUR 1 billion	50,687	125	0	0	50,813
LBBW Group companies	478	79	0	0	558
Total	225,646	18,658	1,043	63	245,409

¹ Restatement of prior year amounts

Large-volume exposures in excess of EUR 500 million were almost exclusively allocated to stage 1. Nearly half of the stage 2 transactions amounted to less than EUR 50 million as at 31 December 2019.

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

Forbearance

As at 31 December 2019, LBBW held assets with a net carrying amount of EUR 412 million (previous year: EUR 556 million) for which forbearance measures were adopted. Concessions to terms and conditions were essentially granted. A EUR 227 million (previous year: EUR 176 million) sub-portfolio of the assets for which forbearance measures had been adopted comprised credit-impaired assets.

LBBW has received guarantees of EUR 52 million (previous year: EUR 43 million) for assets with forbearance measures.

The risk report contains further information on impairment on the portfolio and qualitative disclosures.

48. Determining fair value

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 measured at fair value	
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 market transactions
Loans and advances to customers	Loans, borrower's note loans, securities repurchase transactions, money market 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 derivatives, 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 derivative hedging instruments	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

Class	Financial instruments
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
Subordinated capital	Bonds, participation certificates
Liabilities from disposal groups	According to the respective balance sheet item

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 and raw materials 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 income value approach entails considerable uncertainty or is not reliable due to a lack of data, 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).

49. Fair value of financial instruments

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

Assets

EUR million	31/12/2019		31/12/2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets measured at fair value				
Financial assets mandatorily measured at fair value	34,610	34,610	29,779	29,779
Trading assets	32,018	32,018	26,435	26,435
Derivatives	19,834	19,834	15,474	15,474
Equity instruments	910	910	1,087	1,087
Debentures and other fixed-income securities	6,349	6,349	5,531	5,531
Receivables	4,925	4,925	4,344	4,344
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	1,218	1,218	1,375	1,375
Equity instruments	495	495	467	467
Debentures and other fixed-income securities	16	16	18	18
Receivables	707	707	890	890
Positive fair values from hedging derivatives	1,374	1,374	1,969	1,969
Financial assets designated at fair value	1,170	1,170	1,207	1,207
Debentures and other fixed-income securities	61	61	44	44
Receivables	1,109	1,109	1,163	1,163
Financial assets measured at fair value through other comprehensive income	28,648	28,648	22,821	22,821
Equity instruments	487	487	509	509
Debentures and other fixed-income securities	25,045	25,045	19,487	19,487
Receivables	3,116	3,116	2,825	2,825
Financial assets measured at amortized cost				
Cash and cash equivalents	18,331	18,331	24,721	24,721
Loans and advances to banks	55,801	56,865	46,749	46,817
Loans and advances to customers	110,320	119,461	109,231	117,842
Debentures and other fixed-income securities	1,082	1,083	1,146	1,134

Equity and liabilities

EUR million	31/12/2019		31/12/2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities measured at fair value				
Financial liabilities mandatorily measured at fair value	26,959	26,959	24,478	24,478
Trading liabilities	24,422	24,422	21,416	21,416
Derivatives	17,035	17,035	14,292	14,292
Delivery obligations from short sales of securities	827	827	1,559	1,559
Deposits	192	192	128	128
Securitized liabilities	6,368	6,368	5,436	5,436
Negative fair values from derivative hedging instruments	2,537	2,537	3,062	3,062
Financial liabilities designated at fair value	6,757	6,757	7,613	7,613
Securitized liabilities	4,737	4,737	5,645	5,645
Other financial liabilities	2,020	2,020	1,969	1,969
Financial liabilities measured at amortized cost				
Deposits from banks	66,633	67,869	63,585	63,963
Deposits from customers	90,319	91,457	82,481	83,651
Securitized liabilities	38,815	39,541	38,827	39,330
Subordinated capital	6,123	6,483	5,495	5,432

50. 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

EUR million	Prices traded on active markets (level I)		Measurement method - on the basis of externally observable parameters (level II)		Measurement method - on the basis externally unobservable parameters (level III)	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Financial assets measured at fair value						
Financial assets mandatorily measured at fair value through profit or loss	2,788	2,067	30,859	26,012	963	1,700
Trading assets	2,768	2,050	28,580	23,216	671	1,169
Derivatives	0	39	19,506	15,278	328	157
Equity instruments	321	401	589	686	0	0
Debentures and other fixed-income securities	2,446	1,610	3,904	3,921	0	0
Receivables	0	0	4,581	3,331	343	1,012
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	21	17	905	827	292	531
Equity instruments	15	12	304	269	175	186
Debentures and other fixed-income securities	5	5	5	7	5	5
Receivables	0	0	596	551	112	339
Positive fair values from hedging derivatives	0	0	1,374	1,969	0	0
Financial assets designated at fair value	36	0	981	1,054	153	153
Debentures and other fixed-income securities	36	0	25	44	0	0
Receivables	0	0	956	1,010	153	153
Financial assets measured at fair value through other comprehensive income	19,007	15,535	9,248	6,861	392	425
Equity instruments	95	84	0	0	392	425
Debentures and other fixed-income securities	18,912	15,451	6,132	4,036	0	0
Receivables	0	0	3,116	2,825	0	0
Financial assets measured at amortized cost						
Cash and cash equivalents	151	181	18,180	24,540	0	0
Loans and advances to banks	0	0	37,658	29,246	19,208	17,571
Loans and advances to customers	0	0	20,981	23,520	98,480	94,323
Debentures and other fixed-income securities	0	21	681	710	402	403

Equity and liabilities

EUR million	Prices traded on active markets (level I)		Measurement method - on the basis of externally observable parameters (level II)		Measurement method - on the basis externally unobservable parameters (level III)	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Financial liabilities measured at fair value						
Financial liabilities mandatorily measured at fair value through profit or loss	822	1,612	25,961	22,666	176	200
Trading liabilities	822	1,612	23,424	19,604	176	200
Derivatives	0	53	16,859	14,039	176	200
Delivery obligations from short sales of securities	822	1,558	5	2	0	0
Deposits	0	1	192	128	0	0
Securitized liabilities	0	0	6,368	5,436	0	0
Negative fair values from derivative hedging instruments	0	0	2,537	3,062	0	0
Financial liabilities designated at fair value	0	0	6,293	7,112	464	501
Securitized liabilities	0	0	4,408	5,260	330	385
Other financial liabilities	0	0	1,886	1,852	134	116
Financial liabilities measured at amortized cost						
Deposits from banks	0	0	66,491	62,751	1,378	1,212
Deposits from customers	0	0	90,843	82,961	614	690
Securitized liabilities	0	0	38,088	36,924	1,453	2,406
Subordinated capital	0	0	6,483	5,432	0	0

Transfers to levels

If the main parameters used in fair value measurement change, the classification in the fair value hierarchy is also adjusted. At the end of the reporting period, the necessary reclassifications between Levels I-III is carried out using quality criteria for the market data used in the valuation that are defined by risk controlling. Prompt availability, volume, executability and bid-offer spreads of the market data used play a particular role.

For financial instruments measured using models, Risk Controlling identifies the model parameters necessary for the 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 transfers were made between Levels I and II in the fair value hierarchy since the last reporting date:

Assets

EUR million	Reclassification from level I to level II		Reclassification from level II to level I	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Financial assets measured at fair value				
Financial assets mandatorily measured at fair value through profit or loss	33	43	47	127
Trading assets	33	43	25	127
Derivatives	16	0	0	0
Debentures and other fixed-income securities	17	43	25	0
Financial instruments measured at fair value through profit or loss, not classified as held for trading, and equity instruments	0	0	22	0
Equity instruments	0	0	22	0
Financial assets designated at fair value	0	19	21	0
Debentures and other fixed-income securities	0	19	21	0
Financial assets measured at fair value through other comprehensive income	165	319	10	0
Debentures and other fixed-income securities	165	319	10	0

Equity and liabilities

EUR million	Reclassification from level I to level II	
	31/12/2019	31/12/2018
Financial liabilities measured at fair value		
Financial liabilities mandatorily measured at fair value through profit or loss	33	1
Trading liabilities	33	1
Delivery obligations from short sales of securities	33	1

In the year under review, LBBW carried out reclassifications from Level I to Level II, as there were no listed prices from active markets to hand for the corresponding financial instruments. In addition, commodity future valuations were switched from market price valuation (Level I) to a model valuation based on market data (Level II) in the reporting period in order to ensure that exchange-traded and OTC derivatives are measured consistently in portfolios with a commodity as the underlying asset.

Reclassifications in the opposite direction also took place as listed prices from active markets became available once again for these transactions.

Development of level III.

The development of the portfolios of financial instruments measured at fair value and investment property, which were calculated using valuation models which include material non-observable 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

EUR million	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
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	3
Other earnings items	0	0	0
Income and expenses recognized in other comprehensive income ¹	- 33	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 to level III	0	0	0
Reclassification from level III	0	0	0
Transfers in accordance with IFRS 5	0	0	0
Carrying amount as at 31 December 2019	392	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	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	3
Other earnings items	0	0	0

¹ Amounts recognized under »Revaluation reserve«.

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			Investment property	Non-current assets held for sale and disposal groups	Total
Trading assets								
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
3	0	- 11	21	0	3	27	1	44
1	0	0	0	0	0	0	0	- 1
1	0	- 11	21	0	3	0	1	18
0	0	0	0	0	0	27	0	27
0	0	0	0	0	0	0	0	- 33
0	0	300	11	0	0	4	0	315
0	0	0	- 38	0	0	- 2	- 82	- 122
- 43	0	- 950	0	0	- 231	0	0	- 1,225
0	0	0	0	0	0	14	0	14
214	0	0	0	0	0	0	0	214
- 2	0	- 8	0	0	0	0	0	- 10
0	0	0	- 4	0	0	- 112	116	0
328	0	343	175	5	112	655	57	2,221
3	0	- 24	9	0	3	27	0	19
1	0	0	0	0	0	0	0	- 1
1	0	- 24	9	0	3	0	0	- 7
0	0	0	0	0	0	27	0	27

EUR million	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
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
Additions through issues	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«.

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			Investment property	Non-current assets held for sale and disposal groups	Total
Trading assets								
Derivatives	Equity instruments	Receivables	Equity instruments	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	0	0	0	0	0	0	0
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
- 31	0	0	6	0	- 6	0	0	- 33
0	0	0	0	0	0	31	0	31

Equity and liabilities

EUR million	Financial liabilities designated at fair value		Financial liabilities mandatorily measured at fair value through profit or loss	Total
	Securitized liabilities	Other financial liabilities	Trading liabilities	
			Derivatives	
Carrying amount as at 1 January 2019	385	116	200	701
Gains and losses recognized in net consolidated profit/loss	- 6	1	17	12
Net interest income and current net income from equity instruments	2	0	2	4
Net gains/losses from financial instruments measured at fair value through profit or loss	- 8	1	15	9
Income and expenses recognized in other comprehensive income ¹	0	0	0	0
Disposals through sales	- 41	0	0	- 41
Repayments/offsetting	- 9	0	- 37	- 46
Reclassification to level III	0	17	0	17
Reclassification from level III	0	0	- 4	- 4
Carrying amount as at 31 December 2019	330	134	176	640
of which unrealized gains and losses recognized in net consolidated profit/loss for financial instruments held as at the reporting date	- 6	1	18	13
Net interest income and current net income from equity instruments	2	0	2	4
Net gains/losses from financial instruments measured at fair value through profit or loss	- 8	1	16	9

¹ Amounts recognized under »Revaluation reserve«.

EUR million	Financial liabilities designated at fair value		Financial liabilities mandatorily measured at fair value through profit or loss	Total
	Securitized liabilities	Other financial liabilities	Trading liabilities	
			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
Reclassification from level III	0	0	0	0
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

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 non-observable 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 non-observable parameter is immaterial. A calculation of the interactions between these parameters has therefore been dispensed with.

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

EUR million	Positive changes in fair value		Negative changes in fair value	
	Net gains/losses from financial instruments measured at fair value and revaluation reserve		Net gains/losses from financial instruments measured at fair value and revaluation reserve	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Financial assets measured at fair value				
Financial assets mandatorily measured at fair value through profit or loss	19.6	26.9	- 19.0	- 24.1
Trading assets	8.8	15.2	- 8.2	- 14.0
Derivatives	3.4	3.5	- 2.8	- 2.6
Receivables	5.4	11.7	- 5.4	- 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	- 10.7	- 10.1
Equity instruments	4.6	3.8	- 4.6	- 3.3
Receivables	6.2	7.9	- 6.1	- 6.8
Financial assets measured at fair value through other comprehensive income	26.4	24.0	- 23.5	- 21.8
Equity instruments	26.4	24.0	- 23.5	- 21.8
Total	46.0	50.9	- 42.5	- 45.9

Equity and liabilities

EUR million	Positive changes in fair value		Negative changes in fair value	
	Net gains/losses from financial instruments measured at fair value and revaluation reserve		Net gains/losses from financial instruments measured at fair value and revaluation reserve	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Financial liabilities measured at fair value				
Financial liabilities mandatorily measured at fair value through profit or loss	3.6	5.6	- 4.5	- 6.9
Trading liabilities	3.6	5.6	- 4.5	- 6.9
Derivatives	3.6	5.6	- 4.5	- 6.9
Financial liabilities designated at fair value	0.6	0.9	- 0.4	- 0.6
Securitized liabilities	0.6	0.9	- 0.4	- 0.6
Total	4.2	6.5	- 4.9	- 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

31/12/2019 EUR million	Measurement methods	Significant unobservable parameters	Range	Parameter shift
Financial assets measured at fair value				
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	36%	absolute - 30%/+ 30%
	Net present value method	Liquidity spread (bp)	20	relative - 25%/+ 25%
Equity instruments				
Debentures and other fixed-income securities				
Receivables	Net present value method	Credit spread (bp)	95 - 295	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	1.23% - 3.33%	individually per instrument
	Net income value method	Beta factor	1.00 - 1.23	relative + 5%/- 5%
Debentures and other fixed-income securities				
Receivables	Net present value method	Credit spread (bp)	232 - 800	relative - 30%/+ 30%
Positive fair values from hedging derivatives				
Financial assets designated at fair value				
Debentures and other fixed-income securities				
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	1.05	relative + 5%/- 5%
Debentures and other fixed-income securities				
Receivables				
Investment property	Discounted cash flow method	Rent dynamization/indexing	1.50%	n/a
		Discounting interest rate	3.45% - 9.2%	
		Rental loss risk	0.75% - 4.0%	
		Basic maintenance costs	EUR 5.00 - 17.90/m ²	
		Administrative costs (% of target rent)	1.0% - 6.5%	

31/12/2018 EUR million	Measurement methods	Significant unobservable parameters	Range	Parameter shift
Financial assets measured at fair value				
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%
Equity instruments				
Debentures and other fixed-income securities				
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%
Debentures and other fixed-income securities				
Receivables	Net present value method	Credit spread (bp)	329 - 799	relative - 30%/+ 30%
Positive fair values from hedging derivatives				
Financial assets designated at fair value				
Debentures and other fixed-income securities				
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	1.05	relative + 5%/- 5%
Debentures and other fixed-income securities				
Receivables				
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 2.50 - 18/m ²	
		Administrative costs (% of target rent)	1.0% - 6.5%	

Equity and liabilities

31/12/2019 EUR million	Measurement methods	Significant unobservable parameters	Range	Parameter shift
Financial liabilities measured at fair value				
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	36%	absolute - 30%/+ 30%
	TRS model	Discount curve (bp)	49 - 94	relative - 30%/+ 30%
Delivery obligations from short sales of securities				
Deposits				
Securitized liabilities				
Negative fair values from derivative hedging instruments				
Financial liabilities designated at fair value				
Securitized liabilities	Option price models	Interest rate correlation	- 81% - 96%	relative - 20%/+ 10%
		Currency correlation	36%	absolute - 30%/+ 30%
Other financial liabilities				
31/12/2018				
EUR million				
	Measurement methods	Significant unobservable parameters	Range	Parameter shift
Financial liabilities measured at fair value				
Financial liabilities mandatorily measured at fair value through profit or loss				
Trading liabilities				
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%
	TRS model	Discount curve (bp)	42 - 91	relative - 30%/+ 30%
Delivery obligations from short sales of securities				
Deposits				
Securitized liabilities				
Negative fair values from derivative hedging instruments				
Financial liabilities designated at fair value				
Securitized liabilities	Option price models	Interest rate correlation	10% - 99%	relative - 20%/+ 10%
		Currency correlation	28%	absolute - 30%/+ 30%
Other financial liabilities				

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. The market participants may have different opinions about the characteristics of the unobservable parameters used in these models. Hence, the transaction price may deviate from what is considered by LBBW to be the fair value.

LBBW recognizes day one profits for trading portfolios of derivatives. The table below shows the changes in day one profits for 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
<i>Balance as at 1 January</i>	0	0
New transactions (allocations)	1	0
<i>Balance as at 31 December</i>	1	0

51. Financial instruments designated at fair value

The information on financial assets and liabilities designated at fair value is set out in the following tables.

Assets

31/12/2019 EUR million	Maximum default risk as at the qualifying date	Cumulative changes in fair value resulting from the credit spread	Changes in fair value resulting from the credit spread in the year under review
Debentures and other fixed-income securities	61	1	2
Receivables	1,109	1	- 1
<i>Total</i>	<i>1,170</i>	<i>2</i>	<i>1</i>

31/12/2018 EUR million	Maximum default risk as at the qualifying date	Cumulative changes in fair value resulting from the credit spread	Changes in fair value resulting from the credit spread in the year under review
Debentures and other fixed-income securities	44	- 1	- 1
Other	1,163	2	3
<i>Total</i>	<i>1,207</i>	<i>1</i>	<i>1</i>

Equity and liabilities

31/12/2019 EUR million	Difference between carrying amount and contractual amount payable on maturity	Cumulative changes in fair value resulting from the credit spread
Borrower's note loans	301	16
Securitized liabilities	113	- 18
Subordinated liabilities	108	- 17
Other	239	23
Total	761	5

31/12/2018 EUR million	Difference between carrying amount and contractual amount payable on maturity	Cumulative changes in fair value resulting from the credit spread
Borrower's note loans	267	11
Securitized liabilities	150	- 24
Subordinated liabilities	37	20
Other	0	15
Total	454	23

LBBW calculates two values to determine the change in credit risk. For one fair value, the currently applicable credit spread is used while for the other, the historical credit spread is applied. The difference between the two values expresses the change in fair value induced by changes to the credit rating since the financial instrument was designated at fair value. The approach chosen ensures that the changes in fair value induced by the credit rating are not distorted by other market price risk-induced effects.

