

Group Management Report and
Consolidated Financial Statements of
Landesbank Hessen-Thüringen
Girozentrale 2019

Group Management Report

(except for the subsection "Outlook and Opportunities")

16	Basic Information About the Group
20	Economic Report
24	Financial Position and Financial Performance
33	Risk Report
58	Non-Financial Statement
65	Outlook and Opportunities

Group Management Report

Basic Information About the Group

Business model of the Group

Landesbank Hessen-Thüringen Girozentrale (Helaba) is a credit institution organised under public law; its long-term strategic business model is that of a full-service bank with a regional focus, a presence in carefully selected international markets and a very close relationship with the Sparkassen-Finanzgruppe. One key aspect of Helaba's business model is its legal form as a public-law institution. Helaba operates as a for-profit entity in line with the applicable provisions of the Charter and the Treaty of the Formation of a Joint Savings Banks Association Hesse-Thuringia. The Treaty and the Charter establish the legal framework for Helaba's business model. Other factors central to this business model are Helaba's status as part of the Sparkassen-Finanzgruppe with its institutional protection scheme, the distribution of tasks between Sparkassen, Landesbanken and other S-Group companies, the large stake in Helaba owned by the Sparkassen organisation, and Helaba's retention and expansion of its activities in the S-Group and public development and infrastructure business.

Helaba serves its clients in three functions: as a commercial bank, as a Sparkasse central bank and as a development bank.

As a commercial bank, Helaba operates in Germany and abroad. The Bank's hallmarks include stable, long-term customer relationships. It works with companies, institutional clients, the public sector and municipal corporations.

Helaba is a Sparkasse central bank and S-Group bank for the Sparkassen in Hesse, Thuringia, North Rhine-Westphalia and Brandenburg and, therefore, for around 40% of all Sparkassen in Germany. It operates as a partner to the Sparkassen rather than as a competitor.

Helaba and the S-Group Sparkassen in Hesse and Thuringia together constitute the Sparkassen-Finanzgruppe Hesse-Thüringen, which follows a business model based on economic unity and a joint S-Group rating. Comprehensive co-operation and business agreements have been entered into with the Sparkassen and their associations in North Rhine-Westphalia. In addition, there are sales co-operation agreements with the Sparkassen in Brandenburg. The agreements with the

Sparkassen in North Rhine-Westphalia and Brandenburg complement the S-Group Concept of the Sparkassen-Finanzgruppe Hesse-Thüringen, which continues in its current form.

In its capacity as the central development institution for Hesse, Helaba administers public-sector development programmes through Wirtschafts- und Infrastrukturbank Hessen (WIBank). As a dependent institution within Helaba, WIBank enjoys a direct statutory guarantee from the State of Hesse, which is in compliance with applicable European Union (EU) law. WIBank's business activities are guided by the development objectives of the State of Hesse. Helaba also has stakes in a number of other development institutions in Hesse and Thuringia.

In addition to Helaba, the business model includes further strong, well-known brands (in some cases, legally independent subsidiaries) that complement the Group's product portfolio.

Helaba is the market leader in the home loans and savings business in both Hesse and Thuringia through Landesbausparkasse Hesse-Thüringen (LBS).

Frankfurter Sparkasse, a wholly owned subsidiary of Helaba organised under German public law, is the leading retail bank in the Frankfurt am Main region with around 820,000 customers. It also has a presence in the nationwide direct banking market through 1822direkt.

Frankfurter Bankgesellschaft (Schweiz) AG (FBG) and its wholly owned subsidiary Frankfurter Bankgesellschaft (Deutschland) AG provide Helaba's products and services for Sparkassen in private banking and in the wealth and asset management businesses. FBG, which operates as the private bank of the Sparkassen-Finanzgruppe, acquires high-net-worth customers in Germany through Sparkassen in the S-Group with which it has a collaboration agreement. Frankfurter Bankgesellschaft's Family Office complements its range of professional advisory services in connection with all asset-related matters.

The wholly owned subsidiary Helaba Invest is one of Germany's leading institutional asset management companies that administer and manage both securities and real estate. Its product range includes special funds for institutional investors and retail funds as a management and/or advisory portfolio, comprehensive fund management (including reporting and risk management), advice on strategy and support for indirect investments. Within the Sparkassen-Finanzgruppe, Helaba Invest is the largest provider of special funds for institutional investors.

The GWH Group holds one of the largest residential real estate portfolios in Hesse, comprising around 49,000 managed residential units. The group focuses on developing residential real estate projects and on managing and optimising residential property portfolios.

The OFB Group is a full-service group of companies in the fields of real estate project development, land development and the construction and project management of high-value commercial real estate. It operates throughout Germany with a particular focus on the Rhine-Main region.

The Bank's registered offices are situated in Frankfurt am Main and Erfurt, and it also has branches in Düsseldorf, Kassel, Paris, London, New York and Stockholm. The branches allow Helaba to strengthen its local presence close to customers and Sparkassen. The foreign branches provide Helaba with access to the funding markets, particularly those markets based on the US dollar and pound sterling. The organisation also includes representative and sales offices, subsidiaries and affiliates.

Management instruments and non-financial performance indicators

As part of managing the Bank as a whole, Helaba has integrated systems in place for business and productivity management. This is based on a multi-level margin accounting system. Controlling comprises both the management of absolute income and costs and the integrated management of contribution margins. The target is to achieve a cost-income ratio below 70%. The cost-income ratio is the ratio of general and administrative expenses to total income (profit before taxes net of general and administrative expenses and of loss allowances for loans and advances). The annual planning process, from which a budgeted statement of financial position and income statement are derived, also follows this system. Regular plan/actual comparisons are generated and variances analysed based on a management income statement produced in the margin accounting system at regular intervals in the course of the financial year. In line with management reporting, segment information is based on internal management (contribution margin accounting) and also on external financial reporting.

One key indicator used to manage portfolios is the volume of new medium- and long-term business (defined as the volume of new medium- and long-term business with a funding term of more than one year). Systematic preliminary costings are carried out for loan agreements, in particular to ensure that new business is managed with a focus on risk and profitability.

Equity is managed through the allocation of regulatory and economic limits and through the capital ratio. When the target capital ratios are set, the targets take into account the additional own funds requirements specified by the European Central Bank (ECB). The minimum Common Equity Tier 1 (CET1) capital ratio required to be maintained by the Helaba Group (as defined by the German Banking Act (Kreditwesengesetz, KWG) and the Capital Requirements Regulation (CRR)) in 2019 under the Supervisory Review and Evaluation Process (SREP) decision taken by the ECB was 9.85%. Profitability targets are managed on the basis of, for example, the economic return on equity (ratio of profit before taxes to average capital employed in the financial year determined in accordance with IFRS). Helaba has set a target range of 5% to 7% for economic return on equity before tax.

The leverage ratio measures the ratio between regulatory capital and the unweighted total of all on-balance sheet and off-balance sheet asset items including derivatives. Currently, banks must disclose the leverage ratio and report it to the supervisory authorities as an indicator for monitoring purposes. However, based on a new EU Regulation amending the CRR published at the beginning of June 2019, a binding minimum leverage ratio of 3.0% will apply from mid-2021. Helaba is already taking this ratio into account in its management systems.

The CRR specifies that banks must calculate a (short-term) liquidity coverage ratio (LCR) and a net stable funding ratio (NSFR). The regulatory minimum LCR is 100%. The amended CRR published in 2019 implements the NSFR in the EU and it will be mandatory to comply with the NSFR requirements from 2021. The NSFR is already being taken into account in Helaba's management systems. Both liquidity ratios are leading to an increase in liquidity management costs and therefore have a negative impact on profitability.

In July 2019, as part of the implementation of the Single Resolution Mechanism (SRM) in Europe, the competent resolution authority for the first time specified an institution-specific minimum requirement for own funds and eligible liabilities (MREL). The binding MREL for the Helaba Group – based on figures as at 31 December 2017 – is 8.46% of total liabilities and own funds (TLOF). This equates to 24.8% of risk-weighted assets (RWAs).

To fund itself, Helaba draws on different sources and products, focusing in particular on the anchor sources of funding available through direct and indirect Sparkasse business (proprietary and customer transactions) as a result of belonging to a strong

association of financial institutions. Development funds raised through WIBank and Pfandbrief issues are also a cost-efficient component of its stable funding base.

As the leading S-Group bank in the Sparkassen-Finanzgruppe, Helaba is continuously expanding its business relationships with Sparkassen throughout Germany. In the regions of Hesse, Thuringia and North Rhine-Westphalia, where Helaba acts as the Sparkasse central bank, Helaba uses standard criteria to determine a product use ratio that expresses the volume of business conducted with Helaba and its subsidiaries as a percentage of the total purchases by each Sparkasse. The target range for product utilisation rates is 60 % to 80 %.

As a public-law credit institution with a mandate to operate in the public interest, Helaba has laid down guiding sustainability principles in which it has pledged its commitment to environmental and social responsibility, both internally and in its dealings with the general public, and has established standards of conduct regarding business activities, business operations, staff and corporate social responsibility. Helaba has also translated its responsibility to the environment and society into binding requirements in its business strategy. Helaba's risk assessment and risk management processes thus incorporate the identification and assessment of environmental risks and of issues from a social and ethical perspective.

In lending operations, Helaba has defined mandatory Group-wide sustainability criteria that have been incorporated into the risk strategies. These ensure that human and workers' rights are respected, cultural assets are preserved and the environment is protected. Helaba will not knowingly finance projects that are likely to cause severe environmental damage or breach international social standards. For critical sectors of the economy, it has developed specific lending criteria that rule out controversial business practices in particular, and take into account sector-specific risk issues.

Helaba's sustainability performance is regularly rated by sustainability rating agencies. The ratings are a core component in the process of analysing and refining Helaba's sustainability profile. Helaba is constantly upgrading its range of sustainability management tools with the aim of achieving continuous improvement in these third-party ratings.

Employees

■ HR strategy

The basic principles of Helaba's HR activities are derived from its business strategy. These principles incorporate social, economic and regulatory changes. The core tasks include, for example, strategy-oriented and needs-based recruitment of suitable employees, the provision of professional services, attractive remuneration and ancillary benefits (such as occupational pensions), and continuing professional development (including the management of young talent and employees with high potential). Helaba focuses particularly on health management, the development of its corporate culture and diversity management.

Various indicators, such as a low staff turnover rate, average length of service and low absenteeism, confirm that employees are satisfied and highly committed.

■ Remuneration principles

The business strategy and risk strategy specify the degree of flexibility available to employees. This then also forms the basis for the remuneration system. The Bank's remuneration strategy and remuneration principles set out the relationship between business strategy, risk strategy and remuneration strategy, taking account of the corporate culture. The remuneration strategy takes into account the attainment of targets specified in operational planning when determining an overall budget for the Bank and allocating the budget for variable remuneration at unit level, thereby ensuring that there is a link between the remuneration strategy and divisional strategic objectives. For the corporate centre units, budgets are allocated based on the results generated by the Bank as a whole and the attainment of qualitative targets. This system rules out the possibility of incentives for individual employees to enter into disproportionately high risks. The fixed salaries are based on market requirements.

■ Human resources development

Despite a high level of cost-consciousness, Helaba continues to make a significant investment in developing the skills and qualifications of its employees. All employees can access a needs-based range of internal seminars covering professional, personal, social and methodological development. This is supplemented by third-party training and, if suitable, opportunities in the form of work and study programmes or courses leading to professional qualifications. In addition to the management of professional development, HR development services also include various aspects of performance and change management. The life-stage model introduced in 2019 provides a framework for employees at different stages

in their professional careers and is intended to increase Helaba's appeal as an employer in the competition to attract highly skilled personnel and talent.

- **Management of young talent and high-potential employees**
Demographic change and ongoing digitalisation will have an impact on Helaba's competitiveness in the long term. The recruitment, development and retention of young talent and high-potential employees is therefore correspondingly important. Based on vocational training and general trainee programmes, plus internships for students, Helaba offers those at the start of their careers the opportunity to become familiar with banking practice and acquire basic skills. To reach the young target group, Helaba is also changing its recruitment approach towards more direct, personal contact with candidates and greater use of digital media. In addition, Helaba is focusing internally on the development of existing employees with high potential, to provide the individuals concerned with the foundations for a career as a technical specialist or executive manager. These individuals are provided with targeted development based on their strengths and areas of learning; since 2019, they have been able to receive systematic preparation for future tasks with increased responsibility as part of the "Nauta" programme for high-potential employees, which has been specially developed for Helaba.
- **Health management**
Helaba operates an occupational health management system and a company sports programme, helping employees to maintain their physical and mental well-being and nurturing an awareness of the need for a healthy lifestyle. It also provides an employee assistance programme, which employees have been able to access since 2019 to obtain help in connection with professional, family, health or other personal issues.
- **Corporate culture and diversity management**
The objective of the "Helaba in Bewegung" corporate culture transformation process launched in 2017 is to position Helaba in the market on a long-term viable basis. This initiative aims to move the corporate culture towards new approaches in terms of ways of working, processes and forms of collaboration. Helaba is currently setting out the framework for future mobile, agile working in a programme with the tagline "NewWork@Helaba", which will be implemented for half of the employees at Helaba Bank in 2020 when they move into a new, state-of-the-art office building at the Offenbach site. Since 2019, the HOPS job-shadowing scheme has

also offered employees the opportunity to familiarise themselves with other units at the Bank and improve their internal professional networking.

As part of the corporate culture, Helaba focuses, in addition, on work-life balance and the implementation of measures in the context of diversity management. Various initiatives took place in 2019, including the launch of professional development seminars and a mentoring programme specifically designed for women.

Economic Report

Macroeconomic and sector-specific conditions in Germany

In 2019, the German economy expanded at a rate of 0.6% after adjusting for inflation, which was weaker than in the previous year (1.5%). Recession in the industrial sector had a negative impact, although value creation rose in all other sectors. Growth was driven exclusively by domestic demand, with foreign trade acting as a drag. Consumer spending increased disproportionately by 1.6%. Collectively agreed pay rises and a higher level of employment led to an increase in real incomes. Inflation was low at 1.4%, which meant that consumers had more money in their pockets in real terms.