To be able to take into account the instrument-specific credit risk that is decisive for the rating-induced changes in fair value, a spread curve appropriate to the risk profile is used. Primary market prices are used to form the spread curves; in the absence of primary market activity, secondary market prices and approximation methods based on liquid market prices of comparable bonds may be employed.

From an economic aspect, the financial liabilities designated at fair value are regularly immunized against the changes in fair value resulting from the market price risks through the use of derivative financial instruments. Essentially, the gain/loss from the change in own credit rating remains, which is reported in full under Other comprehensive income. Transfers within equity are made only if the effects are realized gains/losses in connection with the measurement of the own credit rating.

52. Equity instruments voluntarily measured at fair value through other comprehensive income

LBBW exercises the fair value through other comprehensive option in accordance with IFRS 9.5.7.5 for some financial investments in equity instruments. These essentially comprise equity investments on banks held with no intention to sell.

Equity instruments measured voluntarily at fair value through other comprehensive income amounted to EUR 487 million (previous year: EUR 509 million) (see Note 29). Dividends of EUR 19 million (previous year: EUR 22 million) for equity instruments measured voluntarily at fair value through other comprehensive income were recognized in the financial year. As in the previous year, these relate entirely to equity instruments held at the reporting date.

In the financial year, an immaterial amount of gains and losses resulting from the disposal of equity instruments voluntarily measured at fair value through other comprehensive income were transferred within equity to retained earnings.

53. Net gains/losses from financial instruments

The net gains or losses, broken down by category according to IFRS 9, comprise gains and losses on disposal, changes in fair value, impairments, reversals of impairment losses, gains/losses from foreign currency translation and subsequent income from financial instruments already written off. They also include changes in value from economic hedging derivatives and the income/loss from changes in the value of hedged items from micro fair value hedges.

EUR million	01/01 - 31/12/2019	01/01 - 31/12/2018
Financial assets/liabilities mandatorily measured at fair value through profit or loss.	- 147	192
Financial assets designated at fair value	23	- 3
Financial liabilities designated at fair value	- 105	47
Net gains/losses recognized through profit or loss	- 70	18
Net gains/losses recognized in other comprehensive income	- 12	27
Financial assets measured at amortized cost	305	- 56
Financial liabilities measured at amortized cost	- 442	- 142
Equity instruments measured at fair value through other comprehensive income	- 26	- 54
Financial debt instruments measured at fair value through other comprehensive income	684	42
Net gains/losses recognized in other comprehensive income	661	5
Net gains/losses transferred from other comprehensive income to the income statement after derecognition	23	38

54. Maturity analysis

The following table divides the undiscounted financial liabilities into derivative and non-derivative transactions for the remaining contractual maturities. Given that the reporting is undiscounted and includes interest payments, the figures differentiate in part from the carrying amounts shown in the balance sheet.

Financial liabilities according to contractually agreed maturity structures in accordance with IFRS 7.39 as at the balance sheet date are as follows:

31/12/2019 EUR million	up to 1 month	>1 to 3 months	>3 to 12 months	>1 year to 5 years	>5 years
Financial liabilities	57,735	13,890	24,610	38,954	24,910
Liabilities from derivatives	250	256	1,086	4,492	3,116
Total	57,985	14,146	25,696	43,446	28,026
Irrevocable loan commitments and guarantees ¹	56,401	146	1,122	306	665
Savings and demand deposits, securitization from interbank accounts	53,757				

1 Basis: All guarantees and revocable and irrevocable loan commitments included in the IFRS financial statements by the accounting department. The values given are based on the assumption that all guarantees are used and all loan commitments are drawn.

31/12/2018 EUR million	up to 1 month	>1 to 3 months	>3 to 12 months	>1 year to 5 years	>5 years
Financial liabilities	54,700	10,788	20,125	41,760	20,672
Liabilities from derivatives	190	242	979	2,842	699
Total	54,890	11,030	21,104	44,602	21,371
Irrevocable loan commitments and guarantees ¹	49,201	481	1,878	979	966
Savings and demand deposits, securitization from interbank accounts	51,352				

1 Basis: for the LiqV relevant loan commitments and guarantees, excluding intra-Group commitments, since the funding risk associated with these commitments is already reflected in the consolidation of the inflow and outflow of funds, and not including undischursed loans.

55. Issuing activities

EUR million	31/12/2019	31/12/2018
Securitized liabilities	38,815	38,827
Securitized liabilities designated at fair value	4,011	5,077
Securitized liabilities mandatorily measured at fair value through profit or loss	6,368	5,436
Total	49,195	49,340

During the period under review, new issues, essentially short-dated money market paper, with a nominal volume of EUR 984,441 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 4,380 million (previous year: EUR 6,017 million) and the volume of repayments to a nominal of EUR 621,473 million (previous year: EUR 503,890 million).

56. Transfer of financial assets

Transferred financial assets that are not derecognized in their entirety

The transferred assets comprise mainly own assets that LBBW transferred or lent in the development loan business, and in securities lending or repurchase transactions. The receivables transferred within the scope of the development loan business may not be resold by LBBW in the interim. With securities lending or repurchase transactions, the right to use the securities expires with the transfer. The counterparties of the associated liabilities do not have exclusive access to these assets.

The transferred assets continue to be fully recognized in the balance sheet. This can potentially lead to counterparty, default and/or market price risk.

As at the reporting date, there are no issues that would have led to continuing involvement despite the transfer.

31/12/2019 EUR million	Transferred assets continue to be recognized in full	
	Carrying amount of transferred assets	Carrying amount of the associated liabilities
Financial assets measured at fair value		
Financial assets mandatorily measured at fair value through profit or loss	685	552
Trading assets	685	552
Debentures and other fixed-income securities	685	552
Receivables	0	0
Financial assets designated at fair value	96	96
Debentures and other fixed-income securities	96	96
Financial assets measured at fair value through other comprehensive income	2,286	1,776
Debentures and other fixed-income securities	1,039	529
Receivables	1,248	1,248
Financial assets measured at amortized cost		
Loans and advances to banks	21,793	21,792
Loans and advances to customers	9,300	9,345
Debentures and other fixed-income securities	2	0

31/12/2018 EUR million	Transferred assets continue to be recognized in full	
	Carrying amount of transferred assets	Carrying amount of the associated liabilities
Financial assets measured at fair value		
Financial assets mandatorily measured at fair value	729	507
Trading assets	729	507
Debentures and other fixed-income securities	505	283
Receivables	224	224
Financial assets designated at fair value	110	110
Receivables	110	110
Financial assets measured at fair value through other comprehensive income	2,470	1,901
Debentures and other fixed-income securities	1,394	825
Receivables	1,076	1,076
Financial assets measured at amortized cost		
Loans and advances to banks	20,712	20,702
Loans and advances to customers	8,802	8,800
Debentures and other fixed-income securities	102	43

57. Collateral

Assignor

LBBW pledges collateral especially within the scope of the development loan business and repurchase transaction agreements. Collateral is generally provided at commercially available terms that are determined in standard agreements. With securities repurchase agreements, the protection buyer has the right to dispose of or repledge the collateral in the meantime. Overall, assets in the amount of EUR 43,192 million (previous year: EUR 40,400 million) were assigned as collateral for liabilities or contingent liabilities.

Assignee

On the basis of securities repurchase transactions, LBBW receives securities pledged as collateral, which it has the right to resell or repledge, provided it returns securities of equal value at the end of the transaction. The fair value of the financial or non-financial assets received as collateral, which LBBW may sell or repledge even if the owner of such collateral is not in default, totals EUR 22,400 million (previous year: EUR 21,297 million). Of the collateral received, LBBW is required to return collateral with a total fair value of EUR 22,400 million (previous year: EUR 21,297 million) to its owners. The fair value of collateral disposed of or forwarded with an obligation to return the securities to the owner amounted to EUR 3,152 million (previous year: EUR 3,185 million).

58. Offsetting financial assets and liabilities

The Group is obliged to report financial assets and liabilities that meet the accounting offsetting criteria at their net value in the balance sheet. The following tables contain details about the offsetting effects on the consolidated balance sheet as well as potential effects from master netting agreements.

The featured transactions are usually closed on the basis of master agreements, the conditional or unconditional rights to offset receivables, liabilities and collateral received or pledged. A conditional netting right is given, for example, if the legal claim exists only in the case of insolvency or breach of contract. In accordance with IAS 32.42, transactions for which there is no legal right to netting of receivables and liabilities and/or no settlement on a net basis or no simultaneous settlement is planned, are not netted.

The collateral detailed is pledged mainly on the basis of repurchase agreements and liens, whereby collateral may only be offset in legally agreed cases (e.g. in insolvency). In the case of repurchase agreements, the receiver is obliged to return the transferred financial instruments at the end of the term. However, the receiver has the right to regularly sell or pledge the collateral to third parties.

The net amount of the individual financial instruments recognized in the balance sheet is calculated according to the measures shown in the »Accounting and valuation methods« section. Collateral in the form of financial instruments and the cash collateral are stated at the fair value.

Assets

31/12/2019 EUR million	Gross amount of financial assets	Offsetting amount	Net amount of recognized financial assets	Amounts that are not subject to offsetting			
				Effect of master netting agreements	Collateral received		Net amount
					Financial instruments	Cash collateral	
Receivables from securities repurchase and lending agreements	25,303	- 4,109	21,193	- 675	- 20,488	- 26	5
Derivatives	48,535	- 29,161	19,374	- 10,589	- 2	- 3,173	5,611
Total	73,837	- 33,270	40,567	- 11,263	- 20,489	- 3,199	5,616

31/12/2018 EUR million	Gross amount of financial assets	Offsetting amount	Net amount of recognized financial assets	Amounts that are not subject to offsetting			
				Effect of master netting agreements	Collateral received		Net amount
					Financial instruments	Cash collateral	
Current account claims	16	- 6	10	0	0	0	10
Receivables from securities repurchase and lending agreements	23,703	- 2,875	20,828	- 1,568	- 15,781	0	3,479
Derivatives	30,858	- 14,945	15,912	- 8,820	- 2	- 3,054	4,036
Total	54,577	- 17,826	36,750	- 10,388	- 15,783	- 3,054	7,525

The respective net amounts of the receivables from securities repurchase and lending agreements were broken down in the following balance sheet items: EUR 11,971 million in loans and advances to banks (previous year: EUR 8,881 million), EUR 8,423 million in loans and advances to customers (previous year: EUR 11,947 million) and EUR 800 million in financial assets measured at fair value through profit or loss (previous year: EUR 0 million).

As in the previous year, the net receivables from derivative transactions were also recognized in full in the balance sheet item »Financial assets mandatorily measured at fair value through profit or loss«.

The cash collateral was shown as at the reporting date at EUR 2,110 million (previous year: EUR 2,314 million) under Deposits from banks and at EUR 1,089 million (previous year: EUR 741 million) under Deposits from customers.

Equity and liabilities

31/12/2019 EUR million	Gross amount of financial liabilities	Offsetting amount	Net amount of recognized financial liabilities	Amounts that are not subject to offsetting			
				Effect of master netting agreements	Pledged collateral		Net amount
					Financial instruments	Cash collateral	
Current account liabilities	90	0	89	0	0	0	89
Liabilities from securities repurchase and lending agreements	7,957	- 4,109	3,848	- 675	- 3,170	- 3	0
Derivatives	46,247	- 29,161	17,086	- 10,589	0	- 5,491	1,006
Total	54,293	- 33,270	21,023	- 11,263	- 3,170	- 5,494	1,095

31/12/2018 EUR million	Gross amount of financial liabilities	Offsetting amount	Net amount of recognized financial liabilities	Amounts that are not subject to offsetting			
				Effect of master netting agreements	Pledged collateral		Net amount
					Financial instruments	Cash collateral	
Current account liabilities	179	- 6	173	0	0	0	173
Liabilities from securities repurchase and lending agreements	7,313	- 2,875	4,438	- 1,568	- 2,869	0	1
Derivatives	28,806	- 14,945	13,860	- 8,820	- 1	- 4,194	845
Total	36,297	- 17,826	18,471	- 10,388	- 2,870	- 4,194	1,019

As at 31 December 2019, the net amount of recognized current account liabilities was shown in deposits from customers (EUR 68 million) and in deposits from banks (EUR 21 million). In the previous year, the entire amount was attributable to deposits from customers.

The respective net amounts of the securities repurchase and lending agreements were broken down in the following balance sheet items: EUR 1,932 million in deposits from banks (previous year: EUR 3,434 million) and EUR 1,916 million in deposits from customers (previous year: EUR 1,003 million).

As in the previous year, the net liabilities from derivative transactions are also recognized in full in the financial assets at fair value through profit or loss balance sheet item.

The cash collateral was shown as at the reporting date at EUR 4,379 million (previous year: EUR 3,319 million) under Loans and advances to banks and at EUR 1,116 million (previous year: EUR 875 million) under Loans and advances to customers.

59. Hedge accounting

The amount, timing and uncertainty of future cash flows

31/12/2019 EUR million	Up to 3 months	3 months to 1 year	>1 year to < 5 years	>5 years	indefinite term
Fair value hedge					
Interest rate risks (PFVHA + MFVHA)¹					
Nominal amount	1,768	17,183	88,141	82,051	0
Average hedged interest rate (MFVHA, in %)					
CHF	0.0	4.2	0.0	0.0	0.0
EUR	4.3	5.9	4.4	5.7	0.0
GBP	0.0	1.5	0.0	0.0	0.0
USD	8.1	0.0	7.4	6.9	0.0
Foreign currency risks (MFVHA)¹					
Nominal amount	0	0	108	211	0
Average hedged rate (exchange rate)					
AUD	0.0	0.0	0.0	1.5	0.0
HKD	0.0	0.0	10.4	0.0	0.0
NOK	0.0	0.0	8.5	0.0	0.0
USD	0.0	0.0	1.4	0.0	0.0

1 (PFVHA - portfolio fair value hedge accounting; MFVHA - micro fair value hedge accounting)

31/12/2018 EUR million	Up to 3 months	3 months to 1 year	>1 year to < 5 years	>5 years	indefinite term
Fair value hedge					
Interest rate risks (PFVHA + MFVHA)¹					
Nominal amount	10,918	21,279	109,908	98,185	0
Average hedged interest rate (MFVHA, in %)					
CHF	0.0	3.9	4.2	0.0	0.0
EUR	0.0	4.5	4.8	5.7	0.0
GBP	0.0	0.0	1.5	0.0	0.0
USD	6.9	0.0	7.4	6.9	0.0
Foreign currency risks (MFVHA)¹					
Nominal amount	0	13	341	204	0
Average hedged rate (exchange rate)					
AUD	0.0	0.0	0.0	1.5	0.0
CHF	0.0	0.0	1.1	0.0	0.0
HKD	0.0	10.4	0.0	0.0	0.0
NOK	0.0	7.8	8.5	0.0	0.0
USD	0.0	0.0	1.4	0.0	0.0

1 (PFVHA - portfolio fair value hedge accounting; MFVHA - micro fair value hedge accounting)

Effects of hedge accounting on results of operations, net assets and financial position

Hedging instruments designated by LBBW as hedge accounting have the following effects on the balance sheet as at the reporting date:

31/12/2019 EUR million	Carrying amount of hedging transactions assets	Carrying amount of hedging transactions equity and liabilities	Nominal amount of hedging instruments	Balance sheet items under which the hedging transactions are recognized	Change in fair value to measure ineffectiveness in the reporting period
Fair value hedges					
Interest rate risks hedges	1,362	2,527	145,246	Diverse ¹	- 528
Micro fair value hedge accounting	376	767	- 252	Diverse ¹	- 84
Portfolio fair value hedge accounting	986	1,760	145,498	Diverse ¹	- 444
Foreign currency risks hedges	12	10	123	Diverse ¹	14
Other price risks hedges	0	0	0	Diverse ¹	0

¹ Financial assets and liabilities mandatorily measured at fair value through profit or loss

31/12/2018 EUR million	Carrying amount of hedging transactions assets	Carrying amount of hedging transactions equity and liabilities	Nominal amount of hedging instruments	Balance sheet items under which the hedging transactions are recognized	Change in fair value to measure ineffectiveness in the reporting period
Fair value hedges					
Interest rate risks hedges	1,961	3,036	240,290	Diverse ¹	- 99
Micro fair value hedge accounting	336	811	2,717	Diverse ¹	- 49
Portfolio fair value hedge accounting	1,625	2,225	237,573	Diverse ¹	- 51
Foreign currency risks hedges	8	27	557	Diverse ¹	3
Other price risks hedges	0	0	0	Diverse ¹	0

¹ Financial assets and liabilities mandatorily measured at fair value through profit or loss

The hedged items from fair value hedges designated as hedge accounting have the following effects on the balance sheet as at the reporting date:

31/12/2019 EUR million	Carrying amount of hedged items assets	Carrying amount of hedged items equity and liabilities	Cumulative income or expenses recognized in the carrying amount of the hedged item assets	Cumulative income or expenses recognized in the carrying amount of the hedged item equity and liabilities	Balance sheet items under which the hedged items are recognized	Change in fair value to measure ineffectiveness in the reporting period	Cumulative amount of the fair value of hedged items that are no longer adjusted to hedge gains and losses
Interest rate risks hedges	35,479	32,714	33	- 20	0	496	1,088
Micro fair value hedge accounting	1,955	1,436	33	- 20	Diverse 1	82	321
Portfolio fair value hedge accounting	33,524	31,278	0	0	Diverse 1	414	767
Foreign currency risks hedges	89	247	0	20	0	- 14	- 5
Discontinued hedging relationships	0	0	11	6	0	0	0

1 Financial assets and liabilities measured at amortized cost; financial assets measured at fair value through other comprehensive income.

31/12/2018 EUR million	Carrying amount of hedged items assets	Carrying amount of hedged items equity and liabilities	Cumulative income or expenses recognized in the carrying amount of the hedged item assets	Cumulative income or expenses recognized in the carrying amount of the hedged item equity and liabilities	Balance sheet items under which the hedged items are recognized	Change in fair value to measure ineffectiveness in the reporting period	Cumulative amount of the fair value of hedged items that are no longer adjusted to hedge gains and losses
Interest rate risks hedges	30,188	27,814	- 126	- 95	0	87	893
Micro fair value hedge accounting	2,152	1,383	- 126	- 95	Diverse 1	49	462
Portfolio fair value hedge accounting	28,036	26,431	0	0	Diverse 1	38	431
Foreign currency risks hedges	326	237	- 1	4	0	- 3	8
Discontinued hedging relationships	0	0	- 1	0	0	0	0

1 Financial assets and liabilities measured at amortized cost; financial assets measured at fair value through other comprehensive income.

The hedge relationships from fair value hedges (PFVHA and MFVHA) mentioned above have the following effects on the income statement and other comprehensive income as at the reporting date:

31/12/2019 EUR million	Ineffectiveness recognized in the income statement	Items in the income statement under which ineffectiveness is recognized
Interest rate risks hedges	- 32	Net gains/losses from hedging transactions
Foreign currency risks hedges	0	Net gains/losses from hedging transactions

31/12/2018 EUR million	Ineffectiveness recognized in the income statement	Items in the income statement under which ineffectiveness is recognized
Interest rate risks hedges	- 12	Net gains/losses from hedging transactions
Foreign currency risks hedges	0	Net gains/losses from hedging transactions

Other information

60. Disclosure of Interests in Other Entities

Significant restrictions on the Group's ability to access or use the Group assets.

Assets are held within the Group that are subject to contractual, legal or regulatory disposal restraints, which can restrict LBBW's ability to access these assets and use them to meet the Group's liabilities. The restrictions result from the cover pools of the covered bond business, assets for the collateralization of liabilities from repurchase transactions and from the pledging of collateral for liabilities from OTC derivative transactions, as well as for liabilities issued by consolidated structured entities. Regulatory requirements, requirements of central banks and local company law rules can restrict the usability of assets.

There are no significant restrictions from property rights of non-controlling interests that restrict the ability of the Group to transfer assets or meet liabilities.

The carrying amounts of the assets with significant restrictions amounted to:

EUR million	31/12/2019	31/12/2018
Assets with restrictions on disposal		
Financial assets measured at amortized cost	64,139	60,023
Loans and advances to banks	23,230	22,309
Loans and advances to customers	40,714	37,419
Debentures and other fixed-income securities	195	294
Financial assets measured at fair value through profit or loss	6,798	6,213
Financial assets measured at fair value through other comprehensive income	4,463	3,962
Other assets	1,153	1,124
Total	76,552	71,322

The assets with significant restrictions comprised mainly the EUR 34 billion (previous year: EUR 30 billion) in cover assets in the covered bond business, financial assets of EUR 34 billion (previous year: EUR 33 billion) that have been transferred but not fully derecognized, especially in securities repurchase or lending transactions and development loan transactions (see Note 56) and collateral pledged for liabilities from OTC derivative transactions in the amount of EUR 6 billion (previous year: EUR 5 billion).

Shares in consolidated structured entities

A total of five (previous year: eight) structured entities were included in the consolidated financial statements, whose relevant activities are not influenced by voting or comparable rights. LBBW maintains business relationships with these companies and also acquires commercial paper from the consolidated structured entities as part of investment decisions.

As at 31 December 2019, liquidity lines in the amount of EUR 3,276 million (previous year: EUR 3,490 million) were provided to the consolidated structured entities.

Shares in joint agreements and associates

One joint venture and two associates are of material importance to LBBW due to the carrying amount of the equity investment or the total assets and proportionate earnings and are accounted for using the equity method.

Summarized financial information for each joint venture that is material to LBBW and accounted for using the equity method is shown in the following table:

EUR million	GIZS GmbH & Co. KG, Frankfurt am Main ^{1,2}	
	31/12/2019	31/12/2018
Revenues	23	21
Scheduled amortization	- 4	- 3
Profit/loss from continuing operations	- 1	- 7
Net consolidated profit/loss in equity	0	0
Net consolidated total comprehensive income	- 1	- 7
Current assets	14	17
Cash and cash equivalents	7	8
Other current assets	6	9
Non-current assets	12	12
Current liabilities	5	7
Other current liabilities	5	7
Non-current liabilities	1	1
Other non-current liabilities	1	1
Net assets of the joint venture	19	20
Share of capital (in %)	33	33
Share of net assets	6	7
Other adjustments	- 6	- 7
Carrying amount of the equity investment	0	0

1 Principal place of business.
2 Strategic equity investment.

The Other adjustments item includes impairments on the equity investments.

GIZS GmbH & Co. KG, in which LBBW holds a 33% stake in the capital and voting rights, holds and manages the equity investment in a joint venture of institutions of the German banking industry, whose purpose is to establish, operate and further develop a process for mobile and online payments.

Summarized financial information for each associate that is material to LBBW is shown in the following table:

EUR million	BWK GmbH Unternehmensbeteiligungs- gesellschaft, Stuttgart ^{1,2}		Hypo Vorarlberg Bank AG, Bregenz ^{1,2}	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Revenues	39	19	305	308
Profit/loss from continuing operations	11	3	57	23
Net consolidated profit/loss in equity	0	0	- 4	11
Net consolidated total comprehensive income	11	3	54	34
Current assets	94	78	3,406	3,685
Non-current assets	254	274	10,317	9,815
Current liabilities	3	3	5,913	6,091
Non-current liabilities	7	6	6,669	6,322
Contingent liabilities	0	0	435	405
Net assets of the associate	338	343	1,140	1,087
Share of capital (in %)	40	40	23	23
Share of net assets	135	137	264	251
Other adjustments	- 27	- 27	- 121	- 108
Carrying amount of the equity investment	109	110	143	143

1 Principal place of business.
2 Strategic equity investment.

The summarized financial information represents contributions of the IFRS financial statements of the associated entity, adjusted to the Group-wide accounting rules.

The »Other adjustments« item includes mainly impairments on the equity investments.

As an investor with a long-term perspective, BWK GmbH Unternehmensbeteiligungsgesellschaft, in which LBBW holds a 40% stake in the capital and voting rights, offers equity solutions to SMEs.

Hypo Vorarlberg Bank AG, in which LBBW has a 23% share of the capital and voting rights, offers banking services for retail and corporate customers.

During the year under review, LBBW received dividends in the amount of EUR 6 million (previous year: EUR 6 million) from its equity investment in BWK GmbH Unternehmensbeteiligungsgesellschaft and EUR 1 million (previous year: EUR 1 million) from Hypo Vorarlberg Bank AG.

The shares in the success and the carrying amount of the share for each joint venture and associate, which are deemed insignificant individually and are accounted for using the equity method, are shown in the following table:

EUR million	Associates		Joint ventures	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Portion of the profit or loss from continuing operations	0	1	2	2
Share in net consolidated total comprehensive income	0	1	2	2
Total carrying amounts of the Group shares	8	8	5	5

Other unrecognized liabilities of EUR 1 million (previous year: EUR 2 million) existed in connection with shares in associates and joint ventures.

Shares in non-consolidated structured entities

Structured entities are entities designed in a manner that voting and comparable rights do not represent the dominant factor when determining which party exercises controlling influence. This is the case, for example, when the voting rights relate solely to administrative duties and the relevant activities that significantly influence the entities' returns are controlled by contractual agreements or virtual positions of power.

A structured entity is often defined by several or all of the following characteristics:

- limited activities;
- narrow and clearly defined purpose;
- insufficient equity capital to conduct its relevant activities without secondary financial support;
- funding through the pooling of credit and other risks (tranches) in the form of multiple contractual instruments that are linked to the investors.

Accordingly, structured entities are consolidated in the principles shown in Note 3, if LBBW can exercise a controlling influence because of its relationships with the structured entity. The information on the nonconsolidated structured entities is based on structured entities that are not consolidated as LBBW Group cannot exercise any controlling influence over them. This must be reported if LBBW is subject to variable returns from the activities of the structured entities from its contractual and non-contractual relationships (»shares«). Shares in non-consolidated structured entities comprise loans and credits, equity instruments, various types of derivative, guarantees and liquidity facilities.

LBBW has business relationships with the following types of non-consolidated structured entities:

- **Funds:** LBBW provides customers with opportunities to invest in funds established and sponsored by LBBW itself, and invests in funds established and sponsored by third parties. Funds allow investors to make targeted investments in assets in line with a fixed investment strategy. Financing is generally provided through the issue of fund units and usually secured by the assets held by the structured entity. LBBW may operate as manager of the structured entity, investor, trustee for other investors or in another function.
- **Securitization vehicles:** Securitization vehicles offer investment opportunities to investors in diversified portfolios of different assets, such as, for example, leasing, trade receivables and the like. The securitization vehicles are financed through the issue of tranches of debentures, whose disbursements are dependent on the performance of the assets of the securitization vehicles and from the position of the respective tranche within the payment waterfall. LBBW participates in the funding or structuring of such vehicles.
- **Financing companies:** Financing companies (including leasing companies) are established for the purpose of funding various assets or transactions. They follow a specific company purpose, which means that the relevant activities are predetermined or not controlled by voting or comparable rights. As a lender, LBBW provides funding for these structured entities that are secured by assets held by the company.
- **Other:** Other structured entities are entities that cannot be assigned to any of the types stated above.

The scope of a structured entity depends on its type:

- **Funds:** Volume of assets under management
- **Securitized:** Nominal value of the issued securities
- **Financing companies:** Total assets
- **Other structured entities:** Total assets

The scope of non-consolidated structured entities without publicly available data is stated with the nominal value of LBBW's exposure.

The scope of the non-consolidated structured entities was as follows:

EUR million	Securitization vehicle		Funds		Financing companies		Other		Total	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Scope of the structured entities	5,800	7,078	429,865	352,600	7,853	7,843	1,184	1,202	444,703	368,724

The following table shows the carrying amounts of the assets and liabilities, the nominal values of the off-balance-sheet obligations that concern the shares in non-consolidated structured entities, and the items in the consolidated balance sheet in which these assets and liabilities are recognized, depending on the type of structured entity:

EUR million	Securitization vehicle		Funds		Financing companies		Other		Total	
	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Financial assets measured at amortized cost	333	1,802	4,261	3,440	1,366	1,469	0	1,202	5,960	7,913
Loans and advances to banks	0	0	0	0	0	0	0	1,033	0	1,033
Loans and advances to customers	333	1,802	4,261	3,440	1,366	1,469	0	170	5,960	6,881
Financial assets mandatorily measured at fair value through profit or loss	3	2	689	727	16	12	1,233	0	1,942	741
Trading assets	3	1	686	718	16	12	1,233	0	1,939	730
Positive fair values from hedging derivatives	0	1	3	10	0	0	0	0	3	11
Financial assets measured at fair value through other comprehensive income	94	0	0	0	0	0	0	0	94	0
Total assets	430	1,804	4,951	4,167	1,382	1,480	1,233	1,202	7,996	8,654
Financial liabilities measured at amortized cost	30	35	5,207	6,401	187	182	0	0	5,424	6,618
Deposits from banks	0	0	1	16	0	0	0	0	1	16
Deposits from customers	30	35	5,205	6,385	187	182	0	0	5,422	6,602
Financial liabilities mandatorily measured at fair value through profit or loss	0	0	87	71	0	0	0	0	88	71
Trading liabilities	0	0	87	71	0	0	0	0	87	71
Total equity and liabilities	30	35	5,294	6,472	187	182	0	0	5,511	6,689
Off-balance-sheet transactions	0	0	173	33	208	345	0	0	381	377

The maximum potential losses from shares in non-consolidated structured entities depend on the type of shares. The maximum risk of loss on assets presented in the table corresponds to the balance sheet figures (after allowances for losses on loans and advances if necessary). Of the derivatives with a carrying amount of EUR 98 million (previous year: EUR 81 million) and EUR 90 million (previous year: EUR 71 million) included in the trading assets or trading liabilities, respectively, and the off-balance-sheet obligations, including loan commitments, guarantees and liquidity facilities, the nominal amounts represent the maximum potential losses. The nominal value for derivatives with a positive replacement value was EUR 4,167 million (previous year: EUR 5,117 million) while that for derivatives with a negative replacement value was EUR 7,039 million (previous year: EUR 5,937 million). The maximum risk of loss does not correspond to the expected loss and does not take into account existing collateral and hedge relationships that limit the economic risk.

LBBW received interest income and fee and commission income from financing its shares in these nonconsolidated structured entities. Further income was generated from management fees and possible profit-sharing within the scope of fund management operations by LBBW. In addition, income was realized from the valuation or sale of securities issued by non-consolidated structured entities.

Sponsored non-consolidated structured entities in which LBBW does not hold any shares as at the reporting date.

LBBW participated as a sponsor for the launch or marketing of various structured entities in which it held no shares as at the reporting date. A structured entity is considered to be sponsored if it is reasonably associated with LBBW and supported by LBBW. Support in this respect can comprise the following services:

- Using the name »LBBW« for the structured entity;
- LBBW assets are transferred or sold to this structured entity;
- The structured entity was funded by LBBW and/or start-up capital provided by LBBW.

LBBW received gross income of EUR 6 million (previous year: EUR 5 million) from fees and commission from business transactions with sponsored, non-consolidated funds and securitizations in which LBBW holds no shares as at the reporting date. No assets were transferred from third parties to sponsored, nonconsolidated structured entities in 2019 (previous year: EUR 0 million).

61. Leases

Finance lease – LBBW as a lessor

The following maturity structure for future lease payments and reconciliation of the gross investment value to the present value of the leasing payments has been prepared for finance lease transactions which are shown under loans and advances to customers:

EUR million	31/12/2019
<i>Future lease payments</i>	6,124
Up to 1 year	1,897
More than 1 year to 2 years	1,419
More than 2 year to 3 years	1,135
More than 3 year to 4 years	734
More than 4 year to 5 years	391
More than 5 years	548
= Gross investment value	6,124
./. unguaranteed residual values	7
./. unrealized financial income	290
= Net investment value	5,828
Up to 1 year	1,837

From the standpoint of the lessor, gross investment in the lease is the aggregate of the leasing payments under a finance lease and any unguaranteed residual value accruing to the lessor. The lease payments are the fixed payments or payments linked to an index or (interest) rate (including residual value guarantees) that the lessee is required to pay during the term of the lease in exchange for the right to use an underlying asset over the lease term. The lease payments do not include conditional lease payments or payments for non-leasing components. The net investment value is the present value of the gross investment. The discount is based on the interest rate implicit in the lease from the lessor's perspective.

The financial income on the net investment value reported under interest income in the reporting year was EUR 246 million.

The cumulative write-downs for uncollectible outstanding lease payments amounted to EUR 54 million on the reporting date.

Operating lease - LBBW as a lessor

The carrying amounts of assets leased as part of operating lease transactions under property and equipment, which mainly constitute agreements concerning leasing of LBBW's own properties and buildings, were broken down as follows:

EUR million	Land	Buildings	Office equipment	Vehicles	Technical equipment and machinery	Other leased assets	Total
Historical cost							
<i>Balance as at 1 January 2019</i>	28	169	0	0	0	0	197
Additions	0	0	0	0	5	8	8
Transfers	0	1	0	0	0	0	1
Transfers to »Non-current assets and disposal groups held for sale«	0	- 2	0	0	0	0	- 3
<i>Balance as at 31 December 2019</i>	28	167	0	0	5	8	203
Amortization and impairment losses/reversals of impairment losses							
<i>Balance as at 1 January 2019</i>	- 3	- 140	0	0	0	0	- 143
Scheduled amortization	0	- 4	0	0	0	0	- 4
Transfers	0	1	0	0	0	0	1
Disposals	0	0	0	0	0	0	0
Transfers to »Non-current assets and disposal groups held for sale«	0	2	0	0	0	0	2
<i>Balance as at 31 December 2019</i>	- 4	- 140	0	0	0	0	- 144
Carrying amounts							
Balance as at 1 January 2019	25	29	0	0	0	0	54
Balance as at 31 December 2019	24	27	0	0	5	8	60

The carrying amounts of the investment property that is rented within the scope of operating lease agreements amounted to EUR 635 million (previous year: EUR 697 million). Changes to the carrying amounts are shown in Note 35.

In the year under review, lease income from operating leases was generated from fixed lease payments in the amount of EUR 72 million and from variable lease payments that are not dependent on an index or (interest) rate in the amount of EUR 3 million.