Because of the uncertainties surrounding trade policy, weak industrial growth and problems in the automotive industry, businesses only increased their investment in machinery and vehicles by 0.4% in 2019. The expansion of residential construction continued on the back of strong demand for residential space (mainly in large cities), very low mortgage rates, the lack of investment alternatives and investment in existing property. Higher government spending on infrastructure also had a positive impact. In 2019, public-sector construction investment rose by well over 5% in real terms, a rate higher than the 3.8% growth in construction activity overall.

The German banking sector continued to benefit from the positive (albeit slowing) economic trend in 2019. The requirement for loss allowances still remained at a low level. At the same time, the further fall in interest rates in the euro zone had an adverse impact on the operating business. On top of this, institutional investors (insurance companies, pension funds) are making inroads into the market in response to their own investment pressures and are becoming competitors of the banks. Cut-throat competition continues to put pressure on margins.

More and more areas of economic activity are becoming digitalised, driven by continuous advances in information technology. Online and mobile channels are presenting financial service providers with new ways of offering products and of accessing and exchanging data with customers.

In this way, online banks, high street banks and increasingly non-bank web-based businesses (termed fintech companies or fintechs) too have developed new communication and sales channels in private customer business, in some cases in competition and in other cases in co-operation with one another.

To an ever greater extent, attention is now focusing on business with corporate clients, real estate customers and institutional investors as well. Derivative platforms enable currency hedges to be effected using standardised processes, lending portals arrange funding for small corporate customers through banks or directly through institutional investors and banks analyse their customer data in search of more effective ways of offering products. Around the globe, blockchain technology is being refined to find new, faster and more cost-effective methods of exchanging data; besides the handling of promissory note loans, foreign trade finance has also become a focus of attention.

On 31 January 2020, the United Kingdom (UK) left the EU. The withdrawal act provides for an eleven-month transition period (i.e. until the end of 2020) during which time the relationship between the EU and the UK will remain largely unchanged and the UK will remain a member of the EU single market and customs union. In anticipation of the UK's exit from the EU, the Bank has analysed all key scenarios and possible implications and has also submitted to the British supervisory authorities an application to establish a third-country branch for the Helaba branch in London. Overall, Helaba is therefore well prepared for the UK's withdrawal from the EU, even if this occurs without a deal between the UK and the other EU member states.

Key developments in the regulatory framework were as follows:

- Prudential supervision by the ECB (Single Supervisory Mechanism, SSM)
The Helaba Group (within the meaning of the KWG and the CRR), together with its affiliated subsidiaries Frankfurter Sparkasse and Frankfurter Bankgesellschaft (Deutschland) AG, is among the banks classified as "significant" and therefore subject to direct supervision by the ECB. The ECB sent the Helaba Group a letter dated 10 December 2019 notifying it of the findings of the Supervisory Review and Evaluation Process (SREP). The ECB has specified that the minimum Common Equity Tier 1 (CET1) capital ratio to be maintained by the Helaba Group in 2020 is initially 9.85%. This requirement comprises the Pillar 1 minimum capital requirement, the Pillar 2 capital requirement and the capital buffers. At the end of June 2019 and in accordance with the recommendation of the Financial Stability Committee, the German Federal Financial Supervisory Authority (BaFin) set the ratio for the domestic countercyclical capital buffer at 0.25%, effective 1 July 2019. This ratio must therefore be applied from 1 July 2020 to calculate the bank-specific countercyclical capital buffer. As a result, the latest minimum required CET1 capital ratio in the Helaba Group has risen to 10.0%.

- **EU banking package (CRR II, CRD V, BRRD II and SRMR II)**
The final legal texts for the EU's package of banking reforms were published in the Official Journal of the European Union on 7 June 2019. CRR II must be applied from 28 June 2021, and SRMR II (Single Resolution Mechanism Regulation II) from 28 December 2020. Compliance with a small number of the provisions in CRR II is required at an earlier point. CRD V and BRRD II (Bank Recovery and Resolution Directive II) must be transposed into national law by 28 December 2020.

Key changes introduced by the CRR II/CRD V package relate to interest rate risk in the banking book, large exposures, the Fundamental Review of the Trading Book (FRTB), the standardised approach for counterparty credit risk (SA-CCR), the leverage ratio, the NSFR, credit valuation adjustment (CVA) risk and the eligibility criteria for capital instruments and fund investments. The minimum requirement for own funds and eligible liabilities (MREL) to absorb losses set out in BRRD II has been revised in CRR II in terms of the eligibility criteria and reference basis for the MREL ratio. In addition to harmonising the MREL and total loss-absorbing capacity (TLAC), BRRD II lays down new rules on creditor protection, moratorium powers and distribution restrictions in the event of failure to comply with the MREL.

The EU banking package provides the European Banking Authority (EBA) with a large number of new mandates to create regulatory standards, guidelines and reports. Helaba will closely monitor EBA activities and take any implications into account in the management of its banking business.

- **Stress tests**
In the first half of 2019, Helaba underwent the ECB's sensitivity analysis of liquidity risk (LiST), which tests whether a bank has the ability to handle critical liquidity situations. This stress test is in addition to the two-yearly stress test cycle specified by the European Banking Authority (EBA), the next test in the cycle being planned for 2020. The liquidity stress test at Helaba calculated the impact from idiosyncratic shocks on cash inflows and cash outflows as well as on the liquidity position in different scenarios. Helaba was able to supply all the data required by the banking supervisor in an appropriate format and in a timely manner. The results were fed into this year's SREP decision.

- **BaFin guidance notice on dealing with sustainability risks**
On 20 December 2019, BaFin published the final version of its guidance notice on dealing with sustainability risks. In this guidance notice, BaFin sets out the principles of good practice in relation to sustainability risks that it expects banks, insurance companies and asset management companies to incorporate into their activities. Helaba is analysing the need for action arising from this BaFin guidance notice and is holding discussions with other member institutions of banking associations about issues relating to the interpretation and implementation of the guidance.

Business performance

Key factors influencing Helaba's business performance and results of operations in financial year 2019 were weak economic growth in Germany, which was 0.6%, and the persistently low and negative levels of interest rates.

The volume of new medium- and long-term business in the group (excluding the WIBank development business, which does not form part of the competitive market) went up year on year to €21.5 bn (2018: €19.0 bn). Maturities and special repayments were more than offset. Loans and advances to customers (financial assets measured at amortised cost) rose to €113.7 bn, which was also attributable to the inclusion of KOFIBA-Kommunalfinanzierungsbank (KOFIBA) (31 December 2018: €95.5 bn). Added to these were loans and advances to Sparkassen (financial assets measured at amortised cost) in the amount of €5.7 bn (31 December 2018: €6.4 bn). The focus on lending in core business areas and to the Sparkassen as S-Group partners is in line with the customer-centric orientation of Helaba's business model.

The market environment for funding business for financial institutions turned out to be very mixed in 2019. Promising market phases for financial institutions alternated with phases of increased market volatility due to macro-economic and geopolitical events. Over the course of the year, the flagging economic momentum led to further significant falls in interest rates in the euro zone, caused by the loose monetary policy maintained by the central banks. The general level of interest rates in the euro zone hit new historic lows during the year. Nevertheless, in 2019, Helaba was able to obtain medium- and long-term funding at favourable rates from institutional and private investors. As in previous years, the Bank continued to benefit in this regard from its strategic and well-diversified business model and from its stable business and earnings performance.

Against the backdrop of a significantly higher funding requirement compared with the previous year overall, Helaba raised medium- and long-term funding of around € 18.0 bn in 2019 (2018: €13.1 bn), with unsecured funding amounting to approximately € 11.3 bn (2018: € 8.7 bn). Despite persistently low interest rates, sales of retail issues placed through the Sparkasse network were noticeably higher than in the previous year at around € 2.6 bn (2018: € 2.4 bn). Pfandbrief issues amounted to € 6.7 bn in total (2018: € 4.4 bn), with public Pfandbriefe accounting for approximately 65 % and mortgage Pfandbriefe around 35 % of this total. For example, it was once again possible to place US dollar mortgage Pfandbriefe. As in previous years, the customer deposits in the retail business within the Group, in particular through the subsidiary Frankfurter Sparkasse, brought further diversification to the funding base. In addition, new medium- and long-term funding at WIBank amounted to just under € 1.7 bn.

The cost-income ratio was 71.1 % as at 31 December 2019 (31 December 2018: 78.5 %) and was therefore marginally higher than the target range (2019 target: <70 %). Return on equity rose to 6.3 % (31 December 2018: 5.4 %) and was therefore within the target range of 5 to 7 %.

Phased in, i.e. taking into account the CRR I transitional arrangements, as at 31 December 2019 the Helaba Group's CET1 capital ratio was 14.2 % and its total capital ratio 19.0 %. There were no longer any differences between these figures and the equivalent CET1 capital ratio and total capital ratio on a fully loaded basis, i.e. with all CRR I requirements applied. Helaba therefore has a comfortable capital position and satisfies all the regulatory requirements that have currently been published.

CRD IV provides for a transitional phase until the end of 2021 for capital instruments that are currently recognised as regulatory Tier 1 capital, but will not meet the future requirements for such capital. At Helaba, this affects silent participations with a nominal amount of € 518 m.

As at 31 December 2019, the Helaba Group's leverage ratio was 4.5 % taking into account the transitional provisions set out in the delegated act, or 4.3 % fully loaded, and therefore above the specified minimum ratio of 3.0 %.

The liquidity coverage ratio (LCR) for the Helaba Group was 225 % as at 31 December 2019.

The NPL ratio for the Helaba Group (in accordance with EBA risk indicator code AQT_3.2) was 0.44 % as at 31 December 2019. As in the previous year, therefore, Helaba was below the German average published in the EBA Risk Dashboard, which at 1.3 % (as at 30 June 2019) was already very low by European standards.

As at 31 December 2018, the value of the Helaba Group's portfolio eligible for MREL purposes amounted to approximately € 36.8 bn. This equated to an MREL ratio of 67.8 % in relation to RWAs and 24.4 % in relation to TLOF. The portfolio was therefore well in excess of the MREL of 8.46 % of TLOF set by the competent resolution authority.

On 14 December 2018, Helaba entered into a purchase agreement with Dexia Crédit Local (Dexia) for all of the shares in Dexia Kommunalbank Deutschland (DKD) for a purchase price of € 352 m. Following receipt of all the regulatory consents, the sale was completed at the beginning of May as scheduled. After the completion, DKD was initially renamed KOFIBA-Kommunalfinanzierungsbank GmbH. This was a temporary measure before the legal integration of the entity into Helaba could be completed in September 2019 by way of a merger. At that point, a process was initiated to migrate all the assets and liabilities to Helaba's IT system landscape. The entire migration was completed in December 2019.

Also in December 2018, Helaba agreed to take over a customer credit portfolio and relevant staff from DVB Bank SE (DVB). The portfolio consisted of land transport finance with a value of more than € 1 bn. The deal was completed in May 2019 as planned when all the regulatory approvals had been received. As a consequence of this deal, Helaba's land transport portfolio expanded to a total volume of almost € 2 bn.

In December 2019, sustainability rating agency ISS ESG (formerly ISSoekom) confirmed the prime status of Helaba's corporate rating at a rating of C (on a scale from D- to A+). Helaba's rating from sustainability rating agency imug improved from B to BB. Helaba has thereby consolidated its competitive position from the perspective of sustainability and is continually and consistently improving its sustainability profile.

Since December 2019, Helaba Digital GmbH & Co. KG (an equity investment entity operated by Helaba) has held an equity investment in Arabesque S-Ray GmbH (“S-Ray”), a leading global provider of sustainability ratings headquartered in Frankfurt. S-Ray combines big data with tools based on artificial intelligence to assess the sustainability of more than 7,000 businesses around the globe. The stated common development objective is to help this company make new services ready for the market.

Helaba reviews its business model on a regular basis and continues to refine it. In this context, the Bank has drawn up a strategic agenda focusing on growth, long-term performance, responsible conduct and enhanced efficiency. The project “Scope – Growth through Efficiency”, which was launched at the end of April, analyses the potential for growth and efficiency, adding a fourth dimension to the strategic agenda comprising greater focus in the business model, state-of-the-art infrastructure and digitalisation, and responsibility and values.

Financial Position and Financial Performance

Changes to basis of consolidation

The inclusion of KOFIBA-Kommunalfinanzierungsbank GmbH (KOFIBA) in the basis of consolidation from 1 May 2019 had an impact on the financial position and financial performance of the Helaba Group. The total assets taken over from the former DKD amounted to approximately € 26 bn. This takeover means that the comparability of figures with the prior year is limited. For this reason, the main changes caused by the KOFIBA acquisition are highlighted separately. The other changes to the basis of consolidation in 2019 did not have any material impact on financial position or financial performance.

Financial performance of the Group

	2019	2018	Change	
	in € m	in € m	in € m	in %
Net interest income	1,191	1,072	119	11.1
Loss allowances	-86	45	-131	>-100.0
Net interest income after loss allowances	1,105	1,117	-12	-1.1
Dividend income	18	36	-18	-50.0
Net fee and commission income	395	349	46	13.2
Gains or losses on measurement at fair value	143	45	98	>100.0
Net trading income	80	32	48	>100.0
Net income from hedge accounting and other financial instruments measured at fair value (not held for trading)	63	13	50	>100.0
Gains or losses on derecognition of financial instruments not measured at fair value through profit or loss	8	6	2	33.3
Share of profit or loss of equity-accounted entities	24	13	11	84.6
Other net operating income	361	328	33	10.1
General and administrative expenses, including depreciation and amortisation	-1,521	-1,451	-70	-4.8
Profit before taxes	533	443	90	20.3
Taxes on income	-53	-165	112	67.9
Consolidated net profit	480	278	202	72.7

Helaba generated profit before taxes of € 533 m in 2019, which was 20.3 % higher than the corresponding prior-year figure of € 443 m. The significant rise in both net interest income and net fee and commission income reflected the successful initiation of the transformation process, on the basis of which the Bank is safeguarding its future viability by adapting to the new market requirements. Although loss allowances increased year on year, they remain disproportionately low. Operating net trading income from customer-driven capital market operations also contributed to the rise in profit before taxes. Other net operating income was substantially impacted by two countervailing one-off items. One of these items was the recognition in income of a negative goodwill amount arising from the acquisition of the former DKD. The other item was the recognition of a restructuring provision as a result of the “Scope” efficiency programme, which had an adverse impact on other net operating income. The changes in the individual items in the income statement were as described below.

Net interest income amounted to € 1,191 m, a year-on-year increase of 11.1 % (2018: € 1,072 m). The main contributing factors to the growth in the operating lending business were expanded portfolios. Income from early redemption fees and Treasury activities also rose very significantly. On the other hand, the increase in negative deposit interest adversely impacted net interest income.

The allowance for losses on loans and advances amounted to an expense of € 86 m (2018: net reversal (i.e. income) of € 45 m). The breakdown of this net addition to loss allowances by stage in accordance with IFRS 9 (including the provisions for loan commitments and financial guarantees) was as follows: stage 1, net reversal of € 15 m; stage 2, net addition of € 78 m; stage 3, net addition of € 30 m. The balance of direct write-offs and recoveries on loans and advances previously written off amounted to net income of € 7 m.

Net fee and commission income rose by € 46 m to € 395 m. Net fee and commission income is mostly generated by Helaba, Frankfurter Sparkasse and Helaba Invest. In particular, fees and commissions from lending and guarantee business and from Helaba Invest’s asset management activities were on an upward trajectory. Fees and commissions from the payment transactions business and the securities and securities deposit business at Helaba also went up.

The net gain under gains or losses on measurement at fair value climbed from € 45 m in the prior year to € 143 m in the reporting year. Operating net trading income from customer-driven capital market operations was substantially higher than in the prior year and also exceeded forecasts. The main factor behind this change was better performance from the trading of securities in the secondary market as a result of narrower credit spreads. Income from customers also increased in all other product segments. In the primary market, Helaba was able to expand on its position significantly compared with the previous year. A fall in long-term interest rates had a negative effect compared with the prior year. This fall led to significant measurement markdowns on derivatives and adversely impacted both net trading income and the measurement gains or losses on banking book derivatives used to manage interest rates.

Gains or losses on derecognition of financial instruments not measured at fair value through profit or loss rose from a net gain of € 6 m to a net gain of € 8 m. The share of profit or loss from associates and joint ventures accounted for using the equity method amounted to income of € 24 m (2018: income of € 13 m).

Other net operating income rose from € 328 m to € 361 m. Key components of this item were countervailing one-off items. Firstly, the initial consolidation of KOFIBA gave rise to income of € 125 m. This comprised the recognition of negative goodwill amounting to € 163 m, a loss from the elimination of intercompany balances of € 29 m, which arose because contractual relationships between Helaba and KOFIBA in existence before the acquisition had to be eliminated, and a restructuring provision for human resources changes amounting to € 9 m. Secondly, the recognition of a restructuring provision for the “Scope” efficiency programme amounting to € 71 m had an adverse impact on other net operating income. The recognition of an impairment loss of € 25 m in respect of land reported under inventories (to reflect the asset’s net realisable value) also had a negative effect. Most of the € 214 m (2018: € 198 m) of net income from investment property, which is also reported under other net operating income, came from the GWH Group. This figure comprises the balance of rental income, the net gains or losses on disposals and operating costs.

General and administrative expenses rose by € 70 m to € 1,521 m. These expenses comprised personnel expenses of € 683 m (2018: € 655 m), other administrative expenses of € 711 m (2018: € 719 m) as well as depreciation and amortisation charges of € 127 m (2018: € 77 m). The increase in personnel expenses was caused both by collective pay increases in November 2018 and September 2019 and by the greater number of employees. The Group employed an average of 6,243 people in the year under review (2018: 6,127). Other administrative expenses and depreciation and amortisation charges were significantly impacted by the first-time application of IFRS 16 Leasing. As a consequence of the initial application of this standard, lease expenses previously reported under other administrative expenses were replaced in the reporting period by depreciation charges. Of the increase in depreciation and amortisation charges, € 42 m was attributable to the initial application of IFRS 16. In contrast, the contributions to the European bank levy in the amount of € 42 m (2018: € 40 m) and expenses for the Association overhead allocation and the reserve funds in the amount of € 65 m (2018: € 52 m) increased other administrative expenses. The increase was primarily attributable to support measures for NORD/LB. IT expenses, which are included in other administrative expenses, also went up year on year by a modest amount.

The general and administrative expenses were covered by the total operating income of € 2,140 m (2018: € 1,849 m), producing a cost-income ratio of 71.1 % (2018: 78.5 %). Helaba's return on equity before taxes rose from 5.4 % to 6.3 %. The return on assets pursuant to article 90 of Capital Requirements Directive IV (CRD IV) was 0.3 % (2018: 0.2 %).

The income tax expense amounted to € 53 m (2018: € 165 m). It was mainly accounted for by a tax expense of € 16 m at Helaba in Germany (2018: tax expense of € 59 m), tax income of € 30 m at Frankfurter Sparkasse (2018: tax expense of € 34 m), a tax expense of € 25 m at the branch in New York (2018: tax expense of € 26 m) and a tax expense of € 8 m at the London branch (2018: tax expense of € 8 m), plus a tax expense of € 27 m at GWH (2018: tax expense of € 25 m). Some of the income tax expense was offset by tax income of € 6 m in respect of current taxes. Deferred tax expenses of € 59 m arose in relation to temporary differences. As a result of tax-exempt income, largely arising from the merger of KOFIBA, prior-year tax refunds and offsetting amounts related to non-deductible operating expenses, the tax rate amounted to 10.0 % (2018: 37.2 %).

The consolidated net profit, i.e. the profit after tax, rose by 72.7 % to € 480 m. Of the consolidated net profit, a profit of € 2 m (2018: profit of € 2 m) was attributable to non-controlling interests, with the result that the profit attributable to the shareholders of the parent company amounted to € 478 m (2018: € 276 m). From the latter, € 28 m has been earmarked to service the capital contributions of the Federal State of Hesse that are reported under equity, and € 62 m has been earmarked for distribution to shareholders. The servicing of the AT1 bonds, which is also reported as an appropriation of profit, amounted to € 14 m (2018: € 0 m).

Comprehensive income for financial year 2019 rose from € 200 m to € 352 m. This figure includes other comprehensive income in addition to the consolidated net profit as reported in the income statement. Other comprehensive income amounted to a loss of € 128 m (2018: loss of € 78 m). This figure was subject to a very significant negative impact from the remeasurement of the net liability under defined benefit plans caused by the decrease in the discount rate. This resulted in a decline in comprehensive income before tax of € 293 m (2018: increase of € 10 m). A discount rate of 1.25 % (31 December 2018: 2.0 %) was used to determine pension provisions for the main pension obligations in Germany. Debt instruments measured at fair value through other comprehensive income accounted for a net gain of € 62 m before taxes within comprehensive income (2018: net loss of € 89 m). At the same time, there was also a positive impact from net remeasurement gains on financial liabilities measured voluntarily at fair value amounting to € 64 m before taxes (2018: net loss of € 11 m).

Statement of financial position

Assets

	31.12.2019	31.12.2018	Change	
	in € m	in € m	in € m	in %
Cash on hand and demand deposit balances with central banks and banks	14,555	7,342	7,213	98.2
Financial assets measured at amortised cost	130,326	106,755	23,571	22.1
Bonds	–	4	–4	–100.0
Loans and advances to banks	16,649	11,222	5,427	48.4
Loans and advances to customers	113,677	95,529	18,148	19.0
Trading assets	19,304	16,989	2,315	13.6
Financial assets measured at fair value (not held for trading)	37,316	27,390	9,926	36.2
Investment property	2,509	2,420	89	3.7
Income tax assets	719	593	126	21.2
Other assets	2,299	1,479	820	55.4
Total assets	207,028	162,968	44,060	27.0

Equity and liabilities

	31.12.2019	31.12.2018	Change	
	in € m	in € m	in € m	in %
Financial liabilities measured at amortised cost	155,364	125,222	30,142	24.1
Deposits and loans from banks	35,560	32,144	3,416	10.6
Deposits and loans from customers	59,830	47,396	12,434	26.2
Securitised liabilities	59,715	45,455	14,260	31.4
Other financial liabilities	259	227	32	14.1
Trading liabilities	18,473	12,763	5,710	44.7
Financial liabilities measured at fair value (not held for trading)	21,465	13,761	7,704	56.0
Provisions	2,465	2,087	378	18.1
Income tax liabilities	153	157	–4	–2.5
Other liabilities	398	516	–118	–22.9
Equity	8,710	8,462	248	2.9
Total equity and liabilities	207,028	162,968	44,060	27.0

Helaba's consolidated total assets swelled by €44.1 bn (27.0%) to €207.0 bn in financial year 2019. The increase in total assets resulted primarily from the assets taken over from KOFIBA amounting to approximately €26.0 bn and the measurement-related accumulation of financial assets measured at fair value. Total business volume, which includes off-balance sheet liabilities in banking business and fiduciary activities as well as assets, increased by 22.3% to €245.7 bn (31 December 2018: €200.9 bn).

Cash on hand and demand deposit balances with central banks and banks rose by 98.2% to €14.6 bn (31 December 2018: €7.3 bn). This increase was attributable to a rise in the volume of demand deposits, which are mainly held with Deutsche Bundesbank.

The financial assets measured at amortised cost, which are reported at their net carrying amounts, rose by €23.6 bn to €130.3 bn. In particular, the loans to and receivables from customers included in this amount went up by €18.1 bn to €114.0 bn. KOFIBA accounted for €11.7 bn of this increase. Of the loans and advances to customers, commercial real estate loans accounted for €32.9 bn (31 December 2018: €32.2 bn) and infrastructure loans for €28.7 bn (31 December 2018: €18.6 bn). Of the loans and advances to banks amounting to €16.7 bn (31 December 2018: €11.2 bn), which are financial assets measured at amortised cost, €5.3 bn (31 December 2018: €5.8 bn) was attributable to the Sparkassen in Hesse, Thuringia, North Rhine-Westphalia and Brandenburg.

The cumulative loss allowances recognised in respect of financial assets measured at amortised cost amounted to €286 m (31 December 2018: €299 m).

Trading assets recognised at fair value amounted to €19.3 bn at the reporting date (31 December 2018: €17.0 bn). While the portfolio of bonds and other fixed-income securities declined by €0.6 bn to €6.0 bn, the positive fair values of derivatives climbed by €3.4 bn to €12.3 bn.

Of the financial assets measured at fair value (not held for trading) amounting to €37.3 bn (31 December 2018: €27.4 bn), assets of €23.1 bn (31 December 2018: €22.0 bn) were accounted for by bonds and other fixed-income securities measured through other comprehensive income. Non-trading derivatives also increased by €4.3 bn to €7.0 bn, meaning that the positive fair values of all derivatives rose by €7.7 bn overall to €19.3 bn. KOFIBA accounted for €9.6 bn of the increase in financial assets measured at fair value (not held for trading).

Financial liabilities measured at amortised cost amounted to €155.4 bn (31 December 2018: €125.2 bn). Some of this increase was attributable to securitised liabilities, which went up by €14.3 bn to €59.7 bn, caused by an increase of €9.2 bn in money market instruments to €13.3 bn and a rise of €2.6 bn in public Pfandbriefe to €13.3 bn. Another factor in the increase was the very significant rise of €12.4 bn in deposits and loans from customers to €59.8 bn. Of the deposits and loans from banks amounting to €35.6 bn (31 December 2018: €32.1 bn), €6.7 bn (31 December 2018: €7.4 bn) was attributable to liabilities to Sparkassen in Hesse, Thuringia, North Rhine-Westphalia and Brandenburg. KOFIBA accounted for €13.7 bn of the increase in financial liabilities measured at amortised cost.

Trading liabilities recognised at fair value rose by €5.7 bn to €18.5 bn. Within this item, deposits and loans rose by €2.8 bn to €7.1 bn and negative fair values of derivatives went up by €2.7 bn to €10.2 bn.

Financial liabilities measured at fair value (not held for trading) amounted to €21.5 bn as at the reporting date (31 December 2018: €13.8 bn). This figure included non-trading derivatives amounting to €8.7 bn (31 December 2018: €2.3 bn), meaning that the total negative fair values of all derivatives rose by €9.1 bn to €18.9 bn.

Equity

The Helaba Group's equity amounted to €8.7 bn as at 31 December 2019 (31 December 2018: €8.5 bn). The increase was mainly attributable to the comprehensive income of €352 m (31 December 2018: €200 m). Accumulated OCI for the Group amounted to a loss of €488 m (31 December 2018: cumulative net loss of €360 m). Within this figure, a cumulative loss of €616 m (31 December 2018: cumulative loss of €444 m) is related to items that will not be reclassified to profit or loss in future periods (i.e. they will not be recycled). This figure includes a cumulative loss of €646 m (31 December 2018: cumulative loss of €440 m) related to remeasurements in connection with pension obligations. The change was mainly attributable to a decrease in the discount rate to 1.25% (31 December 2018: 2.0%). The balance of the accumulated OCI amounting to cumulative net income of €128 m (31 December 2018: cumulative net income of €83 m) is related to items that will be reclassified to profit or loss in future periods. One of the factors contributing to the increase was the cumulative gains and losses on debt instruments measured at fair value through other comprehensive income amounting to a gain of €140 m (31 December 2018: €94 m). In contrast, equity was negatively impacted by a loss of €32 m (31 December 2018: loss of €29 m) arising from the cross currency basis spread in the measurement of derivatives, which

must be recognised in accumulated OCI in accordance with IFRS 9. Exchange rate factors resulted in an increase of € 3 m in the currency translation reserve for foreign operations to € 38 m. An amount of € 90 m was distributed to the owners from consolidated net profit for 2018 based on their shareholdings and capital contributions. An amount of € 14 m was paid in December 2019 to service the AT1 bonds.