The following payments are expected from the leases:

EUR million	31/12/2019
Up to 1 year	49
More than 1 year to 2 years	43
More than 2 year to 3 years	36
More than 3 year to 4 years	29
More than 4 year to 5 years	25
More than 5 years	111
Future lease payments from operating leases	293

LBBW as the lessee

Rights-of-use from leases reported under property and equipment developed as follows in the year under review:

EUR million	Rights-of-use from land and buildings	Rights-of-use from vehicles	Rights-of-use from other operating and office equipment	Total
Historical cost				
Balance as at 31 December 2018	0	0	0	0
Initial adoption of IFRS 16	340	8	6	354
Balance as at 1 January 2019	340	8	6	354
Additions	20	2	5	27
Disposals	- 5	- 1	0	- 6
Balance as at 31 December 2019	355	9	11	376
Amortization and impairment losses/reversals of impairment losses				
Balance as at 1 January 2019	0	0	0	0
Scheduled amortization	- 35	- 4	- 1	- 40
Unscheduled write-downs	0	0	0	0
Disposals	2	1	0	2
Balance as at 31 December 2019	- 34	- 3	- 1	- 38
Carrying amounts				
Balance as at 1 January 2019	340	8	6	354
Balance as at 31 December 2019	322	6	10	338

Changes to the rights-of-use from investment property are shown in Note 35. They totaled EUR 30 million as at the reporting date.

The maturity structure for the future undiscounted lease payments and the lease liabilities included in »Other liabilities« as at the reporting date was as follows:

EUR million	31/12/2019
Up to 1 year	47
More than 1 year to 5 years	145
More than 5 years	213
Total undiscounted future lease payments	405
Up to 1 year	39
More than 1 year to 5 years	133
More than 5 years	208
Carrying amount of lease liabilities	381

The lease liabilities did not take into account potential future lease payments from existing leases in the amount of EUR 34 million from renewal options and EUR 6 million from termination options.

In the year under review, EUR -3 million was incurred in interest expenses for lease liabilities, essentially due to leases for land and buildings.

The expense for leases of a low-value asset came to EUR -2 million.

62. Related party disclosures

Related party transactions are concluded by LBBW in the ordinary course of business.

These include the shareholders of LBBW (see Note 18), controlled subsidiaries that are however not consolidated for reasons of materiality, structured entities, associates, joint ventures, persons in key positions and their relatives, as well as companies controlled by these individuals. Persons in key positions include the members of the Board of Managing Directors and of the Supervisory Board of LBBW (Bank), including relatives. Other related parties/companies also include equity investments by the shareholders and companies on which persons in key positions and their families can exert a dominant or material influence.

Information on the compensation of and transactions with individuals in key positions is shown in Note 68.

The related party transactions were concluded at arm's length terms in the ordinary course of business. These included loans, overnight and term money, derivatives and securities transactions, among others.

The following table shows the extent of the related party transactions:

31/12/2019 EUR million	Shareholders	Members of the Board of Managing Directors and Supervisory Board	Nonconsoli- dated subsidiaries	Associates	Joint ventures	Other related parties
Financial assets measured at amortized cost	548	3	3	200	0	1,322
Financial assets measured at fair value through other comprehensive income	526	0	22	171	0	99
Financial assets designated at fair value	18	0	0	0	0	0
Financial assets mandatorily measured at fair value through profit or loss	1,904	0	6	118	6	421
Other assets	0	0	1	0	0	0
Total assets	2,997	3	33	489	6	1,842
Financial liabilities measured at amortized cost	2,687	10	45	154	10	11,662
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	53	0	201
Provisions	0	0	0	0	3	0
Total equity and liabilities	2,688	10	46	207	13	11,885
Off-balance-sheet transactions	331	1	10	86	4	930

31/12/2018 EUR million	Shareholders	Members of the Board of Managing Directors and Supervisory Board	Nonconsoli- dated 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 132 million (previous year: EUR 109 million).

LBBW did not exercise the exemption in accordance with IAS 24.25.

63. Off-balance-sheet transactions

Contingent liabilities

EUR million	31/12/2019	31/12/2018
Sureties and guarantee agreements	7,777	7,583
Other contingent liabilities	113	86
Total	7,890	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.). It is recognized under »Provisions for credit risks«.

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.

The following liability relationships exist in addition to the contingent liabilities shown in the above table:

- Pursuant to Section 5 (10) of the bylaws of the German Deposit Protection Fund, LBBW undertook to indemnify Bundesverband Deutscher Banken e.V., Berlin, against any and all losses incurred by the latter as a result of assistance provided to credit institutions that are majority-owned by Landesbank Baden-Württemberg.
- For letters of comfort issued please see the list of shareholdings (Note 66).
- Liabilities from the guarantee obligation: LBBW (Bank) is liable indefinitely for the liabilities of DekaBank Deutsche Girozentrale, Berlin and Frankfurt am Main, and of former LBS Landesbausparkassen Baden-Württemberg, Stuttgart and Karlsruhe created up to 18 July 2001. This also applies externally to the liabilities of the following credit institutions, provided that these liabilities arose during the time when LBBW was a guarantor of these credit institutions: the former Landesbank Schleswig-Holstein Girozentrale, Kiel, and the former LRP Landesbank Rheinland-Pfalz, Mainz.

Other obligations

EUR million	31/12/2019	31/12/2018
Irrevocable loan commitments	28,961	25,476
<i>Total</i>	<i>28,961</i>	<i>25,476</i>

The item consists exclusively of the unutilized amount of the commitment granted that the Bank cannot revoke. If a guarantee is drawn on, there is a risk for LBBW that its claim (for recourse) against the guarantee holder or borrower less the collateral is not valuable (see Note 8 for information on allowances for losses on loans and advances).

Further transactions not included in the balance sheet and other financial obligations

EUR million	31/12/2019	31/12/2018
Payment obligations and joint liability	617	468
Obligations from investment projects started	273	135
Revocable loan commitments	20,380	19,409
Miscellaneous	31	24
Total	21,300	20,036

The following liability relationships exist in addition to the other financial obligations shown in the above table:

Payment obligations and joint liability consist of additional funding obligations to central counterparties in the amount of EUR 531 million (previous year: EUR 383 million). In addition to the items shown in the table, obligations of EUR 197 million (previous year: EUR 294 million) arise each year from rental and lease agreements.

Contingent claims

EUR million	31/12/2019	31/12/2018
Legal disputes	7	7
Total	7	7

Fiduciary transactions

The trust activities which are not carried in the balance sheet involve the following types of assets and liabilities and break down as follows:

EUR million	31/12/2019	31/12/2018
Loans and advances to banks	234	282
Loans and advances to customers	94	125
Financial investments	1	2
Other assets	28	29
Total trust assets¹	358	439
Deposits from banks	355	434
Deposits from customers	1	2
Other liabilities	2	3
Total trust liabilities¹	358	439

¹ Including receivables and liabilities on behalf of others for the account of a third party (administrative loans).

64. Capital management

The objective of this process is to ensure adequate capital and liquidity, both during normal business operations and under stress conditions, and thus to guarantee the permanent viability of the LBBW Group. Normal business operations focus on achieving the company targets while making adequate provisions for stress resistance under stress conditions.

Annual medium-term planning comprises the economic and regulatory considerations, brings these together and acts as a link between the strategic framework and integrated bank management throughout the year. The planning period covers five years.

The planning thus lays the groundwork for monitoring the targets set at all management levels. Within the management areas and dimensions, deviations from targets are analyzed, reported and, where necessary, measures to achieve the targets are agreed, implemented and monitored. This is carried out by those responsible/the committees within the steering groups.

In addition, a check is conducted on compliance with the internal targets for adverse developments over the same time horizon.

The members of the Group's Board of Managing Directors with responsibility for managing risks are supported in their decision-making by corporate bodies and a comprehensive risk and subject-specific reporting system. The overall risk report and the report to the Asset Liability Committee (ALCo) thus form the reporting system relevant to risk within the context of the requirements of MaRisk.

The monitoring body, the Risk Committee, comprises the board members with responsibility for real estate and project finance, capital markets business and asset management/international business, risk management, compliance and auditing, the head of finance/strategy and divisional managers from Group Risk Controlling, Compliance, Finance Controlling, Treasury and Back Office. As an advisory committee, it prepares decisions for the Board of Managing Directors and supports it in risk monitoring, risk methodology and risk strategy for the Group as a whole. The monthly overall risk report and other reports prepared on specific issues as required form the basis for this.

The managing body, ALCo, also has an advisory role and works on preparing decisions for the Group's Board of Managing Directors. The focus of the ALCo is on strategic resource management for the Group as a whole. It supports the Board of Managing Directors, among other things in structuring the balance sheet, managing capital and liquidity as well as in funding and managing market price risks. The committee comprises the board members with responsibility for capital markets business and asset management/international business, risk management, compliance and auditing, the head of finance/strategy and the divisional managers from Financial Controlling and Treasury. Group Risk Controlling and Finance also participate in the meetings.

The Regulatory/Accounting Committee evaluates at an early stage the requirements of the large number of provisions of banking supervisory law and accounting that are relevant for management purposes and takes the measures required. The committee comprises, among other areas, the board members with responsibility for capital markets business and asset management/international business, risk management/compliance and auditing and heads of information technology and finance/strategy, in addition to divisional managers from the Legal division, Group Risk Controlling, Compliance, Finance, Finance Controlling, Group Auditing, Treasury and Back Office.

Economic capital

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).

The internal monitoring of this risk-bearing capacity (RBC) using binding targets and tolerance levels ensures LBBW Group has adequate economic capital both in times of normal business operations as well as under stress conditions. Risks within the framework of the LBBW Group's risk-bearing capacity are described before possible measures to limit risks (so-called gross presentation).

See the risk report for details.

Regulatory capital

LBBW Group's capital ratios are calculated according to the provisions of Article 92 CRR in conjunction with Article 11 CRR. Accordingly, the ratios to be fulfilled at all times are:

- Common equity Tier 1 capital ratio (basis: CET 1 capital) of 4.5%, plus relevant capital buffer
- Tier 1 ratio (basis: common equity Tier 1 capital and additional Tier 1 capital) of 6.0%
- Total capital ratio (basis: common equity Tier 1 and additional Tier 1 capital, as well as supplementary capital) of 8.0%

The ECB is conducting the Supervisory Review and Evaluation Process (SREP). Based on this process, the ECB determined that, beyond the minimum requirements under Article 92 CRR, LBBW is required to maintain a CET 1 capital ratio of 9.75% at all times on a consolidated basis in 2019. This ratio includes the aforementioned common equity Tier 1 capital ratio and the capital conservation buffer, the buffer for other systemically relevant banks and the additional regulatory capital requirements within the scope of the SREP process.

Furthermore, a bank-specific countercyclical capital buffer must be held. This capital buffer can be imposed by countries in the European Economic Area and by third-party states for the major risk exposures in their country. In addition to this, the Bank has to meet the requirements of the Pillar II Capital Guidance (P2G) as additional capital guidance.

The ratios result from the relevant capital components in relation to the total exposure amount, expressed in percent. The total exposure amount is calculated as the risk weighted exposure amounts for the credit and dilution risk, the counterparty risk from the trading book business, market price risk (position, foreign currency and commodity position risks), the risks of credit valuation adjustments for OTC derivatives and operational risk. These ratios required by the supervisory authorities were maintained at all times during the 2019 financial year.

The own funds derive from the sum of Tier 1 and Tier 2 capital.

Tier 1 capital consists of common equity Tier 1 capital and additional Tier 1 capital, whereby the common equity Tier 1 capital comprises the paid-in capital, associated premiums (capital reserves), retained earnings and cumulative »Other income«.

The additional Tier 1 capital comprises the AT 1 bond issued in 2019 and the silent partners' contributions. Due to the transitional provisions that will be in place until the end of 2021, they may continue to be included this capital heading within the ranges applicable in accordance with Article 486 CRR in conjunction with Article 31 SolvV. Amounts that are no longer included in these ranges may be included in this capital heading, provided the conditions for consideration as supplementary capital are met.

Supplementary capital comprises long-term securitized subordinated liabilities as well as long-term subordinated loans and profit participation rights that meet the requirements of Article 63 CRR and the associated premiums. Furthermore, the »Silent partners' contributions« that can no longer be counted as AT 1 capital due to the transitional provisions are counted as part of the supplementary capital. The supplementary capital instruments are subject to a day specific reduction in the last five years of their term.

Intangible assets, deferred tax claims from loss carryforwards dependent on future profitability, assets from defined benefit pension funds and the value adjustment deficit for receivables that were calculated pursuant to the IRB approach, must be deducted from the common equity Tier 1 capital. In addition, the gains or losses from own liabilities measured at fair value due to changes in the credit ratings of LBBW Group, gains and losses from derivative liabilities recognized at fair value resulting from the Bank's own credit risk, as well as value adjustments due to the requirements for a prudent valuation must be deducted when calculating the own funds. Additional deductible items include irrevocable payment obligations towards the deposit guarantee system of the German Savings Bank Association (Deutscher Sparkassen- und Giroverband - DSGV) and towards the Single Resolution Board's resolution fund.

As part of market-smoothing operations, supplementary capital components securitized in securities may be repurchased within the applicable limits. Some directly or indirectly held supplementary capital instruments that have been repurchased must be deducted from the supplementary capital. The fixed ceiling was complied with in 2019.

LBBW applies the internal ratings-based approach (basic IRB approach) approved by the German Federal Financial Supervisory Authority (BaFin) for calculating capital backing for counterparty risks arising from the main exposure classes. Equity requirements for receivables for which permission has not been received to use a rating procedure are calculated in accordance with the credit risk standardized approach (CRSA).

The own funds in accordance with CRR are calculated based on the IFRS financial statements of the entities included in the regulatory scope of consolidation.

The following table shows the structure of the LBBW Group's own funds and the total amount of risk as at the reporting date 31 December 2019:

EUR million	31/12/2019	31/12/2018
Own funds	18,492	17,690
Tier 1 capital	13,257	13,039
of which common equity Tier 1 capital (CET 1)	11,790	12,119
of which additional Tier 1 capital (AT 1)	1,467	920
Supplementary capital (Tier 2)	5,235	4,651
Total amount at risk	80,484	80,348
Risk weighted exposure amounts for credit, counterparty and dilution risk, advance payments and other risk exposure amounts	69,347	69,249
Risk exposure amount for settlement and supply risks	19	0
Total exposure amount for position, foreign exchange and commodity risk	5,282	5,145
Total risk exposure amount for operational risks	4,661	4,685
Total amount of risk due to CVA	1,175	1,269
Total capital ratio (in %)	23.0	22.0
Tier 1 capital ratio (in %)	16.5	16.2
Common equity Tier 1 (CET 1) capital ratio (in %)	14.6	15.1

EUR million	31/12/2019	31/12/2018
Tier 1 capital	13,257	13,039
Paid-in capital instruments	3,484	3,484
Premium	8,240	8,240
Additional Tier 1 capital (AT 1)	1,467	920
Retained profits, cumulative result and other reserves	1,030	1,072
Deductibles from CET 1 capital in accordance with CRR, taking into account transitional provisions	- 965	- 677

Explanation of the changes in 2018 versus 2019

The common equity Tier I (CET 1) of the LBBW Group decreased as against the previous year. This was driven mainly by actuarial losses and the fact that intermediate profits for the 2019 financial year were not recognized this year in accordance with Article 26 (1) CRR. This was accompanied in particular by an increase in the »deductible items intangible assets« and the IRB shortfall compared with the previous year, as the audited write-downs from 2018 were recognized instead of the current write-downs from 2019. This was offset by the increase in the revaluation reserves and the retention of profits not taken into account in the interim profit calculation from 2018.

Additional Tier 1 capital (AT 1) increased as a result of issuing an AT 1 bond of EUR 750 million in November 2019. By contrast, additional Tier 1 capital decreased due to applying the transitional provisions in accordance with CRR. Supplementary capital (T 2) was strengthened in the first half of 2019 through the new issue of three subordinated bonds within the scope of the MTN program, amounting to EUR 500 million, AUD 100 million and JPY 2 billion respectively. Subordinated Schuldscheine and registered bonds of EUR 74 million were also placed on the market. Another positive effect for supplementary capital resulted from the offsetting of »silent partners' contributions« that, in accordance with CRR, no longer fulfill the conditions for AT 1 and instead meet only the conditions for T 2. The amortization of Tier 2 capital components on the basis of the number of days that have passed had the opposite effect.

The changes impacting on CET 1 capital have an effect on all capital ratios. An increase in AT 1 capital influences the Tier 1 capital ratio and the total capital ratio, while the issue of Tier 2 capital only has a positive effect on the total capital ratio.

The total amount of risk remained virtually unchanged compared to the end of the previous year. Specifically, there were the following significant changes although these offset each other on balance. The amount at risk in the CRSA retail business exposure class increased due to applying the SME factor to another subsidiary and financing a retail portfolio. This figure rose in the IRB corporates exposure class on account of new business and occasional rating downgrades. By contrast, the IRB special financing exposure class fell as a result of declining business development and increased collateral.

65. Events after the end of the reporting period

At the time the Board of Managing Directors prepared the annual financial statements on 3 March 2020, Germany had around 200 recorded cases of coronavirus and China around 80,000. By 24 March 2020, this had risen to 29,000 cases in Germany and 375,000 worldwide, prompting the WHO to declare the spread of the virus a pandemic.¹

The further spread of coronavirus and its impact on LBBW's business operations are therefore being monitored on an ongoing basis. Based on the latest developments, LBBW expects both German and global economic output to be negatively influenced for at least the first half of 2020. This could make it more difficult for LBBW to achieve its targets set for the 2020 financial year. The rapid growth of the outbreak means that only very limited exact forecasts can be made regarding the further impact on business performance and net assets, financial position and results of operations.

There were no events after the end of the financial year that particularly affect LBBW's net assets, financial position and results of operations.

¹ Source: WHO websites

Additional disclosures in accordance with Section 315e HGB

66. List of shareholdings and information on subsidiaries, associates and joint ventures

The share of the associates and joint ventures in the aggregate assets and liabilities, as well as revenues and profits/losses for the period are presented in Note 60.

LBBW Immobilien-Holding GmbH, Stuttgart, LBBW Service GmbH, Stuttgart, ALVG Anlagenvermietung GmbH, Stuttgart, SüdFactoring GmbH, Stuttgart, and SüdLeasing GmbH, Stuttgart, availed of the exemption according to Section 264 (3) HGB.