Please refer to Note (35) in the Notes for information on the regulatory capital ratios.

Financial performance by segment

The contributions of the individual segments to the profit before taxes of € 533 m in 2019 (2018: € 443 m) were as follows:

	2019	2018
Real Estate	257	242
Corporates & Markets	61	119
Retail & Asset Management	188	205
WIBank	27	19
Other	-25	-117
Consolidation/reconciliation	25	-25
Group	533	443

in € m

Real Estate segment

The Real Estate Lending business line is reported in the Real Estate segment. In this segment, products related to financing major commercial projects and existing properties are Helaba's particular speciality.

In 2019, the volume of new medium- and long-term business in real estate lending increased by approximately 2 % year on year to € 10 bn. Margins on new business were nearly constant compared with the previous year. Average business volume rose slightly in 2019.

Net interest income went up by around 5 % year on year to € 404 m. Loss allowances amounted to a net reversal of € 13 m, an improvement on the net addition of € 14 m in the previous year, which was already very low. Net fee and commission income came to € 19 m and was thus significantly higher than in the previous year (€ 17 m).

Other net operating income in 2019 reflected an impairment loss of € 25 m recognised in respect of a property held for sale.

The rise in general and administrative expenses of around 5 % resulted primarily from scheduled increases in internal cost allocations.

Profit before taxes for the segment amounted to € 257 m, which equated to an increase of approximately 6 % compared with the figure for 2018 (€ 242 m).

Corporates & Markets segment

The Corporates & Markets segment offers products aimed at companies, institutional clients, public sector and municipal clients.

In Corporate Finance, the volume of new medium- and long-term business with corporate clients was up by around 34 % on the previous year to € 8.2 bn. In the municipal lending business, new business amounted to € 0.7 bn, a much more modest figure than in the previous year. The volume of new business in Sparkasse lending amounted to € 0.6 bn, likewise markedly below the prior-year figure.

Net interest income from lending business went up, primarily as a result of the higher volume of business, whereas interest income from capital market operations and cash management contracted. Overall, the segment generated net interest income of € 354 m, around 8 % down on the previous year.

Loss allowances amounted to a net addition of € 68 m (2018: € 0 m), which was accounted for predominantly by additions to stage 2 under the staged impairment model specified by IFRS 9.

Net fee and commission income came to € 151 m and was thus very significantly higher than in the previous year (€117 m). This increase was derived from the lending business, capital market operations and cash management. The net gain under gains or losses on measurement at fair value, which was derived primarily from capital market operations, climbed from € 47 m in the prior year to € 88 m in the reporting year.

The rise in general and administrative expenses of around 7 % resulted mainly from planned increases in internal cost allocations and project costs.

Profit before taxes in the segment, which amounted to € 61 m, was adversely impacted by valuation markdowns on derivatives and was therefore well below the equivalent figure in 2018 (€119 m). A rise in loss allowances also contributed to this trend.

Retail & Asset Management segment

The Retail & Asset Management segment offers retail banking, private banking and asset management products through the subsidiaries Frankfurter Sparkasse, Frankfurter Bankgesellschaft and Helaba Invest as well as through Landesbausparkasse Hessen-Thüringen. The Settlement/Custody Services business complements the traditional asset management value chain by providing a custodian bank function. The Real Estate Management business, including the real estate subsidiaries of the GWH Group and Helicon KG, also forms part of this segment.

Net interest income in the segment amounted to € 236 m, well below the previous year's figure. The contraction was largely attributable to the retail business at Frankfurter Sparkasse. Loss allowances in the segment amounted to a net addition of € 3 m and thus remained at a very low level (2018: net addition of € 4 m).

The segment's net fee and commission income saw a notable year-on-year rise to € 196 m. FBG, Helaba Invest and Frankfurter Sparkasse all contributed to this increase.

Gains or losses on measurement at fair value of special funds, which are predominantly related to activities at Frankfurter Sparkasse, improved very substantially from a net loss of € 6 m in the prior year to a net gain of € 22 m in the reporting year. Other net operating income remained at the prior-year level. The absence of a one-off item that had been recognised the previous year was offset by higher income at GWH.

The rise of around 4 % in general and administrative expenses for the whole of the segment resulted primarily from business initiatives at GWH, Helaba Invest, FBG and Frankfurter Sparkasse.

Profit before taxes for the segment came to € 188 m, which was noticeably below the corresponding figure for the previous year (€ 205 m).

WIBank segment

Helaba performs public development functions for the State of Hesse through Wirtschafts- und Infrastrukturbank Hessen (WIBank).

Thanks to one-off items and an increase in business volume, net interest income was higher year on year at € 60 m (2018: € 51 m). Net fee and commission income is determined by the service business and remained unchanged compared with the previous year at € 40 m.

General and administrative expenses came to € 74 m. The increase on the previous year's expense (€ 72 m) was mainly down to collectively agreed pay rises and higher IT costs.

Profit before taxes for the segment amounted to € 27 m, which equated to a very substantial increase compared with 2018 (€ 19 m).

Other segment

The Other segment contains the contributions to income and expenses that cannot be attributed to the operating segments. These items include the net income from centrally consolidated equity investments, such as the OFB Group, as well as the costs of the central units that cannot be allocated to the individual segments in line with the user-pays principle. The net income or expense from Treasury activities in the Asset/Liability Management business, from central own funds investing activities and from the centrally held liquidity securities are also recognised under this segment.

Despite the adverse effects of investment of own funds in special funds, the segment's net interest income increased year on year from € 31 m to € 131 m thanks to higher treasury contributions.

In 2019, loss allowances in this segment included the recognition of portfolio loan loss allowances in an amount of € 28 m for risks that could not yet be allocated to specific individual exposures. In the previous year, this item had included reversals of loss allowances.

The net gain under gains or losses on measurement at fair value improved by a very significant amount year on year from € 5 m to € 33 m in the reporting year.

Other net operating income in the segment improved to € 117 m (2018: € 71 m). The net income is mainly generated by the project business at the subsidiary OFB and increased appreciably in 2019 compared with the previous year. The consolidation of KOFIBA contributed € 126 m to the very substantial increase in other net operating income for the whole of the segment. Some of this figure was offset by provisions of € 71 m for anticipated restructuring arising from the “Scope” project.

The segment generated a loss before tax of € 25 m (2018: loss of € 117 m).

Consolidation / Reconciliation

Effects arising from consolidation and intragroup adjustments between the segments are reported under consolidation/reconciliation. Effects that arise from the reconciliation between the segment figures and the consolidated income statement, in particular in relation to net interest income, are also reported under consolidation/reconciliation.

The profit before taxes under consolidation/reconciliation amounted to € 25 m (2018: loss of € 25 m).

Comparison with prior-year forecasts

The following table shows a comparison between the actual values achieved in the year under review for the key performance indicators used by Helaba and the original forecasts:

	2018 forecast for 2019	2019 actual
Net interest income	Up by approx. 5 % year on year	+ 11.1 %
Loss allowances	Expense of € 120 m	Expense of € 86 m
Net fee and commission income	Up by approx. 9 % year on year	+ 13.2 %
Net trading income	Significant increase	> 100 %
Other net operating income	€ 275 m	€ 361 m
General and administrative expenses (including depreciation and amortisation)	Unchanged on previous year	+ 4.8 %
Profit before taxes	€ 444 m	€ 533 m
Cost-income ratio	Approximately 72 %	71.1 %
Total assets	Slightly above prior-year figure	+ 27.0 %
Return on equity	5.4 %	6.3 %
Common Equity Tier 1 (CET1) capital ratio	13.5 %	14.2 %
Leverage ratio	4.8 %	4.5 %
Liquidity coverage ratio (LCR)	Approximately 125 %	225 %
Net stable funding ratio (NSFR)	Approximately 100 %	97 %
Volume of new medium- and long-term business (excl. WIBank)	€ 20.4 bn	€ 21.5 bn

The purchase agreement entered into with Dexia at the end of 2018 for all of the shares in DKD was implemented in 2019 with the merger of KOFIBA. As the implications from the transaction were not included in the planning for 2019, the transaction has led to variances between actual performance and forecast, the details of which are noted separately below.

The anticipated increase in net interest income turned out to be higher than projected even though interest rates remained low. The contributing factors were lending portfolios in excess of budget, higher income from early repayments and from treasury activities, together with unplanned interest income from the KOFIBA deal.

Actual net fee and commission income was higher than the expected increase as a result of brisk new lending business and the growth in the transaction banking business.

Other net operating income reflected the negative impact from the unscheduled recognition of a restructuring provision in connection with the "Scope" efficiency programme. However, this effect was more than offset by the positive impact from the consolidation of KOFIBA, which was also unplanned.

General and administrative expenses were above the forecast level because of the unbudgeted support measures for NORD/LB, higher banking supervisory costs, and non-recurring project costs. The unplanned integration of KOFIBA also gave rise to additional costs.

As a consequence of the KOFIBA deal, which was not included in the planning, and the higher-than-budgeted growth, the increase in total assets was well in excess of forecasts, with the result that the leverage ratio was also below the projected figure.

Helaba made good use of the favourable funding environment in 2019 to obtain funding on capital markets, leading to an increase in the LCR that exceeded the forecast. Temporary effects at the year-end, resulting from unused liquidity reserves among other things, were also a contributing factor.

The main contributor to the volume of new medium- and long-term business well in excess of the budget was the high volume of new business in the fourth quarter.

Risk Report

The Board of Managing Directors is responsible for all of the risks to which the Helaba Group is exposed and for defining a risk strategy consistent with the business strategy. Drafted in accordance with the requirements imposed by the law, the Charter and the banking regulatory authorities and with the Rules of Procedure for the Board of Managing Directors, the risk strategy lays down the principal elements of the approach adopted to dealing with risk, the objectives of risk containment and the measures employed to achieve these objectives within the Helaba Group (hereinafter: Helaba). The risk strategy covers all of the main Helaba Group business units (which includes the Helaba group of companies as defined by the KWG and the Capital Requirements Regulation (CRR)). Once adopted by the Board of Managing Directors, the risk strategy is presented to and discussed with the Supervisory Board and the Board of Public Owners.

Helaba's business strategy and risk strategy are integrally linked to the business strategy and risk strategy of Sparkassen-Finanzgruppe Hessen-Thüringen.

The principal objectives of Helaba's risk strategy are to uphold the organisation's conservative risk profile and maintain risk-bearing capacity while ensuring that all regulatory requirements are satisfied. The risk management system accordingly plays a central role in the management of the company.

Helaba has refined the risk management process over the years to create a range of sophisticated tools for and an environment conducive to risk containment. The methods employed to identify, quantify, contain and monitor risks and the systems required to implement them have undergone continuous development, as have organisational provisions such as process and system documentation and guidelines detailing responsibilities.

Principles

Responsibility of executive management

The Board of Managing Directors bears responsibility for all of the risks to which Helaba is exposed, irrespective of how individual responsibilities are assigned, as part of its overall executive management responsibility. The Board of Managing Directors is also responsible for the implementation of the risk policy throughout the Group. It defines the risk strategy and risk appetite simultaneously, with reference to Helaba's risk-

bearing capacity as determined in an analysis of the initial business policy position and an assessment of the associated primary risks defined in the risk inventory process, and is responsible for ensuring compliance with the risk strategy defined by means of the establishment of an efficient risk management process. The risk strategy covers all material business activities at Helaba. The strategies, processes and procedures are implemented at the subsidiary companies in accordance with their legal and actual scope of influence. The subsidiary companies are also included in the scope of the controlling tools for the various risk types in line with their relative significance and the relevant legal options. Effective risk controlling throughout the Group is thus assured.

Protection of assets

Risks may be assumed only as permitted under the general risk strategy and the specific risk strategies and only in pursuit of the strategic objectives of Helaba on the basis of the risk appetite framework (RAF), in particular in order to maintain Helaba's long-term earnings power while protecting its assets as effectively as possible and accomplishing its mission.

Protection of the Bank's reputation

Effective risk management and the avoidance of legal or regulatory breaches that could damage its reputation are absolutely vital for the Bank if it is to preserve its positive image and achieve the best possible rating. A corresponding control process to assess reputation risks in new business has been implemented.

Clearly defined responsibilities

The managers of the various front office units are responsible for ensuring that their unit achieves a reasonable balance between risks incurred and earnings realised. The units exercising control must ensure that the maintenance of this balance is monitored continuously and that the person with the relevant authority is notified of any existing or potential discrepancies.

Segregation of functions ("three lines of defence")

The independence of risk controlling and risk containment must be assured in order to maintain objectivity and transparency. Independent control processes are implemented wherever the type and degree of risk so require. The responsibilities of the organisational units for risk identification and containment, risk quantification, risk monitoring and risk reporting follow a "three lines of defence" (3-LoD) policy. This policy sets out roles and responsibilities to ensure there is independent monitoring and internal auditing of the effectiveness of the risk containment and monitoring functions that have been implemented. At Helaba Bank, including LBS and WIBank, and in the Group

companies, the containment of risks in the first line of defence is separated in terms of disciplinary and organisational reporting lines from the independent monitoring of risks in the second line of defence.

Transparency

The comprehensive and objective reporting and disclosure of risks is another important component of Helaba's risk strategy and is indispensable for the proper notification, by the Board of Managing Directors, of the corporate bodies, the banking regulator and the public at large.

Cost efficiency

The cost efficiency of the units exercising control and, in particular, of the systems used also has to be considered. The expenditure incurred in connection with risk control (and also risk containment) is reasonable given the pertinent regulatory requirements and the risks under consideration in each case.

Risk Appetite Framework (RAF)

Helaba defines the RAF as a holistic approach to risk containment. Factors known as RAF indicators are identified and then used to produce a complete description of the risk profile in material terms. The RAF indicators comprise indicators that apply across all risk types and others that are specific to particular risk types; they focus on regulatory and economic capital adequacy, the appropriateness of liquidity coverage and on the sustainability of earnings power. For each RAF indicator, the Board of Managing Directors specifies threshold values for risk appetite, risk tolerance and – where relevant – risk capacity; these values are used to convert the main risk strategy objectives into operational details as part of the planning. Risk appetite refers to the level of risk Helaba is prepared to assume to attain its strategic objectives. Risk tolerance indicates the level of variance from the risk appetite that Helaba is still prepared to tolerate in an unfavourable environment to reach its strategic objectives. On the basis of regulatory limits (where available), risk capacity specifies the maximum level of risk that Helaba can take on.

Risk-bearing capacity/ICAAP

Helaba's procedures for quantifying and containing risks ensure that the primary risks always fall within the risk-taking potential and that its risk-bearing capacity is thus assured. Helaba's risk-bearing capacity is one of the factors considered in defining its risk strategy.

Compliance with regulatory standards

The implementation of regulatory requirements, which proceeds in close consultation with the banking regulator, also has a decisive influence on the risk strategy. Helaba's regulatory capital backing and the determination of the regulatory capital are based on the provisions of the CRR and take account of the stipulations of the Supervisory Review and Evaluation Process (SREP).

Risk culture

The risk culture at Helaba consists of the attitudes and conduct of Helaba's employees in relation to risk awareness, risk appetite and risk management. The risk culture at Helaba fosters an environment in which risks are identified and consciously handled to ensure that decision-making processes lead to results that comply with the approved risk strategy requirements and reflect Helaba's risk appetite. Helaba's risk culture therefore extends beyond the governance framework and the established controls. The refinement of the risk culture is an ongoing task for all employees and managers at Helaba. Helaba's risk culture has the following components:

- A set of corporate values adopted by the Board of Managing Directors that set out Helaba's basic values and guiding principles.
- Responsibilities: every employee knows, understands and complies with Helaba's corporate values, with the risk appetite and risk tolerance relevant to their organisational unit and with the system set down in writing.
- Communication and critical dialogue: Helaba's working environment is characterised by respect, tolerance and trust. Everyone has the right to mutual respect, free from any kind of discrimination. Helaba seeks to promote an open working climate.
- Incentives: the remuneration system reflects Helaba's business priorities and aims to ensure that employees are properly rewarded for their efforts and achievements without being encouraged to take inappropriate risks in any way.

Auditing

The Internal Audit function audits all of the Bank's activities and processes in line with their risk content. This helps to safeguard transactions and financial assets. Assessments of the efficacy and adequacy of the Internal Control System facilitate the ongoing development and improvement of the risk management processes.

Risk Classification

Risk types

The primary risk types for the purposes of containment at Helaba result directly from its business activities. The structured risk inventory process, which is implemented annually and, where necessary, in response to relevant developments, examines which risks have the potential to damage Helaba's financial position (including capital resources), financial performance or liquidity position to a material degree. The following primary risk types have been identified.

- The default risk or credit risk is defined as the potential economic loss that can arise as a result of non-payment by or a deterioration in the creditworthiness of borrowers, issuers, counterparties or equity investments and as a result of restrictions on cross-border payment transactions or performance (country risk).
 - The potential economic loss is determined using internal or external credit assessments and risk parameters assessed by Helaba itself or set out in regulatory specifications.
 - The default risk does not include credit standing risks, which are mapped in the market risk under the residual risk and the incremental risk.
 - The equity risk – the potential economic loss as a result of non-payment by or a deterioration in the creditworthiness of an equity investment – that is not managed at the level of the individual risk types also forms part of the default risk. Such developments can lead to a decline in the value of the holding, to the reduction or cancellation of dividend payments, to loss transfers and to contribution, margin call and liability obligations.
 - The market risk is the potential economic loss as a result of disadvantageous movements in the market value of exposures due to changes in interest rates, exchange rates, share prices and commodity prices and their volatility. In this context changes in interest rate levels in one market segment lead to general interest rate risks, specific interest rate changes (for example on the part of an issuer) lead to residual risks and changes in the price of securities subject to a credit rating as a result of rating changes (including default) lead to incremental risks.
 - The liquidity and funding risk is broken down into three categories. The short-term liquidity risk is the risk of not being able to meet payment obligations as they fall due. Structural liquidity risks result from imbalances in the medium- and long-term liquidity structure and a negative change in the organisation's own funding curve. Market liquidity risks result from the insufficient liquidity of assets, with the consequence that positions can be closed out only, if at all, at a disproportionately high cost. The liquidity risks associated with transactions not included in the statement of financial position lead to short-term and/or structural liquidity risks depending on their precise nature.
 - The term “non-financial risk” (NFR) has been introduced in the regulatory framework and in German/European supervisory law as a structure attribute separate and distinct from financial risk (such as market risk and default risk) but a final, binding definition has yet to be forthcoming. It is up to the banks to shape its meaning according to their risk profile.
- Non-financial risk at Helaba includes reputation risk as well as operational risk. Operational risk comprises the non-NFR sub-risk categories of operational risk in the narrow sense (includes aspects of reputation risk and matters relating to compliance, business continuity management (BCM), human resources and taxes), legal risk, conduct risk, model risk, information risk, third-party risk and project risk.
- Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk.
- Operational risk also includes the following NFRs:
- Legal risk is defined as the risk of loss for the Bank resulting from infringements of legal provisions that have the potential to result in (i) legal proceedings or (ii) internal actions to avert such losses. Breaches of contract relating to matters of creditworthiness (for example in the case of loan contracts) do not fall within this definition.

- Conduct risk is defined as the current or potential risk of loss for an institution as a result of an inappropriate offer of financial (banking) services, including cases of intentional or negligent misconduct.
- There are two distinct aspects to model risk:
 - I. One involves the risk of underestimating the regulatory or economic capital requirement as a result of using models to quantify risks. This is in part a reflection of the fact that a model can never entirely capture reality. This aspect of model risk is taken into account at Helaba
 - a) as part of determining the own capital requirement for internal Pillar 1 models using the model premiums/safety margins demanded by regulatory requirements and
 - b) in economic risk management via a risk potential premium for the primary risk types.
 - II. The other aspect of model risk involves the risk of losses associated with the development, implementation or inappropriate use of models by Helaba for the purposes of decision-making. This aspect is factored into operational risk. The analysis of operational risk does not include the models covered under I. a) and model risks already covered by the risk potential premiums in accordance with I. b).
- Information risk, which is a component of operational risk, comprises the risk of losses resulting from a failure to provide the specified protection, in terms of availability, integrity, confidentiality and (as part of integrity) authenticity, for Helaba's information values at a technical, procedural, organisational or human resources level, both internally and externally (including cyber risks), irrespective of form (digital, physical or verbal).
 - I. IT risks are information risks resulting from the use of the IT systems and associated processes (own processes and those operated by third parties) for which the bank is responsible that threaten to compromise the protection of information.
 - II. Cyber risks are information risks resulting from attacks on IT systems from outside the IT systems (own systems and those operated by third parties) for which the bank is not responsible that threaten to compromise the protection of information.
 - III. Non-IT risks are information risks other than IT or cyber risks. These arise in connection with paper-based documents or the spoken word and threaten the protection of information.
- Third-party risk entails matters related to non-financial risk in outsourcing and other external procurement activities. Outsourcing risk and the risk from other outsourcing transactions are defined as the risk of loss/damage to Helaba due to defective performance or loss of performance by the service provider. Risks in relation to the service provider may in principle arise from
 - I. underlying conditions at the service provider (creditworthiness, foreign legal risk, political stability),
 - II. performance (personnel, equipment and IT resources, reputation) and
 - III. dependence and concentration (concentration risk, market position).
- Project risk involves the risk of an event occurring that could give rise to negative consequences for project objectives or imposes scheduling, financial, human resources and/or other constraints.
- Business risk is the potential economic loss attributable to possible changes in customer behaviour, in competitive conditions in the market, in general economic conditions or in the regulatory environment. Damage to Helaba's reputation could also trigger a change in customer behaviour.
- Reputation risk involves the possibility of a deterioration in Helaba's public image (its reputation for competence, integrity and trustworthiness) in the form of the perceptions of the individuals having a business or other relationship with the Bank. Most of the material impact of reputation risk finds expression in the business and liquidity risk. Reputation risk is consequently assigned to these risk types in the risk type system. Reputation risks include original reputation losses as well as those that arise as a result of an operational loss event. The reputation risk profile is mapped entirely under operational risk.
- Regulatory risk is the potential economic loss resulting from business constraints caused by new, unexpected (bank-specific) regulations, amendments to existing regulations or the unclear interpretation of regulations. The material consequences of regulatory risk impact on business risk and regulatory risk is consequently assigned to business risk in the breakdown of risk types.

- Real estate risk comprises the real estate portfolio risk – the potential economic loss from fluctuations in the value of an entity's own real estate – and the real estate project management risk associated with project development business. Risks associated with the provision of equity and loan capital for a project are excluded from this risk type, as are risks associated with real estate finance.

Risk Concentrations

Risk concentrations can occur both within a single risk type and across different risk types. The areas responsible for risk monitoring are charged with managing – that is to say identifying, quantifying, containing and monitoring – risk concentrations and reporting on identified risk concentrations at Helaba in line with their respective accountability for major risk types, risk-bearing capacity and stress tests.

Both concentrations within a risk type (intraconcentrations) and concentrations across risk types (interconcentrations) are analysed and integrated into the risk management reporting and decision-making processes. No risk-mitigating diversification effects between the risk types are applied in the risk-bearing capacity calculation. The design of the extreme market dislocation stress scenarios across all risk types, moreover, implicitly takes account of the main risk concentrations between risk types of significance for Helaba.

Risk Management Process

Risk management at Helaba comprises four elements that are best understood as consecutive phases in a single continuous process.

1. Risk identification

Risks affecting Helaba are identified continuously as an integral part of daily operations. Once identified, each risk is assigned to the relevant risk type. Comprehensive identification and incorporation into existing risk measurement systems and the associated risk monitoring processes are particularly important in connection with the introduction of new products and complex transactions. The central monitoring units are involved in the authorisation of new products as part of the New Product Process for lending business and trading business. The risk inventory process to be completed for the Helaba Group annually and on an ad hoc basis also helps to identify previously unknown risks and ensure that any of material significance are incorporated into the risk management process.

2. Risk assessment

Effective mapping of individual transactions and risk parameters in the risk measuring systems enables qualitatively and quantitatively robust risk measurement and assessment for the various risk types. A variety of models, methods and processes are used for this purpose. Helaba applies corresponding premiums and discounts to cover the model risk that results from the use of models and is confirmed in the course of independent validations.

3. Risk containment

The information obtained in the risk identification and quantification phases provides the basis for risk containment by the local management units. Risk containment encompasses all of the measures aimed at incurring, reducing, limiting, avoiding or transferring risks within the Board of Managing Directors' defined limits and RAF thresholds plus additional management variables for default risk.

4. Risk monitoring and reporting

The Risk Controlling unit provides independent central risk monitoring of the following risk types: default risk (including equity risk), market risk, liquidity risk, non-financial/operational risk, real estate risk and business risk. The responsibilities of the Risk Controlling unit in this regard include the specification of appropriate methods, their implementation and the operation of the associated models. An integral component of these monitoring activities is the submission of reports to the relevant authority holders and committees covering the main risk types, risk-bearing capacity, the status of the RAF indicators and the status of the relevant indicators from the recovery plan (MaSan). The internal models used in Risk Controlling to assess risk in accordance with Pillars 1 and 2 are in addition recorded in a model inventory and validated regularly. The Risk Controlling unit (Independent Validation Group) is responsible for model governance, including maintaining the model inventory and ensuring that independent validation is carried out.

Risk Management Structure

Entities involved

The Helaba Board of Managing Directors is responsible for all of the risks to which Helaba is exposed and for implementing the risk strategy policy throughout the regulatory consolidation group. The Board of Managing Directors has established a Risk Committee in accordance with the applicable banking regulatory requirements to implement and monitor Helaba's risk strategy, first and foremost, and to aggregate all of the risks – that is to say the default risks, market, liquidity and funding risk, non-financial/operational risks, business risks and real estate risks – assumed across Helaba and evaluate their combined implications. The Risk Committee is charged with identifying risks at Helaba at the earliest possible stage, designing and monitoring the RAF and the calculation of risk-bearing capacity and determining measures aimed at avoiding risk and generating containment mechanisms for risk management. It also approves the containment and quantification methods employed by the various units and assesses the appropriateness of the tools applied in light of the extent of the risk.

The Risk Committee is complemented by the Asset/Liability Management Committee and the Credit Committee of the Board of Managing Directors (VSKA). The Asset/Liability Management Committee has responsibility for monitoring market risks, including the associated limit utilisation, and containing the strategic market risk portfolio and the portfolio of non-interest-bearing liabilities. The Credit Committee of the Board of Managing Directors is responsible for credit and settlement risks associated with counterparties as well as syndication risks, placement risks and country risks.

Appointments to the committees and the committees' duties, jurisdiction and responsibilities are governed in separate rules of procedure approved by the Board of Managing Directors.

The organisational guidelines specify that the approval of the entire Board of Managing Directors or of the Supervisory Board or one of its committees must be obtained for decisions on matters of particular significance such as acquiring, changing or disposing of equity investments, granting loans above a certain threshold and defining the cumulative limit for market risks. The Bank's Charter, moreover, requires that any decision to take on or make changes to strategic equity investments involving a stake in excess of 25 % also be approved by the Board of Public Owners.

Risk management at Group companies

Companies belonging to the Group are incorporated into risk management activities at Group level by taking account of the risks established in the course of the annual or, where applicable, an ad hoc risk inventory. The risk inventory process identifies risks at the level of Helaba's direct equity investments, with each of these Group companies measuring the cumulative risk across its own organisation including its own equity investments. The starting point for determining inclusion is all direct equity investments of Helaba Bank under commercial law plus special purpose entities and special funds. The regular risk inventory covers the companies belonging to the Group for which there exists a material legal or economic reason for inclusion. The list of companies to be included is drawn up with reference to a catalogue of criteria. Companies belonging to the Group that are not included in the risk inventory are considered through the mechanism of the residual equity risk.