The following overview shows the full list of shareholdings of LBBW in accordance with Section 313 (2) HGB in the consolidated financial statements and Section 285 (11) HGB in the annual financial statements of Landesbank Baden-Württemberg including the statements pursuant to Section 285 (11a) HGB as at the reporting date. The list of shareholdings shows the companies for which a letter of comfort has been issued.

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
I. Companies included in the consolidated financial statements							
1. Subsidiaries							
a. Fully-consolidated subsidiaries (authority over the voting rights)							
1	ALVG Anlagenvermietung GmbH ^{1,6,18,22}	Stuttgart	100.00		EUR	19,000.00	0.00
2	Austria Beteiligungsgesellschaft mbH ¹⁸	Stuttgart	66.67		EUR	36,286.69	163.22
3	Bahnhofplatz-Gesellschaft Stuttgart Aktiengesellschaft ^{1,18}	Stuttgart	98.47		EUR	4,452.44	0.00
4	Berlin Lützowstraße GmbH & Co. KG ^{1,18}	Stuttgart	60.00		EUR	- 177.92	- 210.85
5	Centro Alemán de Industria y Comercio de México S.de R.L.de C.V. ^{2,18}	México, Mexico	100.00		MXN	- 12,474.40	1,752.76
6	Dritte Industriefabrik Objekt-GmbH ^{1,6,18}	Stuttgart	100.00		EUR	701.91	0.00
7	Dritte LBBW US Real Estate GmbH ¹⁸	Leipzig	100.00		EUR	16,426.89	- 307.62
8	Eberhardstraße Stuttgart GmbH & Co. KG ^{1,18}	Stuttgart	100.00		EUR	- 3,844.05	215.67
9	Employrion Komplementär GmbH ^{1,18,23}	Weil	100.00		EUR	32.47	1.01
10	Entwicklungsgesellschaft Grunewaldstraße 61 - 62 mbH & Co. KG ^{1,18}	Stuttgart	100.00		EUR	- 3,398.26	- 6.58
11	Entwicklungsgesellschaft Uhlandstraße 187 GmbH & Co. KG ^{1,18}	Stuttgart	100.00		EUR	- 2,203.77	- 6.03
12	Erste IMBW Capital & Consulting Komplementär GmbH ^{1,15,23}	Weil	100.00		EUR	25.51	- 1.05
13	Erste Industriefabrik Objekt-GmbH ^{1,6,18}	Stuttgart	100.00		EUR	474.96	0.00
14	EuroCityCenterWest GmbH & Co. KG ^{1,18}	Stuttgart	100.00		EUR	- 5,065.90	2,682.48
15	EuroCityCenterWest Verwaltungs-GmbH ^{1,18}	Stuttgart	100.00		EUR	35.11	- 0.08
16	FLANTIR PROPERTIES LIMITED ^{1,18}	Nicosia, Cyprus	100.00		RUB	- 13,977.74	- 9,296.72
17	FOM / LEG Generalübernehmer GmbH & Co. KG ^{1,18}	Heidelberg	100.00		EUR	- 8,473.55	467.99
18	FOM / LEG Verwaltungs GmbH ^{1,18}	Heidelberg	100.00		EUR	- 17.55	- 0.15
19	Fünfte Industriefabrik Objekt-GmbH ^{1,6,18}	Stuttgart	100.00		EUR	575.02	0.00
20	German Centre for Industry and Trade GmbH, Beteiligungsgesellschaft ^{5,18}	Stuttgart	100.00		EUR	7,720.60	0.00
21	German Centre for Industry and Trade Pte. Ltd. ^{1,18}	Singapore, Singapore	100.00		SGD	19,725.80	1,827.55
22	Grunewaldstraße 61 - 62 GmbH ^{1,18}	Stuttgart	100.00		EUR	27.98	- 0.26
23	IMBW Capital & Consulting GmbH ^{1,6,22,18}	Stuttgart	100.00		EUR	250.00	0.00
24	Immobilienvermittlung BW GmbH ¹⁸	Stuttgart	100.00		EUR	3,606.86	935.74
25	Industriefabrik-Aktiengesellschaft ^{1,6,18}	Stuttgart	93.63		EUR	23,281.64	0.00
26	Kiesel Finance Management GmbH ^{1,18}	Baienfurt	90.00		EUR	42.13	2.10
27	Kommunalbau Rheinland-Pfalz GmbH ^{1,18}	Mainz	100.00		EUR	2,043.33	4.19
28	Landesbank Baden-Württemberg Capital Markets Plc ^{3a,18}	London, Great Britain	100.00		EUR	927.00	- 23.00
29	LBBW Asset Management Investmentgesellschaft mbH ^{3,18,22}	Stuttgart	100.00		EUR	36,201.13	16,465.47
30	LBBW Corporate Real Estate Management GmbH ¹⁸	Stuttgart	100.00		EUR	2,817.72	- 230.87

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
31	LBBW Immobilien Asset Management GmbH ^{1,6,18}	Stuttgart	100.00		EUR	1,305.03	0.00
32	LBBW Immobilien Capital Fischertor GmbH & Co. KG ^{1,18}	Munich	93.98	94.00	EUR	- 5,247.13	1.60
33	LBBW Immobilien Capital GmbH ^{1,18}	Stuttgart	100.00		EUR	- 2,212.56	- 2.43
34	LBBW Immobilien Development GmbH ^{1,4,6,18,22}	Stuttgart	94.90		EUR	15,394.95	0.00
35	LBBW Immobilien Development Komplementär GmbH ^{1,18}	Stuttgart	100.00		EUR	- 608.59	- 8.93
36	LBBW Immobilien GmbH & Co. Beteiligung KG ^{1,18}	Stuttgart	100.00		EUR	32,950.63	950.63
37	LBBW Immobilien Investment Management GmbH ^{1,18}	Stuttgart	100.00		EUR	33.07	8.07
38	LBBW Immobilien Kommunalentwicklung GmbH ^{1,4,6,18,22}	Stuttgart	81.62		EUR	2,016.51	0.00
39	LBBW Immobilien Luxembourg S. A. ^{1,18}	Luxembourg, Luxembourg	100.00		EUR	- 76,282.61	- 30.26
40	LBBW Immobilien Management Gewerbe GmbH ^{1,6,18}	Stuttgart	94.90		EUR	3,303.97	0.00
41	LBBW Immobilien Management GmbH ^{1,6,18}	Stuttgart	100.00		EUR	375,690.52	0.00
42	LBBW Immobilien Romania S.R.L. ^{1,18}	Bucharest, Romania	100.00		RON	- 34,212.68	- 47.02
43	LBBW Immobilien Süd GmbH & Co. KG ^{1,4,18}	Munich	100.00		EUR	- 36,437.61	7,450.32
44	LBBW Immobilien-Holding GmbH ^{5,18}	Stuttgart	100.00		EUR	402,050.54	0.00
45	LBBW Leasing GmbH i.L. ¹⁸	Mannheim	100.00		EUR	25,024.36	- 24.73
46	LBBW México ^{2,18}	México, Mexico	100.00		MXN	3,654.42	1,257.57
47	LBBW Service GmbH ^{5,18}	Stuttgart	100.00		EUR	224.67	0.00
48	LBBW US Real Estate Investment LLC ⁸	Wilmington, USA	100.00		USD	53,907.11	- 1,551.75
49	LBBW Venture Capital Gesellschaft mit beschränkter Haftung ¹⁸	Stuttgart	100.00		EUR	22,944.32	- 1,435.77
50	LEG Projektgesellschaft 2 GmbH & Co. KG ^{1,18}	Stuttgart	100.00		EUR	6,953.62	513.75
51	LEG Verwaltungsgesellschaft 2 mbH ^{1,18}	Stuttgart	100.00		EUR	28.61	- 0.18
52	LIAM Horizont Stuttgart GmbH ^{1,18}	Stuttgart	100.00		EUR	31.23	0.71
53	LOOP GmbH ^{1,18}	Stuttgart	100.00		EUR	151.97	- 73.87
54	Löwentor Stuttgart Komplementär GmbH ^{1,18}	Stuttgart	100.00		EUR	26.98	1.37
55	Löwentor Stuttgart Projekt GmbH & Co. KG ^{1,18}	Stuttgart	70.00		EUR	3,712.67	- 522.33
56	LRP Capital GmbH ^{1,18}	Stuttgart	100.00		EUR	3,460.29	82.29
57	Lyoner Quartier GmbH & Co. KG ^{1,18}	Frankfurt am Main	100.00		EUR	- 4,485.63	- 4,323.15
58	MMV Bank GmbH ^{18, 22}	Koblenz	100.00		EUR	51,181.15	10,174.04
59	MMV Leasing Gesellschaft mit beschränkter Haftung ^{1,6,18,22}	Koblenz	100.00		EUR	21,000.00	0.00
60	MMV Versicherungsdienst GmbH ^{1,6,18}	Koblenz	100.00		EUR	27.05	0.00

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
61	MMV-Mobilien Verwaltungs- und Vermietungsgesellschaft mbH ^{1,6,18,22}	Koblenz	100.00		EUR	26.00	0.00
62	Nagatino Property S.à.r.l. ^{1,18}	Luxembourg, Luxembourg	100.00		EUR	- 27,700.79	- 12.37
63	Nymphenburger Straße München GmbH & Co. KG ^{1,18}	Stuttgart	100.00		EUR	39.88	118.53
64	Nymphenburger Straße München Komplementär GmbH ^{1,18}	Stuttgart	100.00		EUR	20.95	- 0.74
65	Pasing Projekt GmbH & Co. KG ^{1,18}	Stuttgart	100.00		EUR	- 15,564.82	12,591.71
66	Projekt 20 Verwaltungs GmbH ^{1,18}	Munich	100.00		EUR	41.67	1.35
67	Projektgesellschaft SMK 69 mbH ^{1,18}	Eschborn	60.00		EUR	- 226.75	- 174.15
68	Rheinallee V GmbH & Co. KG ^{1,18}	Stuttgart	100.00		EUR	- 545.70	- 485.46
69	Rheinallee V Komplementär GmbH ^{1,18}	Stuttgart	100.00		EUR	25.50	0.28
70	Schlossgartenbau Objekt-GmbH ^{1,6,18}	Stuttgart	100.00		EUR	18,560.61	0.00
71	Schlossgartenbau-Aktiengesellschaft ^{1,6,18}	Stuttgart	92.68		EUR	6,592.42	0.00
72	SG Management GmbH ^{1,18}	Stuttgart	100.00		EUR	13,308.13	47.58
73	SGB - Hotel - Verwaltung GmbH ^{1,18}	Stuttgart	100.00		EUR	39.06	3.93
74	Signaris GmbH ^{1,18}	Stuttgart	94.90		EUR	9,971.46	858.75
75	SLN Maschinen-Leasing Verwaltungs-GmbH ^{1,18}	Stuttgart	100.00		EUR	1,133.67	558.13
76	SLP Mobilien-Leasing Verwaltungs GmbH ^{1,18}	Mannheim	100.00		EUR	285.67	106.25
77	Süd Beteiligungen GmbH ¹⁸	Stuttgart	100.00		EUR	145,845.00	- 4,526.62
78	Süd KB Sachsen GmbH ^{1,18}	Leipzig	100.00		EUR	16,356.92	- 2,093.20
79	Süd KB Unternehmensbeteiligungsgesellschaft mbH ^{1,18}	Stuttgart	100.00		EUR	48,012.34	- 2,760.49
80	SüdFactoring GmbH ^{3,5,18,22}	Stuttgart	100.00		EUR	70,000.00	0.00
81	Süd-Kapitalbeteiligungs-Gesellschaft mbH ^{1,6,18}	Stuttgart	100.00		EUR	61,181.87	0.00
82	SüdLeasing Agrar GmbH ^{1,18,22}	Mannheim	100.00		EUR	1,801.50	895.12
83	SüdLeasing GmbH ^{5,18,22}	Stuttgart	100.00		EUR	34,748.22	0.00
84	targens GmbH ¹⁸	Stuttgart	100.00		EUR	4,597.92	1,291.98
85	Turtle Portfolio GmbH & Co. KG ^{1,4,18}	Frankfurt am Main	100.00		EUR	- 23,462.33	18,357.38
86	Turtle Vermögensverwaltungs-GmbH & Co. KG ^{1,18}	Frankfurt am Main	100.00		EUR	- 22,021.96	15,657.73
87	Turtle 1. Verwaltungs-GmbH ^{1,18}	Frankfurt am Main	100.00		EUR	- 2.03	- 70.38
88	Vierte Industriehof Objekt-GmbH ^{1,6,18}	Stuttgart	100.00		EUR	1,176.78	0.00
89	zob Esslingen Grundbesitz GmbH ^{1,18}	Stuttgart	100.00		EUR	539.81	523.97
90	Zweite IMBW Capital & Consulting Komplementär GmbH ^{1,18}	Stuttgart	100.00		EUR	22.03	1.21

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
91	Zweite Industriebau Objekt-GmbH ^{1,6,18}	Stuttgart	100.00		EUR	19,825.72	0.00
92	Zweite LBBW US Real Estate GmbH ¹⁸	Leipzig	100.00		EUR	50,351.43	2,155.58
b. Fully consolidated subsidiaries (authority over contractual agreements)							
93	Employrion Immobilien GmbH & Co. KG ^{1,18}	Weil	35.00	50.00	EUR	8.00	0.00
94	Erste IMBW Capital & Consulting Objektgesellschaft mbH & Co. KG ^{1,15}	Weil	40.00	50.00	EUR	- 34.14	0.00
95	Grundstücksgesellschaft Einkaufszentrum Kröpeliner-Tor-Center Rostock mbH & Co. KG ^{1,18}	Berlin	39.94	50.00	EUR	- 8,524.93	- 195.63
96	Weinberg Capital Designated Activity Company ^{18,23}	Dublin, Ireland			EUR	70.00	- 16.00
97	Weinberg Funding Ltd. ^{18,23}	St.Helier, Jersey, United Kingdom			EUR	3.60	0.00
2. Joint ventures accounted for using the equity method							
98	ARGE ParkQuartier Berg ^{1,18}	Stuttgart	50.00		EUR	472.98	- 69.36
99	Bad Kreuznacher Entwicklungsgesellschaft mbH (BKEG) ^{1,18}	Bad Kreuznach	50.00		EUR	3,887.56	593.44
100	GIZS GmbH & Co. KG ¹⁸	Frankfurt am Main	33.33		EUR	22,219.83	- 4,704.13
101	OVG MK6 GmbH & Co. KG ^{1,18}	Berlin	49.60	50.00	EUR	1,716.63	1,790.33
102	OVG MK6 Komplementär GmbH ^{1,18}	Berlin	50.00		EUR	26.97	1.35
103	Parcul Banatului SRL ^{1,18}	Bucharest, Romania	50.00		RON	290.54	168.97
104	SEALINK FUNDING DESIGNATED ACTIVITY COMPANY ^{18,23,29}	Dublin, Ireland			EUR	0.00	248,201.00
3. Associates accounted for using the equity method							
105	Altstadt-Palais Immobilien GmbH & Co. KG ^{1,15}	Weil	40.00	50.00	EUR	- 44.25	- 20.98
106	BWK GmbH Unternehmensbeteiligungsgesellschaft ¹⁸	Stuttgart	40.00		EUR	241,927.17	5,083.70
107	BWK Holding GmbH Unternehmensbeteiligungsgesellschaft ¹⁸	Stuttgart	40.00		EUR	10,563.87	850.08
108	EGH Entwicklungsgesellschaft Heidelberg GmbH & Co. KG ^{1,18}	Heidelberg	33.33		EUR	6,857.45	663.41
109	Hypo Vorarlberg Bank AG ^{1,18,22}	Bregenz, Austria	23.13		EUR	1,066,463.46	57,356.48

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity in EUR th.	Result EUR th.
II. Companies not included in the consolidated financial statements due to being of minor influence							
1. Subsidiaries							
a. Subsidiaries not included (authority over the voting rights)							
110	Baden-Württembergische Equity Gesellschaft mit beschränkter Haftung ¹⁸	Stuttgart	100.00		EUR	1,548.14	292.21
111	Berlin Lützowstraße Komplementär GmbH ^{1,18}	Stuttgart	100.00		EUR	29.98	2.30
112	DEBTVISION GmbH ^{1,18}	Stuttgart	80.00		EUR	1,097.12	- 838.58
113	German Centre for Industry and Trade Beijing Co., Ltd. ¹⁸	Beijing, China	100.00		CNY	6,578.24	1,673.06
114	Heurika Mobilien-Leasing GmbH ^{1,4,18}	Mannheim	100.00		EUR	254.11	175.57
115	Karin Mobilien-Leasing GmbH i.L. ^{1,18}	Mannheim	100.00		EUR	884.31	0.00
116	KB Projekt GmbH ^{1,18}	Frankfurt am Main	100.00		EUR	46.40	- 0.04
117	Kröpeliner-Tor-Center Rostock Verwaltungsgesellschaft mbH ^{1,18,23}	Berlin	100.00		EUR	28.47	1.84
118	Laurus Grundstücksverwaltungsgesellschaft mbH i.L. ¹⁸	Stuttgart	100.00		EUR	1,311.21	245.13
119	LBBW Dublin Management GmbH i. L. ²¹	Mainz	100.00		EUR	155.34	24.35
120	LBBW Gastro Event GmbH ^{5,18}	Stuttgart	100.00		EUR	130.00	0.00
121	LBBW Pensionsmanagement GmbH ^{5,18}	Stuttgart	100.00		EUR	25.00	0.00
122	LBBW REPRESENTAÇÃO LTDA. ^{2,18}	Sao Paulo, Brazil	100.00		BRL	157.29	- 1.95
123	LBBW (Schweiz) AG ¹⁸	Zurich, Switzerland	100.00		CHF	8,832.71	- 742.99
124	LEG Osiris 4 GmbH ^{1,18}	Stuttgart	100.00		EUR	28.08	- 1.13
125	LGZ-Anlagen-Gesellschaft mit beschränkter Haftung i.L. ¹⁸	Mainz	100.00		EUR	2,044.35	446.40
126	LIVIDA MOLARIS Grundstücks-Vermietungsgesellschaft mbH & Co. Landesfunkhaus Erfurt KG ¹⁸	Erfurt	99.77	24.00	EUR	- 5,735.71	2,366.81
127	LIVIDA MOLARIS Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Polizei Nordhausen KG ¹⁸	Erfurt	100.00	15.00	EUR	- 4,129.96	632.97
128	LLC German Centre for Industry and Trade ¹⁸	Moscow, Russia	100.00		RUB	2,530.04	312.80
129	MLP Verwaltungs GmbH i.L. ^{1,18}	Mannheim	100.00		EUR	106.31	- 0.89
130	MMV-Mittelrheinische Leasing Gesellschaft mit beschränkter Haftung ^{1,6,18}	Koblenz	100.00		EUR	26.43	0.00
131	Pollux Vierte Beteiligungsgesellschaft mbH ¹⁸	Stuttgart	100.00		EUR	7,422.42	169.07
132	SachsenFonds International Equity Holding I GmbH ^{1,18}	Aschheim	100.00		EUR	137.66	- 72.63
133	SachsenFonds International Equity I GmbH & Co. KG i.L. ^{1,18}	Leipzig	96.15		EUR	312.47	- 151.48
134	SBF Sächsische Beteiligungsfonds GmbH ^{1,18}	Leipzig	100.00		EUR	933.35	717.19
135	SL Bayern Verwaltungs GmbH i.L. ^{1,18}	Mannheim	100.00		EUR	65.00	- 2.94
136	SL Bremen Verwaltungs GmbH ^{1,18}	Mannheim	100.00		EUR	657.80	219.48