The outcome of the materiality assessment conducted as part of the risk inventory process is used to determine which Group companies are included in risk management at Group level with which risk types and which Group companies are considered only through the mechanism of the residual equity risk. Companies belonging to the regulatory consolidation group are included in risk management at the level of individual risks in line with their primary risk types.

These companies must in addition establish an appropriate risk management process for any of their own risks that are assigned to the risk type at Group level. The officers responsible for the relevant risk types and methods stipulate precisely how risks are to be included. The mode of inclusion in the methods used in the risk management process varies from risk type to risk type.

Principal risk monitoring areas

The responsibilities of the organisational units follow a "three lines of defence" (3-LoD) policy. This policy sets out roles and responsibilities to ensure there is independent monitoring and internal auditing of the effectiveness of the risk containment and monitoring functions that have been implemented. At Helaba Bank, including LBS and WIBank, and in the Group companies, the containment of risks in the first line of defence is separated in terms of disciplinary and organisational reporting lines from the independent monitoring of risks in the second line of defence. The three lines of defence policy is implemented at Helaba Bank as follows:

First line of defence (LoD 1)

The first line of defence assumes risks in the course of its (business) activities, bears these risks and has responsibility for the results. In particular, it is responsible for controlling its risks and designing controls, with due regard for the methods specified by LoD 2.

Second line of defence (LoD 2)

A second line of defence to provide independent monitoring of LoD 1 has been established for all primary risk types (in particular the Risk Controlling, Credit Risk Management, Compliance and Process Management and Information Security units).

The main task is a holistic global assessment of all risks on an individual basis and at portfolio level – both at Helaba Bank and across Helaba as a whole.

Third line of defence (LoD 3)

Internal Audit conducts risk-based and general audits, in particular of the appropriateness and effectiveness of the activities of the first two lines of defence.

To enable the aforementioned organisational units at Helaba to carry out their assigned responsibilities, the other organisational units must offer appropriate support by providing the necessary information and assistance.

Risk types	Risk containing units (LoD 1)	Risk monitoring units (LoD 2)	Reviewing unit (LoD 3)
Default risk including equity risk	Front office units (lending units, Capital Markets, Asset/Liability Management: Municipal Loans)	Risk Controlling (combined bank, portfolio level) Group Strategy and Central Staff Division (equity risk) Credit Risk Management (individual exposure level and individual portfolio level)	Internal Audit
Market risk	Capital Markets, Asset/Liability Management	Risk Controlling	
Liquidity and funding risk	Capital Markets (money market trading), Asset/Liability Management	Risk Controlling	
Non-financial risk (NFR)/operational risk	All units	Risk Controlling, together with specialist functions ¹⁾ in the following units: Process Management and Information Security including Information Security Management, Legal Services, Compliance, Human Resources, Accounting and Taxes and Administration	
Business risk	Front office units	Risk Controlling	
Real estate risk	Real Estate Management	Risk Controlling	
Tasks across all risk types	–	Risk Controlling (including calculation of potential risk exposures, model governance) Group Controlling (including risk-bearing capacity calculation, capital planning)	

¹⁾In addition to the Risk Controlling unit, the specialist functions are responsible for relevant risks (as set out in the risk type breakdown) that are subsumed under non-financial risk/operational risk and described in detail in the specific risk strategy for non-financial risk.

In terms of the three lines of defence principle, the independent risk management system within LBS, WIBank and the Group companies is generally structured in the same way as that at Helaba Bank. Regardless of the overall structure, there may, however, be specific arrangements in place. The relevant units at Helaba Bank are responsible for the integration of activities

into the risk containment and risk monitoring systems of the Helaba Group. LBS and WIBank must also directly apply the requirements applicable to Helaba Bank.

The Group Controlling unit is responsible for carrying out the calculation of risk-bearing capacity across risk types.

Internal Audit

The Internal Audit function, which reports to and is directly subordinate to the Board of Managing Directors, performs its tasks independently and without external direction. It examines and assesses all of the Bank's activities and processes, including activities and processes that have been outsourced, on the basis of risk considerations. It conducts audits at subsidiaries both in its role as the internal auditor and when specifically asked to do so. The annual audit plan drawn up in accordance with the risk-oriented multi-year plan and approved by the Board of Managing Directors forms the basis of all auditing activities.

Internal Audit focuses in particular on assessing the efficacy and adequacy of the Internal Control System and of risk management, thereby helping to safeguard financial assets. Internal Audit also supports major projects.

The scope and findings of audits are documented in accordance with uniform standards. Written audit reports are supplied promptly to the Board of Managing Directors and the people responsible for the units audited. The timely resolution of deficiencies identified is monitored and matters are escalated if necessary. Internal Audit reports significant audit findings, the actions adopted and the implementation status of these actions to the Board of Managing Directors and Supervisory Board every quarter. The Board of Managing Directors, Supervisory Board and Audit Committee are also presented with a summary annual report on auditing activities.

Compliance

The Bank has now brought the functions of the Compliance Capital Markets department, the Compliance Money Laundering and Fraud Prevention department and the Compliance MaRisk (in accordance with the German Minimum Requirements for Risk Management (AT 4.4.2 MaRisk)) department together under the Compliance division.

The Compliance Capital Markets department advises the operating units and monitors and evaluates the principles, processes and practices applied against various criteria including, in particular, the requirements of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG), German Investment Services Conduct of Business and Organisation Regulation (Wertpapierdienstleistungs-Verhaltens- und -Organisationsverordnung – WpDVerOV) and German WpHG Employee Notification Regulation (WpHG-Mitarbeiteranzeigerverordnung – WpHGMAAnzV), statements issued by BaFin and pertinent statements issued by the European Securities and Markets Authority (ESMA). It also evaluates inherent risks and checks compliance with the relevant regulatory requirements

and performs regular risk-oriented monitoring activities using a monitoring plan based on a prior risk analysis, paying particular attention in this regard to the rules prohibiting insider dealing and market manipulation, and identifies and regulates conflicts of interest throughout the Group that pose a potential risk.

The Compliance Money Laundering and Fraud Prevention department, acting in its capacity as the central authority for the purposes of Section 25h KWG, develops internal principles and adequate transaction- and customer-related safeguards and checks to prevent money laundering, the funding of terrorism and other criminal acts. The precautionary organisational measures to be implemented are based in part on the Group risk analysis (money laundering, terrorism financing and fraud prevention) and also in part on the Group Policy. This Group Policy sets out the Group's general ground rules, which reflect the relevant legal and regulatory requirements. Monitoring software keeps business relationships under constant surveillance. The Compliance Money Laundering and Fraud Prevention department is also responsible for the implementation of the legal requirements created by the Agreement between the United States of America and the Federal Republic of Germany to Improve International Tax Compliance (FATCA) and the international Automatic Exchange of Information (AEOI) process.

The Compliance MaRisk department identifies material legal provisions and regulations and promotes the adoption of effective procedures to ensure that they are observed. It also conducts risk-based checks of its own, regularly reviewing and assessing the adequacy and efficacy of the business processes and practices associated with ensuring that material legal provisions and regulations are observed within the Bank.

Information Security Management

The Information Security Management function is responsible for ensuring the proper control, coordination and development of information security management in line with the Bank's business strategy, IT strategy and risk management strategy. It manages the identified and analysed information security risks to this end using an information security management system (ISMS) and develops relevant measures and checks for sustainable risk reduction and risk monitoring. The Information Security Management function also continuously refines the processes for ensuring that any necessary security requirements arising in connection with relevant laws and regulations (data protection legislation (German Federal Data Protection Act – BDSG, EU General Data Protection Regulation – GDPR), German IT Security Act, German Minimum Requirements for the Security of Internet Payments – MaSI, MaRisk, German Supervisory

Requirements for IT in Financial Institutions – BAIT, etc.) are determined and specified, that information protection classifications and infrastructures are analysed regularly and that technical and organisational measures appropriate for this purpose are coordinated to make certain that a proper level of security is maintained at the Bank.

The Data Protection Officer reports to and advises the Board of Managing Directors and all organisational units and employees with regard to data protection requirements. The function involves responsibility for monitoring the implementation of and compliance with the requirements of data protection law and for relevant employee training and measures to raise awareness of data protection issues among employees. Helaba maintains a record of processing activities (Art. 30 GDPR) covering procedures that involve the processing of personal data. This record provides the basis for ensuring that the processing of personal data complies with the data protection regulations. Helaba has developed an information security management system (ISMS) aligned with the ISO 27001 standard to ensure the availability, confidentiality and integrity of data (Art. 5 and Art. 32 GDPR) and to assess the resilience (maintenance of operability) of data-processing systems.

These functions report directly to the Board of Managing Directors.

Risk-Bearing Capacity/ICAAP

Helaba uses its established procedures for quantifying and containing risks to ensure that all primary risks within the Helaba Group are always covered by the risk cover pools and that its risk-bearing capacity is thus assured.

In terms of concept, Helaba's lead risk-bearing capacity approach reflects the supervisory requirements for an ICAAP at institutions from an internal economic perspective. In other words, the calculation of risk-bearing capacity takes into account all risks that could jeopardise the continued existence of Helaba as a going concern from an internal economic perspective. The economic limitation and containment of risks is also based on ensuring risk-bearing capacity in accordance with this economic internal perspective. The risk tolerance and risk appetite related to the risk exposures in this perspective are specified in the RAF.

Risk-bearing capacity is determined on the basis of a time frame of one year in the economic internal perspective and both risk exposures and risk cover pools are designed and quantified for this period.

The economic risk cover pools are calculated on the basis of own funds determined in accordance with IFRS financial reporting requirements, adjusted for economic correction factors. These factors ensure a loss absorption capacity comparable with regulatory CET1 capital.

In terms of risk, risk exposures for default risk (including equity risk), market risk, operational risk, business and real estate risk are included in the analysis for the internal economic perspective with a confidence level of 99.9%. This approach is used to demonstrate that the economic risk cover pool is adequate enough – even if rare and serious loss scenarios should materialise – to ensure that the Bank can continue as a going concern on the basis of its own resources, i.e. without recourse to third-party funds.

The risk-bearing capacity assessment covering all risk types reveals that the existing risk cover pools at the end of 2019 once again exceeded the quantified risk exposures by a substantial margin, underlining Helaba's conservative risk profile. Helaba had a capital buffer of € 4.3 bn in respect of its economic risk exposures as at the reporting date (31 December 2018: € 4.6 bn).

Helaba regularly examines the effects of historical and hypothetical stress scenarios on risk-bearing capacity as well as analysing risk-bearing capacity for given reference dates. The scenarios considered include macroeconomic stress scenarios and a scenario involving exceptional market dislocation based on the most extreme changes in parameters observed over the historical time frame (usually observed market dislocation occurring in a global financial crisis).

To complement the economic internal perspective as the lead approach for ensuring risk-bearing capacity in Pillar II, an analysis using the normative internal perspective is conducted quarterly. The normative internal perspective examines how the primary Pillar II risks affect the regulatory ratios in accounting terms and the internal objectives for capital ratios in the context of the RAF for the institution as a going concern. This analysis is conducted using various macroeconomic scenarios. Pillar II risks affect regulatory capital, both through profit and loss and through other comprehensive income, whereas Pillar I risk quantification is reflected in a change in risk-weighted assets (RWAs).

The objective of this analysis is to ensure ongoing compliance with regulatory requirements and with the internal targets derived from the risk strategy and RAF. The capital ratios achieved under the simulated scenarios exceed the regulatory minimum CET1 capital ratio by a significant margin.

Helaba additionally conducts a number of reverse stress tests to investigate what nature of idiosyncratic or market-wide events could jeopardise its continued existence as a going concern. The analyses focus on the regulatory minimum capital requirements, the available liquidity reserves and economic risk-bearing capacity in the economic internal perspective. There is currently no indication of any of the scenarios described above becoming a reality.

Other protection mechanisms

There are other protection mechanisms in addition to the risk cover pool. Helaba is a member of the Reserve Fund of the Landesbanken and Girozentralen and is thus included in the Sparkassen-Finanzgruppe's protection scheme, which comprises the eleven regional Sparkasse support funds, the aforementioned reserve fund and the deposit security reserve fund of the Landesbausparkassen.

The most notable features of this protection scheme are the way that it safeguards the viability of the affiliated institutions, especially their liquidity and solvency, its risk monitoring system for the early detection of specific risk profiles and its use of a method based on risk parameters defined by the supervisory authorities to calculate the amounts to be paid into the protection scheme by the various institutions. The legally dependent Landesbausparkasse Hessen-Thüringen, the subsidiary Frankfurter Sparkasse, and Frankfurter Bankgesellschaft (Deutschland) AG, which is a subsidiary of Frankfurter Bankgesellschaft (Schweiz) AG (which in turn is a subsidiary of Helaba), are also directly integrated into this protection scheme.

The Sparkassen-Finanzgruppe protection scheme includes a deposit guarantee scheme to protect qualifying deposits up to a value of € 100,000 per customer as well as safeguarding the viability of the affiliated institutions themselves. The deposits thus protected at the Helaba Group amount to € 16.4 bn in total (31 December 2018: € 16.0 bn). The German Federal Financial Supervisory Authority (BaFin) has recognised the Sparkassen-Finanzgruppe's institutional protection scheme as a deposit guarantee scheme for the purposes of the German Deposit Guarantee Act (EinSiG).