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
137	SL BW Verwaltungs GmbH i.L. ^{1,18}	Mannheim	100.00		EUR	39.64	0.00
138	SL Düsseldorf Verwaltungs GmbH ^{1,18}	Mannheim	100.00		EUR	604.59	- 2.86
139	SL Financial Services, LLC ¹⁸	Wilmington, USA	100.00		USD	63.93	- 30.71
140	SL Mobilien-Leasing GmbH & Co. Hafis KG ^{1,18,23}	Mannheim	0.00	51.00	EUR	1,992.37	- 6.37
141	SL Operating Services GmbH i.L. ^{1,18}	Mannheim	100.00		EUR	80.41	0.00
142	SL RheinMainSaar Verwaltungs GmbH ^{1,18}	Mannheim	100.00		EUR	58.19	- 0.85
143	SL Schleswig-Holstein Verwaltungs GmbH i.L. ^{1,18}	Mannheim	100.00		EUR	91.56	0.00
144	SL Ventus GmbH & Co. KG i.L. ^{1,20}	Mannheim	100.00		EUR	475.00	- 0.04
145	Städtische Pfandleihe Stuttgart GmbH ¹⁸	Stuttgart	100.00		EUR	3,713.01	134.22
146	Süd Mobilien-Leasing GmbH i.L. ^{1,18}	Stuttgart	100.00		EUR	28.28	0.00
147	Süd Verwaltung Schweiz GmbH ¹⁸	Zurich, Switzerland	100.00		CHF	75.03	22.30
148	SüdLeasing Finance GmbH i.G. ¹	Stuttgart	100.00			Not specified	Not specified
149	SüdLeasing Finance-Holding GmbH i.L. ^{1,18}	Stuttgart	100.00		EUR	174.58	0.00
150	Yankee Properties II LLC ²³	Wilmington, USA	0.00	100.00		Not specified	Not specified
151	Yankee Properties LLC ¹³	New York, USA	100.00		USD	580.75	- 23.57
152	Zenon Mobilien-Leasing GmbH i.L. ^{1,18}	Mannheim	100.00		EUR	36.61	1.29
153	Zorilla Mobilien-Leasing GmbH i.L. ^{1,18}	Mannheim	100.00		EUR	33.79	0.00
154	Zweite Karl-Scharnagl-Ring Immobilien Verwaltung GmbH ^{1,18}	Munich	100.00		EUR	42.36	1.52

b. Subsidiaries not included (authority over contractual agreements)

155	Germany Diversified Core+ ^{16,23}	Stuttgart			EUR	57,381.48	- 118.49
156	Humboldt Multi Invest B SICAV-FIS Sachsen LB Depot A i.L. ¹¹	Luxembourg, Luxembourg	100.00		EUR	5,897.89	- 248.71
157	LBBW AM-Start ²³	Stuttgart				Not specified	Not specified
158	LBBW Income Strategie ²³	Stuttgart				Not specified	Not specified
159	LBBW Mobilität der Zukunft ²³	Stuttgart				Not specified	Not specified
160	LBBW Multi Asset Defensiv Nachhaltigkeit ²³	Stuttgart				Not specified	Not specified
161	LBBW Multi Global Plus Nachhaltigkeit ^{19,23}	Stuttgart			EUR	10,448.33	- 410.09
162	Platino S.A. ^{17,23}	Luxembourg, Luxembourg			EUR	1.67	1.24
163	SPKED Invest ²³	Stuttgart				Not specified	Not specified
164	Weinberg Capital LLC ²³	Wilmington, USA				Not specified	Not specified

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
2. Joint ventures not accounted for using the equity method							
165	addfinity testa GmbH ^{1,18}	Hartha	49.85		EUR	5,966.87	7,550.25
166	EPSa Holding GmbH ^{1,18}	Saalfeld	45.00		EUR	3,427.67	582.75
167	German Centre for Industry and Trade India Holding-GmbH ^{1,18}	Munich	50.00		EUR	905.97	- 13.92
168	GIZS Verwaltungs-GmbH ¹⁸	Frankfurt am Main	33.33		EUR	25.56	8.03
169	LBBW Immobilien Verwaltung GmbH ^{1,18}	Stuttgart	50.00		EUR	66.55	7.08
170	SHS Gesellschaft für Beteiligungen mbH & Co. Mittelstand KG ^{1,18}	Tübingen	75.02		EUR	4,172.18	796.69
3. Associates not accounted for using the equity method							
171	AGVS Holding GmbH ^{1,18}	Villingen-Schwenningen	45.00		EUR	18,827.80	3,122.71
172	Deharde GmbH ^{1,18}	Varel	39.47		EUR	5,155.00	- 4,152.62
173	EURAMCO Immobilien GmbH ^{1,18}	Aschheim-Dornach	49.00		EUR	20.63	- 8.22
174	FABMATICS Holding GmbH ^{1,18}	Dresden	50.00		EUR	5,923.87	186.17
175	Grundstücks-, Vermögens- und Verwaltungs-GbR 34, Wolfstor 2, Esslingen i.L. ^{1,18}	Stuttgart	30.99		EUR	588.14	- 9.10
176	Grundstücks-, Vermögens- und Verwaltungs-GbR 36, Stuttgart/Leinfelden-Echterdingen ^{1,15}	Stuttgart	29.09		EUR	29,175.17	- 217.73
177	Grundstücks-, Vermögens- und Verwaltungs-GbR 39, Stuttgart-Fellbach i.L. ^{1,15}	Stuttgart	42.63		EUR	362.59	- 112.44
178	Grundstücks-, Vermögens- und Verwaltungs-GbR 40, Ludwigsburg "Am Schloßpark" i.L. ^{1,15}	Stuttgart	44.64		EUR	1,286.32	- 290.87
179	Janoschka AG ^{1,18}	Kippenheim	39.80		EUR	18,592.71	- 578.19
180	Kiesel Finance GmbH & Co. KG ^{1,18,23}	Baienfurt	0.00	75.00	EUR	- 303.11	- 338.11
181	KKL Holding GmbH ^{1,18}	Dusseldorf	48.27	47.20	EUR	15,353.00	- 391.00
182	Kreditgarantiegemeinschaft in Baden-Württemberg Verwaltungs-GmbH ¹⁸	Stuttgart	20.00		EUR	1,022.58	0.00
183	Mittelständische Beteiligungsgesellschaft Sachsen mbH ¹⁸	Dresden	25.27		EUR	47,602.20	908.07
184	MOLWANKUM Vermietungsgesellschaft mbH & Co. Objekt Landkreis Hildburghausen KG ¹⁸	Dusseldorf	94.00	49.00	EUR	- 1,670.90	451.89
185	Siedlungswerk GmbH Wohnungs- und Städtebau ^{18,22}	Stuttgart	25.00		EUR	247,651.36	13,157.27
186	SL Mobilien-Leasing GmbH & Co. ENERCON KG ^{1,18,23}	Mannheim	0.00	80.00	EUR	35,878.29	1,971.01
187	SLN Maschinen Leasing GmbH & Co. OHG ^{1,18,23}	Stuttgart	0.00	75.00	EUR	- 1,961.48	- 191.56
188	SLP Mobilien-Leasing GmbH & Co. OHG ^{1,18,23}	Mannheim	0.00	75.00	EUR	873.69	261.41
189	Xavin GmbH ^{1,18}	Stuttgart	24.50		EUR	151.17	- 167.83
190	1. yourTime Solutions AbwicklungsGmbH ^{1,10}	Potsdam	20.11		EUR	- 478.00	- 1,317.00

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
III. Equity investments within the meaning of Section 271 (1) HGB²⁸							
191	ABE Clearing S.A.S., à capital variable ¹⁴	Paris, France	1.96		EUR	20,401.40	4,799.64
192	Abingworth Bioventures III L. P. ¹	London, Great Britain	0.44			Not specified	Not specified
193	Accession Mezzanine Capital II L.P. ^{1,18}	Hamilton, Bermuda	1.91		EUR	27,092.00	800.00
194	Acousia Therapeutics GmbH ^{1,18}	Tübingen	12.35		EUR	5,231.20	- 1,264.15
195	ADLATUS Robotics GmbH ^{1,18}	Ulm	0.83		EUR	- 25.74	- 719.21
196	African Export-Import Bank ¹⁸	Cairo, Egypt	0.05		USD	2,286,611.28	246,462.10
197	AKA Ausfuhrkredit-Gesellschaft mit beschränkter Haftung ¹⁸	Frankfurt am Main	3.29		EUR	246,672.10	12,040.00
198	ALPHA CEE II L.P. ^{1,18}	Grand Cayman, Cayman Islands	2.41		EUR	58,042.00	- 10,078.00
199	amcure GmbH ^{1,18}	Eggenstein-Leopoldshafen	18.26		EUR	1,634.25	- 1,823.82
200	Bain Capital VIII L. P. ^{1,18}	Grand Cayman, Cayman Islands	0.32		USD	33,810.28	63.33
201	Biometrics GmbH i.L. ^{1,15}	Tübingen	17.47		EUR	- 508.59	- 1,218.76
202	BS Abwicklungs-GmbH i.L. ^{1,13}	Stuttgart	1.10		EUR	- 791.64	- 282.92
203	Bürgschaftsbank Sachsen GmbH ¹⁸	Dresden	27.96	18.44	EUR	43,596.27	1,581.17
204	CCP Systems AG i.L. ^{1,12}	Stuttgart	0.96		EUR	9,182.77	- 10,654.37
205	CME Group Inc.	Wilmington, USA	0.00			Not specified	Not specified
206	Computomics GmbH ^{1,18}	Tübingen	0.37		EUR	- 1,026.14	- 80.21
207	CorTec GmbH ^{1,18}	Freiburg	5.95		EUR	- 112.12	- 2,702.65
208	crealytics GmbH ^{1,18}	Passau	9.86		EUR	8,482.71	- 1,224.33
209	CVC European Equity Partners IV (A). L. P. ^{1,18}	Grand Cayman, Cayman Islands	0.29		EUR	1,241.80	- 263.38
210	Depository Trust & Clearing Corporation	New York, USA	0.00	0.02		Not specified	Not specified
211	Designwelt GmbH i.L. ^{1,9}	Munich	6.41		EUR	- 17.00	- 4,417.00
212	Deutscher Sparkassen Verlag Gesellschaft mit beschränkter Haftung ^{18,22}	Stuttgart	8.11		EUR	205,387.83	45,925.79
213	Doughty Hanson & Co. IV Partnership 2 ^{1,18}	London, Great Britain	4.04		EUR	5,622.11	- 2,817.94
214	Dritte SHS Technologiefonds GmbH & Co. KG ^{1,18}	Tübingen	4.94		EUR	28,733.53	1,655.26
215	Erste IFD geschlossener Immobilienfonds für Deutschland GmbH & Co. KG i.L. ^{1,18}	Hamburg	0.63		EUR	1,904.47	- 135.31
216	FL FINANZ-LEASING GmbH ¹⁸	Wiesbaden	17.00		EUR	- 585.02	- 124.58
217	Fludicon GmbH i.L. ^{1,12}	Darmstadt	7.88		EUR	516.90	- 2,184.41

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
218	GbR VÖB-ImmobilienAnalyse ²⁶	Bonn	25.00	20.00		Not specified	Not specified
219	GLB GmbH & Co. OHG ^{18,25}	Frankfurt am Main	30.05		EUR	2,891.54	- 61.30
220	GLB-Verwaltungs-GmbH ^{18,25}	Frankfurt am Main	30.00		EUR	55.67	1.96
221	Grundstücks-, Vermögens- und Verwaltungs-GbR 35, Sillenbacher Markt i.L. ^{1,15}	Stuttgart	0.02		EUR	23,024.36	- 388.42
222	Grundstücks-, Vermögens- und Verwaltungs-GbR 31, Esslingen/ Stuttgart i.L. ^{1,15}	Stuttgart	13.57		EUR	571.59	97.32
223	Grundstücks-Vermögens- und Verwaltungs-GbR Nr. 32, Leonberg/ Ditzingen i.L. ^{1,15}	Stuttgart	0.37		EUR	1,473.71	19.62
224	Grundstücks-Vermögens- und Verwaltungs-GbR Nr. 27, Stuttgart-Mitte II i.L. ^{1,15}	Stuttgart	0.13		EUR	493.29	6.23
225	Grundstücksverwaltungsgesellschaft Sonnenberg mbH & Co. Betriebs-KG i.L. ¹	Wiesbaden	5.52			Not specified	Not specified
226	HANSA TREUHAND Dritter Beteiligungsfonds GmbH & Co. KG ^{1,18}	Hamburg	0.03		EUR	12,445.44	- 7,205.60
227	HANSA TREUHAND Zweiter Beteiligungsfonds GmbH & Co. KG i.L. ^{1,30}	Hamburg	0.16		EUR	- 9,582.96	- 129.00
228	Heidelberg Innovation BioScience Venture II GmbH & Co. KG i.L. ^{1,18}	Leimen	3.83		EUR	5,673.12	1,414.50
229	HGA Mitteleuropa V GmbH & Co. KG ^{1,14}	Hamburg	0.05		EUR	1,338.70	- 584.70
230	HSBC Trinkaus & Burkhardt AG ^{18,22}	Dusseldorf	18.66		EUR	1,893,131.44	89,036.22
231	Humboldt Multi Invest B S.C.A., SICAV-FIS i.L. ^{1,11,27}	Luxembourg, Luxembourg	99.93		EUR	6,928.35	- 165.43
232	Icon Brickell LLC ¹	Miami, USA	13.35			Not specified	Not specified
233	ImmerSight GmbH ^{1,18}	Ulm	0.90		EUR	- 430.92	- 253.85
234	Kreditgarantiegemeinschaft der Freien Berufe Baden-Württemberg Verwaltungs-GmbH ¹⁸	Stuttgart	4.76		EUR	153.39	0.00
235	Kreditgarantiegemeinschaft der Industrie, des Verkehrsgewerbes und des Gastgewerbes Baden-Württemberg Verwaltungs-GmbH ¹⁸	Stuttgart	15.28		EUR	1,299.87	0.00
236	Kreditgarantiegemeinschaft des Gartenbaues Baden-Württemberg Verwaltungs-GmbH ¹⁸	Stuttgart	4.50		EUR	138.31	0.00
237	Kreditgarantiegemeinschaft des Handels Baden-Württemberg Verwaltungs-GmbH ¹⁸	Stuttgart	9.14		EUR	1,021.91	0.00
238	Kreditgarantiegemeinschaft des Handwerks Baden-Württemberg Verwaltungs-GmbH ¹⁸	Stuttgart	9.76		EUR	1,001.05	0.00
239	Kunststiftung Baden-Württemberg gGmbH ¹⁸	Stuttgart	2.00	0.61	EUR	10,148.72	- 313.24
240	Maehler & Kaege AG i. l. ^{1,7}	Ingelheim	7.50	9.26	EUR	- 2,041.59	67.06
241	MAT Movies & Television Productions GmbH & Co. Project IV i.L. ^{1,15}	Grünwald	0.22		EUR	530.25	- 13.32
242	MBG Mittelständische Beteiligungsgesellschaft Baden-Württemberg Gesellschaft mit beschränkter Haftung ¹⁸	Stuttgart	9.94	8.33	EUR	76,992.62	4,504.49
243	NESTOR Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Villingen-Schwenningen KG i.L. ^{15,24}	Dusseldorf	5.00		EUR	- 1,967.87	607.44
244	Notion Systems GmbH ^{1,18}	Schwetzingen	0.75		EUR	193.18	- 327.92
245	Otego GmbH i.L. ^{1,15}	Karlsruhe	6.25		EUR	375.85	- 151.80
246	PARAMOUNT GROUP, INC. ^{1,18}	Lutherville, USA	0.47	0.53	USD	4,369,702.98	16,966.37

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
247	Paramount Group Operating Partnership LP ¹	Wilmington, USA	2.53	0.00		Not specified	Not specified
248	Phenex Pharmaceuticals AG ^{1,18}	Heidelberg	8.90		EUR	9,310.59	- 10,987.75
249	Poldergesellschaft Neumühlen-Westkai mbH ^{1,15}	Hamburg	16.67		EUR	126.40	Not specified
250	PolyAn Gesellschaft zur Herstellung von Polymeren für spezielle Anwendungen und Analytik mbH ^{1,18}	Berlin	9.93		EUR	26.75	29.51
251	"PORT MENIER" GmbH & Co. KG ^{1,15}	Bramstedt	0.15		EUR	600.83	42.25
252	PressMatrix GmbH ^{1,18}	Berlin	14.08		EUR	- 1,266.80	- 296.14
253	Reha-Klinik Aukammtal GmbH & Co. Betriebs-KG i.L. ¹	Wiesbaden	5.54			Not specified	Not specified
254	RSU Rating Service Unit GmbH & Co. KG ¹⁸	Munich	18.80		EUR	11,330.79	- 2,244.75
255	RWSO Grundstücksgesellschaft TBS der Württembergischen Sparkassenorganisation GbR ¹⁸	Stuttgart	10.00	8.55	EUR	5,339.34	137.41
256	S CountryDesk GmbH ¹⁸	Cologne	2.50		EUR	498.59	49.76
257	Schiffahrts-Gesellschaft "HS ALCINA" / "HS ONORE" / "HS OCEANO" mbH & Co. KG i.L. ^{1,31}	Hamburg	0.04		EUR	351.16	- 3,497.26
258	Schiffahrts-Gesellschaft "HS MEDEA" mbH & Co. KG i.L. ^{1,31}	Hamburg	0.16		EUR	657.90	- 1,121.08
259	SE.M.LABS GmbH i.L. ^{1,15}	Stuttgart	0.75		EUR	- 474.89	- 331.64
260	SI-BW Beteiligungsgesellschaft mbH & Co KG ¹⁸	Stuttgart	4.00	3.96	EUR	43,750.18	1,203.48
261	SimuForm GmbH i.L. ^{1,10}	Dortmund	6.84		EUR	235.00	- 300.00
262	Society for Worldwide Interbank Financial Telecommunication (S.W.I.F.T.) ¹⁵	La Hulpe, Belgium	0.14		EUR	394,698.39	81,079.47
263	stimOS GmbH ^{1,18}	Konstanz	0.75		EUR	- 449.91	- 317.87
264	Synapticon GmbH ^{1,18}	Schönaich	0.57		EUR	- 814.52	- 4,358.91
265	tado GmbH ^{1,18}	Munich	1.59		EUR	16,291.56	- 45,608.31
266	Technologiegründerfonds Sachsen Plus GmbH & Co. KG ^{1,18}	Leipzig	8.48		EUR	8,997.73	- 6,944.74
267	Technologiegründerfonds Sachsen Seed GmbH & Co. KG ^{1,18}	Leipzig	3.34		EUR	4,975.43	35.61
268	Technologiegründerfonds Sachsen Start up GmbH & Co. KG ^{1,18}	Leipzig	10.83		EUR	15,255.86	- 1,414.71
269	Teralytics AG ^{1,18}	Zurich, Switzerland	6.19		CHF	1,946.61	- 10,361.15
270	tocario GmbH i.L. ^{1,18}	Stuttgart	0.77		EUR	- 295.86	- 452.19
271	TradelX Limited ^{1,18}	Cork, Ireland	2.33		USD	3,722.96	8,867.91
272	TuP 8 GmbH & Co. KG ¹	Berlin	0.43			Not specified	Not specified
273	TVM IV GmbH & Co. KG ^{1,18}	Munich	1.67		EUR	6,311.71	- 288.14
274	VCM Golding Mezzanine GmbH & Co. KG ^{1,18}	Munich	3.89		EUR	6,703.15	2,335.28
275	Visa Inc. ¹⁶	San Francisco, USA	0.00		USD	30,377,417.48	9,201,840.19

No.	Name	Place of business	Share of capital	Non-prop. voting rights	Currency	Equity EUR th.	Result EUR th.
276	Vivoryon Therapeutics AG ^{1, 18}	Halle/Saale	0.98		EUR	1,542.62	- 7,703.47
277	VRP Venture Capital Rheinland-Pfalz GmbH & Co. KG i.L. ^{1, 18}	Mainz	16.65		EUR	1,366.42	22.69
278	VRP Venture Capital Rheinland-Pfalz Nr. 2 GmbH & Co. KG i.L. ^{1, 18}	Mainz	16.65		EUR	724.21	226.07
279	Wachstumsfonds Mittelstand Sachsen Plus GmbH & Co. KG ^{1, 18}	Leipzig	13.68	13.72	EUR	16,627.20	- 77.68
280	Wirtschaftsförderung Region Stuttgart GmbH ^{1, 18}	Stuttgart	16.06		EUR	1,599.80	- 2,907.66
281	5Analytics GmbH i.L. ^{1, 18}	Köngen	0.75		EUR	77.20	- 629.99

1 Held indirectly.

2 Including shares held indirectly.

3 A letter of comfort exists.

3a A letter of comfort exists. The letter of comfort was withdrawn in LBBW's 2019 annual and consolidated financial statements with effect for the future.

4 A letter of comfort exists on the part of a Group subsidiary.

5 A profit transfer and/or control agreement has been concluded with the company.

6 A profit transfer and/or control agreement has been concluded with another company.

7 Data available only as at 31 December 2004.

8 Data available only as at 31 December 2018 in accordance with IFRS.

9 Data available only as at 31 December 2012.

10 Data available only as at 31 December 2013.

11 Data available only as at 31 July 2014.

12 Data available only as at 31 December 2014.

13 Data available only as at 31 December 2015.

14 Data available only as at 31 December 2016.

15 Data available only as at 31 December 2017.

16 Data available only as at 30 September 2018.

17 Data available only as at 4 December 2018.

18 Data available only as at 31 December 2018.

19 Data available only as at 31 January 2019.

20 Data available only as at 31 October 2019.

21 Data available only as at 28 November 2019. Liquidation final balance sheet.

22 Equity investment in a large corporation (Kapitalgesellschaft) with a share of over 5% in voting rights (Section 340a (4) no. 2 HGB).

23 No shareholdings within the meaning of Section 285 no. 11 HGB.

24 Is a structured entity in accordance with IFRS 12 at the same time.

25 Classification as equity investment, as no relevant decisions are made any longer and liquidation is expected.

26 Classification as equity investment, as the company does not generate any commercial activities.

27 Classification as equity investment, in liquidation: no relevant decisions are made any longer.

28 Financial instruments pursuant to IFRS.

29 The equity method cannot be used for Sealink Funding DAC, due to a lack of equity investment by LBBW.

30 Data available only as at 25 July 2016.

31 Data available only as at 30 November 2018.

67. Employees

On average, the number of employees (heads) is as follows:

	2019			2018		
	Male	Female	Total	Male	Female	Total
Full-time	4,484	2,626	7,110	4,553	2,736	7,289
Part-time	279	2,562	2,842	253	2,559	2,812
Trainees ¹	183	105	288	179	90	270
Total	4,946	5,293	10,240	4,985	5,385	10,371

¹ Including students at universities of cooperative education.

68. Executive and supervisory bodies and positions held

Members of the executive and supervisory bodies

Board of Managing Directors

Chairman	Members	
RAINER NESKE	KARL MANFRED LOCHNER	THORSTEN SCHÖNENBERGER
Deputy Chairman		
MICHAEL HORN	DR CHRISTIAN RICKEN	VOLKER WIRTH

Supervisory Board

Chairman		
CHRISTIAN BRAND Former chairman of the Board of Management of L-Bank	MARC-OLIVER KIEFER from 1 February 2019 Employee Representative of Landesbank Baden-Württemberg	CHRISTIAN ROGG Employee Representative of Landesbank Baden-Württemberg
Deputy Chairperson		CLAUS SCHMIEDEL CEO of Citalog GmbH
EDITH SITZMANN MDL Minister of Finance of the State of Baden-Württemberg	BETTINA KIES-HARTMANN Employee Representative of Landesbank Baden-Württemberg	B. JUTTA SCHNEIDER Executive Vice President Global Services Delivery, SAP SE & Co. KG
Members	FRITZ KUHN Lord Mayor of the State Capital Stuttgart	PETER SCHNEIDER President of the Sparkassenverband Baden-Württemberg (Savings Bank Association of Baden-Württemberg)
WOLFGANG DIETZ Lord Mayor of the town of Weil am Rhein	SABINE LEHMANN Employee Representative of Landesbank Baden-Württemberg	DR. JUTTA STUIBLE-TREDER Managing Partner of EversheimStuible Treuberater GmbH
UTA-MICAELA DÜRIG Corporate and foundation consultant	KLAUS-PETER MURAWSKI until 11 April 2019 State Secretary (retired)	DR. BRIGITTE THAMM until 31 January 2019 Employee Representative of Landesbank Baden-Württemberg
WALTER FRÖSCHLE Employee Representative of Landesbank Baden-Württemberg	DR. FRITZ OESTERLE Attorney at law	BURKHARD WITTMACHER Chairman of the Board of Managing Directors of Kreis-sparkasse Esslingen-Nürtingen
HELMUT HIMMELSBACH Lord Mayor (retired)	MARTIN PETERS Managing Partner of the Eberspächer group of companies	NORBERT ZIPF Employee Representative of Landesbank Baden-Württemberg
CHRISTIAN HIRSCH Employee Representative of Landesbank Baden-Württemberg	PROF. WOLFGANG REINHART MDL since 17 May 2019 Chairman of parliamentary group, Attorney at law	

The remuneration of and defined benefit pension commitments to members of the committees are broken down as follows:

EUR million	Board of Managing Directors		Supervisory Board	
	2019	2018	2019	2018
Remuneration				
Salaries, remuneration and short-term benefits ¹	6.7	6.4	1.0	1.0
Post-employment benefits (total obligations from defined benefit obligations) ²	21.0	18.1	0.0	0.0
Remuneration for former members and their dependents				
Salaries, remuneration and short-term benefits	12.7	13.3	0.0	0.0
Post-employment benefits (total obligations from defined benefit obligations) ²	169.5	161.9	0.0	0.0

¹ Including attendance allowance.

² Provisions for pensions including assistance provisions

As at 31 December 2019, loans granted to and contingent liabilities assumed in favor of members of the Board of Managing Directors and members of the Supervisory Board came to EUR 3 million (previous year: EUR 3 million) of which EUR 2 million (previous year: EUR 2 million) were accounted for by members of the Board of Managing Directors and EUR 1 million (previous year: EUR 1 million) by members of the Supervisory Board.

The loans were extended with an interest rate of between 1.24% and 5.04% and have a remaining term extending from a few months to 37 years. The banking transaction were concluded with all of the cited persons at arm's length terms and collateral requirements.

As in the previous year, no advances were made in the 2019 financial year.

Positions held

Offices held by legal representatives of LBBW and members of the AidA¹ Board of Managing Directors on statutory supervisory boards and similar supervisory bodies of large companies and banks, as well as offices held by employees of LBBW on statutory supervisory boards of large companies and banks are listed below:

Company	Position	Incumbent
Boerse Stuttgart GmbH, Stuttgart	Deputy Chairman of the Supervisory Board	Dr Christian Ricken
Deutscher Sparkassenverlag GmbH, Stuttgart	Supervisory Board	Michael Horn
EUREX Clearing Aktiengesellschaft, Frankfurt am Main	Supervisory Board	Dr. Thilo Roßberg
Euwax AG, Stuttgart	Deputy Chairman of the Supervisory Board	Dr Christian Ricken
Grieshaber Logistik GmbH, Weingarten	Supervisory Board	Michael Horn
Hypo Vorarlberg Bank AG, Bregenz	Supervisory Board	Michael Horn
LBBW Asset Management Investmentgesellschaft mbH, Stuttgart	Chairman of the Supervisory Board	Dr Christian Ricken
	Supervisory Board	Michael Nagel
	Supervisory Board	Thomas Rosenfeld
Mainzer Stadtwerke AG, Mainz	Supervisory Board	Hannsgeorg Schönig
MMV Bank GmbH, Koblenz	Chairman of the Supervisory Board	Karl Manfred Lochner
	Deputy Chairman of the Supervisory Board	Volker Wirth
	Supervisory Board	Peter Hähner
MMV Leasing GmbH, Koblenz	Chairman of the Advisory Board	Karl Manfred Lochner
	Deputy Chairman of the Advisory Board	Volker Wirth
	Advisory Board	Peter Hähner
Siedlungswerk GmbH Wohnungs- und Städtebau, Stuttgart	Deputy Chairman of the Supervisory Board	Michael Horn
	Supervisory Board	Thorsten Schönenberger
	Supervisory Board	Thomas Christian Schulz
SüdFactoring GmbH, Stuttgart	Chairman of the Supervisory Board	Karl Manfred Lochner
	Deputy Chairman of the Supervisory Board	Volker Wirth
	Supervisory Board	Norwin Graf Leutrum von Ertingen
SüdLeasing GmbH, Stuttgart	Chairman of the Supervisory Board	Karl Manfred Lochner
	Deputy Chairman of the Supervisory Board	Volker Wirth
	Supervisory Board	Norwin Graf Leutrum von Ertingen
VPV Lebensversicherungs-Aktiengesellschaft, Stuttgart	Supervisory Board	Claudia Diem

¹ Institution within the institution.

04

Further Information



Responsibility statement

To the best of our knowledge, and in accordance with the applicable financial reporting framework, the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group, and the combined 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.

Stuttgart, Karlsruhe, Mannheim and Mainz, 3 March 2020

Additions were made to the notes and the combined management report to include significant events after the end of the reporting period. These events after the end of the reporting period relate to the impact of the coronavirus pandemic on the risk report and the forecast and opportunities report.

Stuttgart, Karlsruhe, Mannheim and Mainz, 26 March 2020

The Board of Managing Directors

RAINER NESKE

Chairman

MICHAEL HORN

Deputy Chairman

KARL MANFRED LOCHNER

DR CHRISTIAN RICKEN

THORSTEN SCHÖNENBERGER

VOLKER WIRTH

Independent Auditor's report

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

Report on the audit of the consolidated financial statements and the combined management report

Audit opinion

We have audited the consolidated financial statements prepared by Landesbank Baden-Württemberg, Stuttgart, Karlsruhe, Mannheim and Mainz, and its subsidiaries (the Group) comprising the income statement as at 31 December 2019, total comprehensive income, statement of changes in equity and cash flow statement for the financial year from 1 January 2019 to 31 December 2019 as well as the Notes, including a summary of significant accounting methods. Furthermore, we audited the combined management report of Landesbank Baden-Württemberg, Stuttgart, Karlsruhe, Mannheim and Mainz for the financial year from 1 January 2019 to 31 December 2019. In accordance with German statutory regulations, we have not audited the contents of the parts of the combined management report listed in the »Other information« section of our auditor's report.

According to our assessment on the basis of the knowledge acquired in the course of the audit,

- the accompanying consolidated financial statements comply in all material respects with the IFRS applicable within the EU and the additional requirements of German commercial law pursuant to Section 315e (1) of the German Commercial Code (HGB) and give a true and fair view of the net assets and financial position of the Group as at 31 December 2019 and its results of operations for the financial year from 1 January 2019 to 31 December 2019 in accordance with these requirements and
- the accompanying combined management report accurately represents the Group's position. The combined management report is consistent in all material respects with the consolidated financial statements and in accordance with German statutory provisions, and accurately presents the opportunities and risks of future development. Our audit opinion on the combined management report does not refer to the contents of the combined management report listed in the »Other information« section.

In accordance with Section 322 (3) sentence 1 HGB we state that our audit has not led to any objections to the correctness of the consolidated financial statements and the combined management report.

Basis for our audit opinion

We conducted our audit of the consolidated financial statements and the combined management report in accordance with Section 317 HGB and the EU Audit Regulation (No. 537/2014) as well as the German generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors (IDW). Our responsibility in accordance with these provisions and principles is described in more detail in the section »Responsibility of the statutory auditor for the audit of the consolidated financial statements and the combined management report« of our auditor's report. We are independent from the Group companies in accordance with the provisions of European law and German commercial and professional law, and we have also met our other German professional obligations in accordance with these requirements. We furthermore state in accordance with Article 10 (2) (f) of the EU Audit Regulation that we have not provided any prohibited non-audit services as defined in Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we obtained is sufficient and appropriate to provide a basis for our audit opinion on the consolidated financial statements and the combined management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are such audit matters that, after due consideration, are the most significant for the audit of the consolidated financial statements for the financial year from 1 January to 31 December 2019. These matters were taken into account in our audit of the consolidated financial statements as a whole and in forming our audit opinion thereof. We are not issuing a separate audit opinion on these matters.

Calculation of the fair values of financial instruments based on valuation models (Levels II and III)

With regard to the accounting and valuation methods applied by Landesbank Baden-Württemberg, please refer to Notes 8 and 48.

RISK TO THE FINANCIAL STATEMENTS

For the fair value within the meaning of IFRS 13 there are some financial assets mandatorily measured at fair value through profit or loss (EUR 34,610 million) and liabilities mandatorily measured at fair value through profit or loss (EUR 26,959 million), financial assets designated at fair value (EUR 1,170 million) and liabilities designated at fair value (EUR 6,757 million) and financial assets measured at fair value through other comprehensive income (EUR 28,648 million) for which no market prices are observable.

Their fair values must therefore be determined based on generally accepted valuation methods. The choice of valuation models and their parameterization are, in part, discretionary. It was therefore particularly important for our audit that the calculation of the fair values be based on appropriate valuation models and parameters.

APPROACH ADOPTED IN THE AUDIT

Based on our risk assessment and the assessment of the risk of error, we derived our audit opinion from both control-based audit procedures and substantive audit procedures. Accordingly, we performed the following audit procedures, amongst others:

As a first step, we obtained an insight into the development of the financial instruments in the trading portfolio, the associated risks and the internal control system with regard to the measurement of the financial instruments in the trading portfolio.