Helaba and Frankfurter Sparkasse are also affiliated to the Reserve Fund of the Sparkassen- und Giroverband Hessen-Thüringen under the terms of their Charters. The reserve fund provides further protection in the event of a default in addition to the nationwide Joint Liability Scheme. It covers the liabilities of Helaba and Frankfurter Sparkasse to customers, including banks, insurance companies and other institutional investors, and their securitised liabilities. Liabilities that serve or have served at the institutions as components of own funds pursuant to Section 10 KWG, such as asset contributions of dormant shareholders, liabilities under profit participation rights and subordinated liabilities, are not covered irrespective of their remaining term. The total volume of the fund is equal to 0.5 % of the affiliated institutions' total risk exposure amount as defined by article 92(3) CRR and stood at € 606 m at the end of 2019 (31 December 2018: € 555 m).

The Sparkassen- und Giroverband Hessen-Thüringen has undertaken to make up the shortfall between the amount actually paid in and the full amount should the fund be required before such time as the full amount has been contributed.

Rheinischer Sparkassen- und Giroverband (RSGV) and Sparkassenverband Westfalen-Lippe (SVWL) have each also unilaterally set up an additional regional reserve fund for Helaba.

Development institution WIBank, which is organised as a dependent institution within Helaba, enjoys the direct statutory guarantee of the State of Hesse as regulated by law and as permitted under EU law on state aid.

Default risk

Lending business is one of Helaba's core activities and the acceptance, control and containment of default risks accordingly constitutes one of its core competencies. Events in the market and developments in the regulatory environment for banks are together generating a continuous stream of new challenges for internal default risk management, making rigorous examination of the existing procedures absolutely essential.

Guiding these steps is a comprehensive and universal risk strategy derived from the business strategy. The specific risk strategy for default risks defines the risk propensity, differentiated by product, customer segment and risk type, for every business segment. It is reviewed annually.

Basel III/CRR

Helaba applies the IRBA. The corresponding regulatory requirements as set out in Basel III/CCR are implemented in Helaba's procedures and systems with the internal rating methods (default rating) for the lending portfolio, the Collateral Management System, the credit loss database, which is used to record and analyse the default portfolio and the specific loan loss allowances, and a regulatory calculation module.

Risk monitoring using the global limit system

Helaba employs a global limit system that records counterparty-specific default risks promptly in a structured and transparent manner. The system uses counterparty limits based on a combination of the creditworthiness (rating) of counterparties and the Bank's risk-bearing capacity.

Cumulative limits for each borrower are recorded in the global limit system at Group level to help monitor, limit and contain default risks. All types of loans in accordance with Articles 389 et seq. of the CRR made to borrowers in both trading and banking book activities are counted against these cumulative limits. Advance payment and settlement risks attributable to foreign currency and securities transactions, current account intraday risks, creditor risks associated with direct debits and what are referred to as "additional risks from constructs" are approved as commercial risks and counted against separate limits.

The approved total limits are allocated to individual borrowers, product categories and the operating divisions concerned in accordance with the application for approval. The utilisation of the individual limits is monitored on a daily basis and appropriate measures are initiated immediately if any limit is exceeded.

Swaps, forward transactions and options are counted towards the total limit at their credit equivalent amounts based on an internal add-on method. The Risk Controlling unit validates and, where appropriate, adjusts the add-ons once a year or on an ad hoc basis (for example in the event of market turmoil). All other trading book positions (for example money market trading and securities) are valued at market prices.

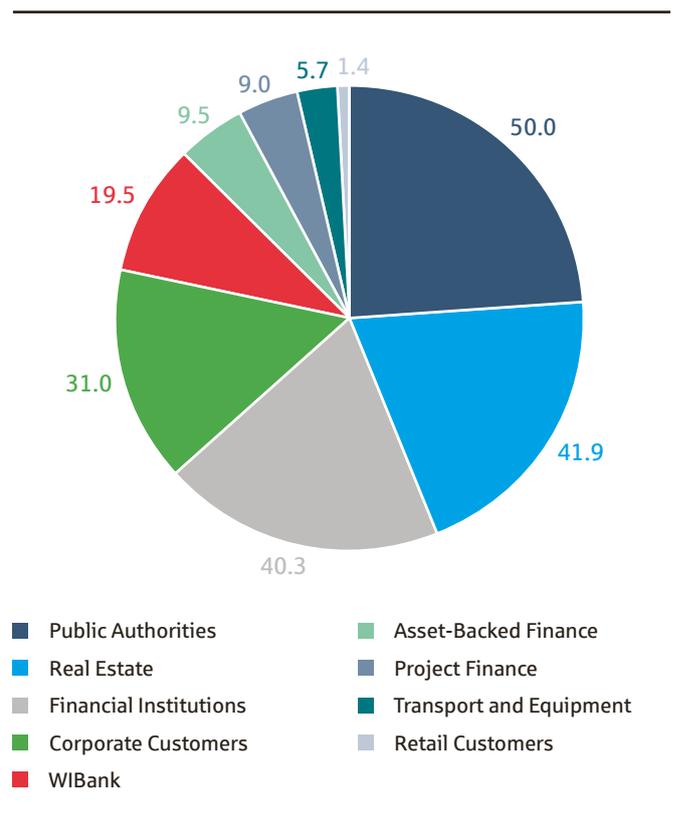
Creditor risks associated with direct debits and secondary risks resulting from leasing commitments (lessees) or guarantees received are also recorded as commercial risks for the relevant risk-bearing entity.

Chart 1 shows the total volume of lending (comprising draw-downs and unutilised lending commitments) in the narrow Group companies (Helaba Bank plus subsidiaries Frankfurter Sparkasse, Frankfurter Bankgesellschaft (Schweiz) AG and Helaba Asset Services) of € 208.3 bn as at 31 December 2019 (31 December 2018: € 182.3 bn) broken down by portfolios. The total volume of lending is the risk exposure value calculated in accordance with the legal provisions applicable to large exposures before applying the exemptions in relation to calculating utilisation of the large exposure limit and before applying credit mitigation techniques. The exposure relating to KOFIBA is integrated in full.

Total volume of lending by portfolio
(narrow Group companies)

Chart 1

in € bn



The lending activities in the narrow Group companies as at 31 December 2019 focused on the following portfolios: public sector, real estate and financial institutions (especially in the banking sector).

The summary below provides an overview of the regional breakdown of the total lending volume in the narrow Group companies by borrower's country of domicile.

in € bn

Region	31.12.2019	31.12.2018
Germany	132.5	111.6
Rest of Europe	51.2	46.7
North America	23.0	22.3
Oceania	0.7	0.8
Other	0.9	0.9

The table shows that Germany and other European countries continue to account for most of the total lending volume. The UK accounts for an exposure of € 8.6 bn (31 December 2018: € 7.7 bn).

Creditworthiness / risk appraisal

The Bank employs 15 rating systems developed together with DSGV or other Landesbanken and two rating systems developed internally. Based on statistical models, these systems classify

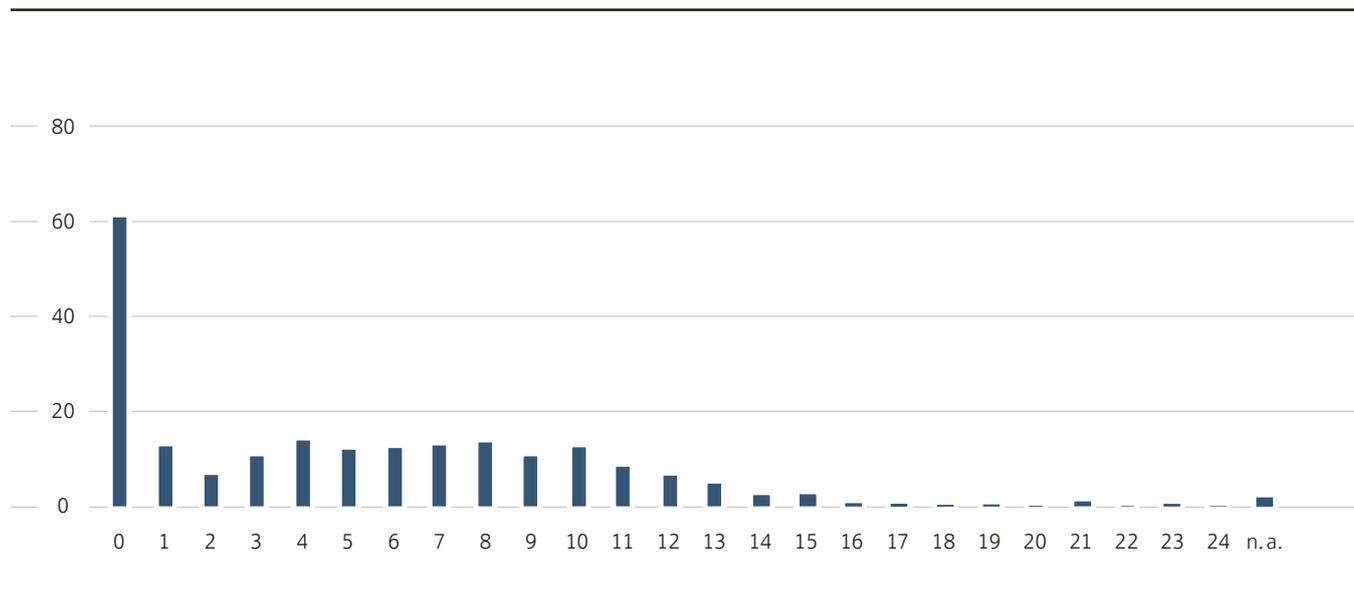
loan exposures, irrespective of the customer or asset group, by the fixed probability of default (PD) using a 25-point cardinal default rating scale.

Chart 2 shows the total volume of lending in the narrow Group companies (Helaba Bank plus subsidiaries Frankfurter Sparkasse, Frankfurter Bankgesellschaft (Schweiz) AG and Helaba Asset Services) of € 208.3 bn (31 December 2018: € 182.3 bn) broken down by default rating category.

Total volume of lending by default rating category (narrow Group companies)

Chart 2

in € bn



Collateral

Like the creditworthiness of borrowers or counterparties, the collateral arrangements (or general credit risk reduction techniques) available are of major importance when determining the extent of default risks. Collateral is measured in accordance with the Bank's lending principles. The measurement is adjusted as part of the regular or ad hoc monitoring process if there are any changes in factors relevant for measurement purposes.

Helaba's Collateral Management System meets the necessary conditions to allow full advantage to be taken of the comprehensive opportunities for recognising credit risk reduction techniques that enhance shareholders' equity in accordance with the CRR. It provides the data resources required to verify and distribute the assets eligible as collateral to the risk exposures secured.

Country risks

Helaba's definition of country risk encompasses the risk of sovereign default as well as transfer and conversion risk, which means that country risk exposure also includes individual transactions entered into by a Helaba location with a borrower in the same country in local currency (local transactions).

Helaba has a uniform methodology for the internal measurement and allocation of country risks based on the entity bearing the economic risk. The risk initially assigned to the borrower's country of domicile in accordance with the strict domicile principle is accordingly transferred, subject to certain conditions, to the country of domicile of the parent company of the Group, the lessee or, in the case of cash flow structures and when collateral is involved, to the country of the entity bearing the economic risk.

The country risk system is the central tool for the comprehensive, timely and transparent risk-oriented recording, monitoring and containment of country risks. All of Helaba's lending and trading units, including subsidiaries Frankfurter Sparkasse, Frankfurter Bankgesellschaft (Schweiz) AG and Helaba Asset Services, are involved in country risk containment. The total country risk, excluding the countries of the euro zone, may not exceed six times the liable capital of the Helaba Group of institutions. As of 31 December 2019, utilisation was less than four times the liable capital.

The Credit Committee of the Board of Managing Directors defines country limits for all countries apart from Germany. The overall limit assigned to a country is subdivided into a lending limit and a trading limit. The country risks for long-term transactions are also subject to additional sub-limits.

The internal rating method for country and transfer risks provides 25 different country rating categories based on the uniform master scale used throughout the Bank. All classifications are established at least annually by the Economics and Research department and ultimately defined by the Credit Risk Management unit. The Banks and International Business unit, which performs the central coordination function for country limit requests, presents a country limit proposal on this basis factoring in bank-specific considerations and relevant factors relating to business policy and risk methodology and the Credit Committee of the Board of Managing Directors then sets the limits for the individual countries based on this proposal.

The Bank has no defined country limits for countries falling into the weakest rating categories (22–24).

Country risk (transfer, conversion and sovereign default risks) from Helaba loans issued by the narrow Group companies to borrowers based outside Germany amounted to € 70.1 bn (31 December 2018: € 67.4 bn), most of which was accounted for by borrowers in Europe (67.0%) and North America (31.2%). As at 31 December 2019, 79.6% (31 December 2018: 80.5%) of these risks were assigned to country rating classes 0 and 1 and a further 20.3% (31 December 2018: 19.4%) came from rating categories 2–13. Just 0.1% (31 December 2018: 0.1%) fell into rating class 14 or worse.

United Kingdom exposures

Helaba's net exposure to borrowers in the United Kingdom across the narrow Group companies amounted to € 8.2 bn as at 31 December 2019 (31 December 2018: € 7.9 bn). Project finance accounts for most of this increase.

Although the future relationship between the United Kingdom and the European Union remains uncertain following the adoption of the Withdrawal Agreement, Helaba continues to believe that its portfolio of loans to UK borrowers will not suffer substantial impairment in the short term, even in the case of a no-deal Brexit.

Credit risk processes and organisation

The MaRisk contain differentiated rules in respect of the organisation of lending business, of lending processes and of the design of the methods used to identify, quantify, contain and monitor risks in lending business.

The Board of Managing Directors has defined the main requirements of business policy regarding structural and procedural organisation in lending business in separate organisational guidelines for lending business.

Approval procedure

The approval procedure followed by the Bank ensures that no credit risks are entered into without prior approval. The rules of procedure for the Board of Managing Directors state that loans above a certain value require the approval of the Supervisory Board Risk and Credit Committee. Commitments in amounts below this value are approved at different authorising levels (Board of Managing Directors, Credit Committee of the Board of Managing Directors, individual members of the Board of Managing Directors, staff members) depending on the amounts involved. Loans are approved on the basis of detailed risk assessments. In accordance with the MaRisk, the loan documents in what is designated risk-relevant business always comprise two independent opinions, one from the relevant front office unit and one from the relevant back office unit. The representative of the relevant back office unit also always has a right of veto in this connection as part of an escalation process. The ultimate decision rests with the entire Board of Managing Directors.