Moreover, we satisfied ourselves that LBBW had implemented appropriate and effective risk management. Our main goal was to determine whether the valuation is consistent with the written policy on the model-based calculation of the fair value.

The assessment of the appropriateness and effectiveness of the control system covered in particular that the valuation models implemented and the valuation parameters involved are validated independent of trading, both when they are introduced as well as regularly and on an ad hoc basis. On the basis of a random sample of transactions, we also examined if the model valuations were performed and documented appropriately, if the valuation models implemented were appropriate and if the valuation parameters involved were also validated on a regular basis. In addition, we audited the control of the revaluation of the trading transactions independently of trading by an organizational unit which is independent of trading.

In addition, our internal KPMG valuation specialists implemented a revaluation of products on the basis of a deliberate selection of materiality and risk aspects and compared the results with the values calculated by LBBW. In the revaluation, price and market information observed on the market were used.

For a representative random sample of all products, we examined the parameters relevant for the valuation on the reporting date.

OUR CONCLUSIONS

The valuation models used to calculate the fair values of the trading portfolio for which no market prices are observable are appropriate. The valuation parameters underlying the valuation are derived appropriately.

Calculation of allowances for losses on loans and advances (Level 3) for credit-impaired loans and advances to customers in the case of significant loans

With regard to the accounting and valuation methods applied by Landesbank Baden-Württemberg, please refer to Notes 8 and 46.

RISK TO THE FINANCIAL STATEMENTS

Loan loss provisions for credit-impaired debt instruments (Level 3 loan loss provisions) are measured in accordance with the IFRS 9 requirements on the basis of probability-weighted scenarios. In this context, the influence of macroeconomic factors on default risks is also to be taken into consideration. As at 31 December 2019, there were loans and advances to customers (before allowances for losses on loans and advances) of EUR 111,197 million. The allowances for losses on loans and advances (Level 3) for loans and advances to banks and customers and for debentures and other fixed-income securities measured at amortized cost totaled EUR 549 million as at 31 December 2019. The overwhelming portion of these relate to loans and advances to customers (significant loans).

In accordance with IFRS 9, it must be determined at each balance sheet date if a financial asset is credit-impaired. This is the case when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. The calculation of allowances for losses on loans and advances (Level 3) for loans and advances to customers in the case of significant loans is discretionary. It requires assumptions on possible scenarios, the consideration of macroeconomic factors within the scenarios and the probability of these occurring. Calculating these also requires assumptions on the amount of contractual cash flows still expected per scenario and/or the amount of cash flows expected from the realization of the loan collateral provided per scenario. The assumptions are made depending on the restructuring and liquidation strategies underlying the scenarios.

It was therefore important for our audit that credit-impaired debt instruments are recognized in a timely manner and that appropriate criteria are applied to identify objective financial assets with indications of impairment. In addition, it was important for our audit that appropriate assumptions were made when determining allowances for losses on loans and advances. Incorrect assumptions mean that counterparty risks are not taken adequately into account and hence receivables are not measured in line with accounting principles.

APPROACH ADOPTED IN THE AUDIT

Based on our risk assessment and the assessment of the risk of error, we derived our audit opinion from both control-based audit procedures and substantive audit procedures. Accordingly, we performed the following audit procedures, amongst others:

To assess the appropriateness of the internal control system with regard to the identification, management, monitoring and evaluation of significant loans and advances to customers, we have audited the relevant organizational guidelines and conducted surveys. Moreover, we satisfied ourselves of the appropriateness and effectiveness of the relevant controls that the Bank has set up to identify credit-impaired exposures and to comply with the system for determining allowances for losses on loans and advances. With regard to the IT systems used, we examined the operating effectiveness of the relevant IT application controls with the involvement of our IT specialists.

On the basis of our findings, we examined the recoverability of loans and advances to customers on the basis of a deliberate selection of individual exposures based on materiality and risk aspects. First of all, we satisfied ourselves that the existence of events which indicate credit impairment were duly identified. For credit-impaired exposures we subsequently assessed whether the underlying restructuring or liquidation strategy and resulted determination of possible scenarios and the considered macroeconomic factors and the determined probability per scenario provide a true and fair view and are adequately substantiated and documented. On this basis, we examined in particular the assumptions regarding the expected contractual cash flows per scenario and/or the expected cash flows from the realization of the loan collateral provided per scenario, and assessed whether the assumptions used in the past were correct. If loan collateral was provided for an exposure which is taken into account in the valuation, we assessed the legal validity and the fair value of this collateral. In this context, we used, where applicable, independent expert valuations as a basis for our opinion and assessed, on the basis of publicly available information, whether their assumptions were derived from suitable internal and external sources in an appropriate manner. To this end, we used information such as market studies, market prices and yield analyses. In this matter we involved our real estate valuation specialists for selected collateral real estate. Finally, we verified whether the required specific loan loss provision was accurately calculated and correctly recorded in the accounting system.

In addition, we examined a random sample of individual commitments that had not been included in our specific item testing and checked whether the criteria for identifying credit-impaired exposures were applied appropriately and, if necessary, led to the recognition of losses on loans and advances (Level 3).

OUR CONCLUSIONS

The criteria to identify credit-impaired exposures are appropriate. The assumptions on possible scenarios, the considered macroeconomic factors and their probabilities were made properly. The amount of contractual cash flows still expected per scenario and/or the amount of cash flows expected from the realization of the loan collateral provided per scenario were derived appropriately and used in accordance with the accounting principles applicable for the measurement of losses on loans and advances (Level 3).

Other information

The legal representatives are responsible for other information. Other information comprises:

- the combined non-financial statement and
- the other parts of the annual report, with the exception of the audited consolidated financial statements and combined management report as well as our auditor's report.

Our audit opinion on the consolidated financial statements and the combined management report does not include other information. We therefore do not offer an audit opinion nor any other form of audit conclusion regarding this.

In connection with our audit, it is our responsibility to read the other information and to assess whether the other information is free of

- material inconsistencies with the consolidated financial statements, the combined management report or our knowledge gained during the audit, or
- otherwise appears to be materially incorrect.

Responsibility of the legal representatives and the Supervisory Board for the consolidated financial statements and the combined management report

The legal representatives are responsible for the preparation of the consolidated financial statements in accordance, in all material respects, with the IFRS applicable within the EU and the additional requirements of German law pursuant to Section 315e (1) HGB and for the presentation of a true and fair view of the net assets, financial position and results of operations of the Group in the consolidated financial statements in accordance with these requirements. The legal representatives are also responsible for internal controls they have identified as necessary to allow the preparation of consolidated financial statements which are free from material misstatement, whether intentional or not.

In preparing the consolidated financial statements, the legal representatives are responsible for assessing the Group's ability to continue as a going concern. They are also responsible for disclosing, where relevant, matters relating to the going-concern assumption for the Group. In addition, they have responsibility for accounting on the basis of the going concern principle, unless there is the intention to liquidate the Group or to discontinue operations or there is no realistic alternative.

The legal representatives are also responsible for the preparation of the combined management report, which as a whole provides an accurate picture of the Group's position, is consistent in all material respects with the consolidated financial statements, complies with German law and adequately depicts the opportunities and risks presented in the future performance. Furthermore, the legal representatives are responsible for the precautions and measures (systems) which they have deemed necessary to enable the preparation of a combined management report in accordance with German statutory requirements and to provide sufficient suitable evidence for the statements in the combined management report.

The Supervisory Board is responsible for monitoring the Group's accounting process for the preparation of the consolidated financial statements and the combined management report.

Responsibility of the statutory auditor for the audit of the consolidated financial statements and the combined management report

Our objective is to obtain reasonable assurance as to whether the consolidated financial statements as a whole are free from material misstatements, whether intentional or not, and whether the combined management report as a whole provides an accurate picture of the Group's position and, in all material respects, is in accordance with the consolidated financial statements and the findings of our audit, the IFRS applicable within the EU, and the additional requirements of Section 315e (1) HGB and accurately depicts the opportunities and risks presented by the future performance, and to issue an audit report that includes our audit opinion on the consolidated financial statements and the combined management report.

Reasonable assurance represents a high degree of certainty, but no guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation as well as the generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors (IDW) will always reveal a material misstatement. Misstatements may result from infringements or inaccuracies and are considered material if it could reasonably be expected that they will, individually or collectively, influence the economic decisions of addressees made on the basis of these consolidated financial statements and the combined management report.

During our audit we exercise professional judgment and due skepticism. Moreover,

- we identify and assess the risks of material misstatements, whether intentional or not, in the consolidated financial statements and the combined management report, plan and perform audit procedures in response to these risks, and obtain audit evidence which is sufficient and appropriate to form the basis for our audit opinion. The risk that material misrepresentations are not detected is higher in the case of violations than in the case of inaccuracies, since violations may involve fraudulent interaction, forgery, intentional incompleteness, misleading representations or the repeal of internal controls.
- we gain an understanding of the internal control system relevant to the audit of the consolidated financial statements and the arrangements and measures relevant to the audit of the combined management report that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- we express an opinion on the appropriateness of the accounting policies used by the legal representatives and the reasonableness of the estimated amounts and related information presented by the legal representatives.
- we draw conclusions about the appropriateness of the going concern principle applied by the legal representatives and assess, based on the audit evidence obtained, whether there is material uncertainty in connection with events or circumstances that could raise significant doubts about the Group's ability to continue as a going concern. If we come to the conclusion that there is material uncertainty, we are obliged to draw attention to the relevant information in the consolidated financial statements and the combined management report in our audit report or, if this information is inadequate, to modify our audit opinion. We draw our conclusions based on audit evidence obtained by the date of our audit opinion. However, future events or circumstances may prevent the Group from continuing its business activities in the future.
- we express an opinion on the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and assess whether the consolidated financial statements present the underlying transactions and events such that the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with the IFRS applicable within the EU and the additional requirements of German law in accordance with Section 315e (1) HGB.
- we obtain sufficient suitable audit evidence for the accounting information of the companies or business activities within the Group to enable us to express an opinion on the consolidated financial statements and the combined management report. We are responsible for guiding

the audit of the consolidated financial statements, its supervision and execution. We have sole responsibility for our audit opinions.

- we assess the consistency of the combined management report with the consolidated financial statements, its compliance with the law and the picture it portrays of the Group's position.
- we conduct audit procedures on the forward-looking statements presented by the legal representatives in the combined management report. Based on sufficient, appropriate audit evidence, we retrace in particular the significant assumptions underlying the forward-looking statements made by the legal representatives and assess the appropriate derivation of the forward-looking statements from these assumptions. We do not issue a separate audit opinion on the forward-looking statements and the underlying assumptions. There is significant unavoidable risk that future events could differ materially from the forward-looking statements.

We discuss with those responsible for governance issues such as the planned scope and timing of the audit and significant audit findings, including any deficiencies in the internal control system that we identify during our audit.

We make a statement to those responsible for governance that we have complied with the relevant independence requirements and discuss with them all relationships and other matters that can reasonably be expected to affect our independence, and the safeguarding measures taken in this respect.

From the matters that we discussed with those responsible for governance, we determine those matters that were most significant in the audit of the consolidated financial statements for the current reporting period and are therefore considered key audit matters. We describe these matters in the auditor's report, unless laws or other statutory provisions prohibit a public disclosure of such facts.

Other statutory and regulatory requirements

Other disclosures in accordance with Article 10 EU of the Audit Regulation

We were appointed statutory auditors of the consolidated financial statements by the annual general meeting on 17 May 2019. We received our mandate from the Audit Committee on 7 June 2019. We have been in continuous practice as statutory auditors of the consolidated financial statements of Landesbank Baden-Württemberg, Stuttgart, Karlsruhe, Mannheim and Mainz since the 2010 financial year.

We state that the audit opinions contained in this audit report are consistent with the additional report to the Supervisory Board in accordance with Article 11 of the EU Audit Regulation (audit report).

Responsible statutory auditor

The statutory auditor responsible for the audit is Klaus-Ulrich Pfeiffer.

Note on subsequent audit

We issue this auditor's report for the amended consolidated financial statements and the amended combined management report on the basis of our audit performed on 6 March 2020 and our subsequent audit performed on 27 March 2020 that related to the disclosures in the notes and in the combined management report as a result of new findings regarding the impact of the spread of the coronavirus. Please see the description of the amendment by the legal representatives in the amended notes, section 65 »Events after the end of the reporting period« and in the amended combined management report, sections »Group overview«, »Risk report« and »Forecast and opportunity report«.

Stuttgart, 6 March 2020 / limited to the amendment dated 27 March 2020 described in the note on subsequent audit

KPMG AG
Wirtschaftsprüfungsgesellschaft

Signed Pfeiffer
Statutory auditor

Signed Kühn
Statutory auditor

Limited Assurance Report of the Independent Auditor regarding the Combined Non-financial statement¹

To the Supervisory Board of Landesbank Baden-Württemberg, Stuttgart, Karlsruhe, Mannheim, Mainz

We have performed an independent limited assurance engagement on the combined non-financial statement of Landesbank Baden-Württemberg and the LBBW Group (further »LBBW« or »Company«) as well as the section of the combined management report that are qualified as part of it through cross reference, »Business model«, for the year from January 1 to December 31, 2019 (further the »Statement«). The Statement was prepared according to §§ 340i (5) in conjunction with 315b and 315c as well as §§ 340a (1a) in conjunction with 289b to 289e of the German Commercial Code (HGB).

Management's Responsibility

The legal representatives of LBBW are responsible for the preparation of the Statement in accordance with §§ 340i (5) in conjunction with 315b and 315c as well as §§ 340a (1a) in conjunction with 289b to 289e HGB.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the Statement and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances. Furthermore, this responsibility includes designing, implementing and maintaining systems and processes relevant for the preparation of the Statement in a way that is free of – intended or unintended – material misstatements.

Independence and Quality Assurance on the Part of the Auditing Firm

We are independent from the company in accordance with the requirements of independence and quality assurance set out in legal provisions and professional pronouncements and have fulfilled our additional professional obligations in accordance with these requirements.

Our audit firm applies the legal provisions and professional pronouncements for quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

¹ Our engagement applied to the German version of the Statement 2019. This text is a translation of the independent Assurance Report issued in the German, whereas the German text is authoritative.

Practitioner's Responsibility

Our responsibility is to express a conclusion on the Statement based on our work performed within a limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): »Assurance Engagements other than Audits or Reviews of Historical Financial Information« published by IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance whether any matters have come to our attention that cause us to believe that the Statement for the period from January 1 to December 31, 2019, has not been prepared, in all material respects in accordance with §§ 340i (5) in conjunction with 315b and 315c as well as §§ 340a (1a) in conjunction with 289b to 289e HGB. We do not, however, issue a separate conclusion for each disclosure. In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore less assurance is obtained than in a reasonable assurance engagement. The choice of audit procedures is subject to the auditor's own judgement.

Within the scope of our engagement, we performed amongst others the following procedures:

- Inquiries of personnel on group level who are responsible for the materiality analysis in order to gain an understanding of the processes for determining material sustainability topics and respective reporting boundaries for LBBW
- A risk analysis, including a media research, to identify relevant information on LBBW's sustainability performance in the reporting period
- Evaluation of the design and implementation of systems and processes for the collection, processing and monitoring of disclosures on environmental, employee and social matters, respect for human rights, and combating corruption and bribery, including data consolidation
- Inquiries of personnel on group level who are responsible for determining disclosures on concepts, due diligence processes, results and risks, the conduction of internal controls and consolidation of the disclosures
- Evaluation of selected internal and external documents
- Analytical evaluation of data and trends of quantitative disclosures which are reported by all sites on group level
- Assessment of the overall presentation of the disclosures

Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the Statement of Landesbank Baden-Württemberg for the period from January 1 to December 31, 2019 is not prepared, in all material respects, in accordance with §§ 340i (5) in conjunction with 315b and 315c as well as §§ 340a (1a) in conjunction with 289b to 289e HGB.

Restriction of Use/Clause on General Engagement Terms

This assurance report is issued for purposes of the Supervisory Board of Landesbank Baden-Württemberg, Stuttgart, Karlsruhe, Mannheim, Mainz, only. We assume no responsibility with regard to any third parties.

Our assignment for the Supervisory Board of Landesbank Baden-Württemberg, Stuttgart, Karlsruhe, Mannheim, Mainz, and professional liability is governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf). By reading and using the information contained in this assurance report, each recipient confirms notice of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the General Engagement Terms with respect to us.

Frankfurt am Main, March 6, 2020

KPMG AG
Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

Hell
Brokof
Wirtschaftsprüferin
[German Public Auditor]

Note regarding forward-looking statements

This Annual 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.

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

FURTHER INFORMATION ON LANDESBANK BADEN-WÜRTTEMBERG

www.LBBW.de

kontakt@LBBW.de

PUBLISHER'S INFORMATION

Published by:

Landesbank Baden-Württemberg
Am Hauptbahnhof 2
70173 Stuttgart, Germany

www.LBBW.de
kontakt@LBBW.de

Concept & Realization:

Landesbank Baden-Württemberg

Created using  **firesys**

The Annual Report is also available in German. The German version of this Annual Report is the authoritative version and only the German version of the Combined Management Report and the Consolidated Financial Statements was audited by the auditors.

Landesbank Baden-Württemberg

www.LBBW.de
kontakt@LBBW.de

Headquarters

Stuttgart

Am Hauptbahnhof 2
70173 Stuttgart, Germany
Phone + 49 (0) 711 127-0
Fax + 49 (0) 711 127-43544

Mannheim

Augustaanlage 33
68165 Mannheim, Germany
Phone + 49 (0) 621 428-0
Fax + 49 (0) 621 428-72591

Karlsruhe

Ludwig-Erhard-Allee 4
76131 Karlsruhe
Phone + 49 (0) 721 142-0
Fax + 49 (0) 721 142-23012

Mainz

Große Bleiche 54 – 56
55116 Mainz, Germany
Phone + 49 (0) 6131 64-37800
Fax + 49 (0) 6131 64-35701