The procedure also takes account of the concentration limits derived from the Bank's risk-bearing capacity, which place an additional limit on exposures in line with the default rating category of the economic group of connected clients. All loans also have to be reviewed at least once every twelve months. Mechanisms for ensuring on a daily basis that limits are not exceeded include the use of the global limit system, which aggregates all loans (credit lines and utilisations) extended by the narrow Group companies for each group of connected clients.

Quantifying default risks

For regulatory purposes, expected and unexpected default risks are quantified using the regulatory calculation module. Expected default risks are treated for calculation purposes on a transaction-by-transaction basis in the form of the expected loss. The calculation for regulatory purposes is carried out using the internal rating methods and regulatory loss given default (LGDs). The equity to be held available in accordance with the

CRR to cover unexpected losses is also calculated on a transaction-by-transaction basis and is used for containment purposes for both the specific transaction and the risk capital.

Default risks are determined for the purposes of internal containment using a value-at-risk approach. Risks are quantified using a Credit Metrics-based credit risk model (Monte Carlo simulation) developed in house taking account of risk concentrations and additional migration and stochastic LGD risks. The value-at-risk (VaR) calculated from the simulated probability distribution provides a measure – with a probability (confidence level) of 99.9 % (economic internal perspective) – of the upper limit of the potential loss of a portfolio within a period of one year.

The risk parameters applied additionally include migration matrices and LGD parameters estimated internally and empirically measured correlation values as well as the internal rating methods. The overall risk assumes a simultaneous, correlated onset of losses (systematic risk).

The quantification of default risk is additionally assessed against various scenarios to determine the impact of corresponding stress situations. The risk parameters are modelled scenario by scenario for this purpose.

The analysis as at the reporting date using the economic internal perspective for the calculation of risk-bearing capacity indicates that the economic risk exposure for the Group from default risk, calculated on the basis of the VaR, has increased significantly to € 1,636 m (31 December 2018: € 1,421 m). The main reason for this increase in the economic risk exposure is the opening at year-end – on a temporary basis and without any increase in total assets and liabilities – of a short-term position with a multinational company in the Corporate Finance division. A rating downgrade affecting one multinational company and the integration of KOFIBA also made a moderate contribution to the increase in risk. A slight fall in unsecured positions and various rating improvements offset some of the increase in risk in the real estate area.

The updated correlation parameters and enhancements to the scenario risk models that became operational in the year under review had the effect of increasing risk slightly.

Loss allowances

Appropriate loss allowances are recognised to cover default risk. The adequacy of the loss allowances is reviewed regularly and adjustments are made where necessary.

Equity Risk

The equity risk category brings together those risks attributable to equity investments whose individual risk types are not considered separately in risk controlling activities by risk type. Equity risks do not have to be considered for an equity investment if all risk types of relevance for the equity investment concerned are integrated into Group-wide risk management (at the level of individual risks) in line with their relative significance and the relevant legal options. Financial instruments classified under the CRR as equity exposures are also reported as equity risks alongside the equity investments under commercial law.

The risk content of each individual equity investment is classified with regard to value using a two-phase catalogue of criteria (traffic-signal method). In addition, the risk assessment is based on the appraisal and development of the rating of the company concerned within the framework of the Bank's internal rating method. Equity risks are reported quarterly to the Risk Committee of the Board of Managing Directors and the Risk and Credit Committee of the Supervisory Board.

The composition of the equity investments portfolio has changed markedly since year-end 2018. The analysis as at the reporting date using the economic internal perspective for the calculation of risk-bearing capacity shows an economic risk exposure of € 103 m (31 December 2018: € 70 m) for the Group from equity risk. The increase was mainly attributable to new investments in private equity/mezzanine funds.

Market Risk

Risk containment

Helaba manages market risks for the trading book and the banking book as part of its overall bank management. Clearly defined responsibilities and business processes create the necessary conditions for effective limitation and containment of market risks. The subsidiaries are integrated into the containment process as part of Group-wide risk management according to a graduated system based on the risk inventory process in line with the specific business activities involved. Attention in

this area focuses principally on subsidiaries Frankfurter Sparkasse and Frankfurter Bankgesellschaft (Schweiz) AG. Market risks are quantified using Helaba's own methods.

Trading activities focus for strategic purposes on customer-driven business, which is supported by a demand-led product range. Responsibility for containing trading book exposures rests with the Capital Markets unit, while the Asset/Liability Management unit has responsibility for funding and for the management of the interest rate and liquidity risks in the banking book. The own issues repurchase portfolio belonging to the trading book also falls under the jurisdiction of the Asset/Liability Management unit.

Limitation of market risks

Helaba employs a uniform limit structure to limit market risks. The process through which limits are allocated involves the Bank's internal corporate bodies and, in the context of limit definition for the risk-bearing capacity, the Risk and Credit Committee of the Supervisory Board.

Acting on the recommendation of the Asset/Liability Management Committee, the Risk Committee allocates limits to the risk-incurring business units and the various types of market risk within the scope of the defined cumulative limit for market risks. In addition separate limits are defined for the trading book and the banking book. Responsibility for the onward allocation of limits to Helaba's subordinate organisational units and its various sites rests with the divisions to which a limit has been assigned. Stop-loss limits and volume limits are also used independently in the trading units to limit market risks.

Compliance with the cumulative market risk limit was maintained at all times in the year under review and there were no limit violations at the main trading book and banking book aggregation stages (both Bank and Group) or for the individual market risk types.

Risk monitoring

The Risk Controlling unit is responsible for identifying, quantifying and monitoring market risks. This responsibility includes checking transactions for market conformity and determining the economic profit or loss as well as risk quantification. In addition, the reconciliation statement with external Accounting is prepared.

Continuous functional and technical development of the methods and systems used and intensive data entry play a key role in ensuring that Helaba's market risks are recorded properly. A special process owned by the New Products Committee has to be completed whenever a new product is introduced. New products must be incorporated correctly into the required systems for position recording, processing, profit or loss determination, risk quantification, accounting and reporting before they can gain authorisation.

A comprehensive reporting regime ensures that the relevant members of the Board of Managing Directors and the position-keeping units are notified daily of the risk figures calculated and the economic profit and loss generated on the basis of current market prices. Information about the current risk and earnings situation is in addition provided weekly to the entire Board of Managing Directors and the Asset/Liability Management Committee and monthly to the Risk Committee. Any breach of a defined limit triggers the escalation process to limit and reduce the associated risks.

Quantification of market risk

Market risk is quantified using a money-at-risk approach backed up by stress tests, the measurement of residual risks, sensitivity analyses for credit spread risks and the assessment of incremental risks for the trading book. The money-at-risk (MaR) figure corresponds to what is deemed, with a certain confidence level, to be the upper threshold of the potential loss of a portfolio or position due to market fluctuations within a prescribed holding period.

The risk measurement systems employed at Helaba for each of the various types of market risk (interest rates, share prices and foreign exchange rates) all use the same statistical parameters

in order to facilitate comparisons across the different risk types. This also makes it possible to aggregate the risk types into an overall risk. The overall risk assumes that the various different losses occur simultaneously. The MaR figure calculated using the risk models provides a measure of the maximum loss that will not be exceeded, with a probability of 99.0 %, on the basis of the underlying historical observation period of one year and a holding period for the position of ten trading days.

The summary below presents a reporting date assessment of the market risks (including correlation effects between the portfolios) taken on as at the end of 2019 plus a breakdown by trading book and banking book. The linear interest rate risk is the most significant of the market risk types. The rise in the linear interest rate risk in the banking book is primarily attributable to the integration of KOFIBA into Helaba Bank. Various country- and rating-dependent government, financials and corporate yield curves are also used alongside swap and Pfandbrief curves for measurement purposes. Euro positions account for 83 % (31 December 2018: 87 %) of the linear interest rate risk for the overall portfolio of the narrow Group companies, US dollar positions 10 % (31 December 2018: 8 %). In the field of equities, the focus is on securities listed in the DAX and DJ Euro Stoxx 50. The main foreign currency risks are attributable to US dollar, Canadian dollar and sterling positions. Residual risk amounted to € 13 m for the Group (31 December 2018: € 14 m). The incremental risk in the trading book amounted, with a time horizon of one year and a confidence level of 99.9 %, to € 180 m (31 December 2018: € 205 m). The analysis as at the reporting date using the economic internal perspective for the calculation of risk-bearing capacity shows an economic risk exposure of € 664 m (31 December 2018: € 601 m) for the Group from market risk. The increase was due mainly to the rise in linear interest rate risk.

Group MaR by risk type

in € m

	Total risk		Interest rate risk		Currency risk		Equities risk	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Total	75	64	68	58	1	0	6	6
Trading book	22	18	20	17	0	0	2	1
Banking book	59	51	53	45	1	0	5	6

The risk measuring systems are based on a modified variance-covariance approach or a Monte Carlo simulation. The latter is used in particular for mapping complex products and options. Non-linear risks in the currency field, which are of minor significance at Helaba, are monitored using sensitivity analyses.

Internal model in accordance with the CRR

Helaba calculates the regulatory capital required for the general interest rate risk using an internal model in accordance with the CRR. This model, which consists of the risk measurement systems MaRC² (linear interest rate risk) and ELLI (interest rate option risk), has been approved by the banking regulator.

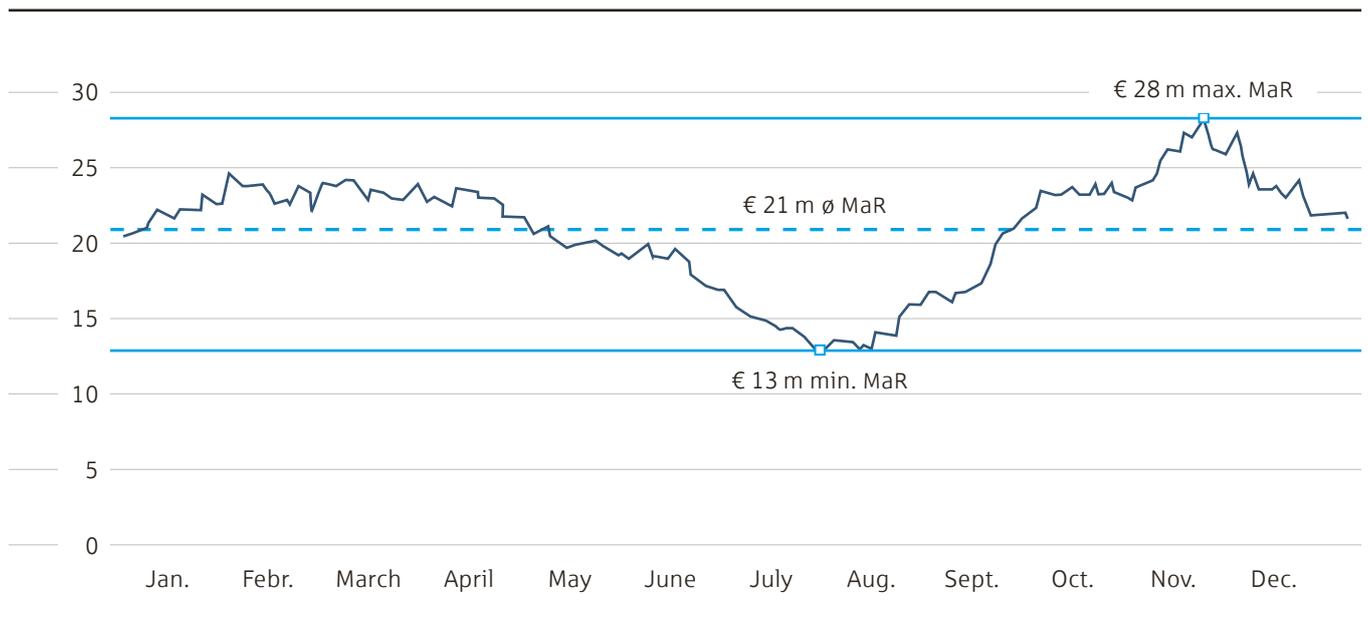
Market risk in the trading book

All market risks are calculated daily on the basis of the end-of-day position of the previous trading day and the current market parameters. Helaba also uses the parameters prescribed by the regulatory authorities for internal risk management. Chart 3 shows the MaR for the trading book (Helaba Bank) for the 2019 financial year. The average MaR for 2019 as a whole was € 21 m (2018 as a whole: € 19 m), the maximum MaR was € 28 m (2018 as a whole: € 25 m) and the minimum MaR was € 13 m (2018 as a whole: € 14 m). The changes in risk in financial year 2019 stem primarily from linear interest rate risk and are attributable to a normal level of reallocated exposures and regular updating of parameters (volatility, correlations).

Daily MaR of the trading book in financial year 2019

Chart 3

in € m



Helaba's international branch offices plus Frankfurter Bankgesellschaft (Schweiz) AG and Frankfurter Sparkasse make the most recent business data from their position-keeping systems available to Group headquarters in a bottom-up process so that consolidated MaR figures can be calculated for the Group.

The market parameters, in contrast, are made available in a standard form right across the Group in a top-down process. This arrangement means that risk quantification can be performed not just centrally at headquarters, but also locally at the sites.

The summary below shows the average daily MaR amounts for the trading book.

Average MaR for the trading book in financial year 2019

Ø MaR in € m

	Q1		Q2		Q3		Q4		Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Interest rate risk	21	13	19	18	14	20	23	17	19	17
Currency risk	0	0	0	0	1	0	0	0	0	0
Equities risk	1	2	1	2	1	1	1	1	1	2
Total risk	23	16	20	19	16	21	24	19	21	19

Number of trading days: 250 (2018: 250)

The annual average MaR for the trading book for Frankfurter Sparkasse and Frankfurter Bankgesellschaft (Schweiz) AG remains unchanged at €0 m in each case.

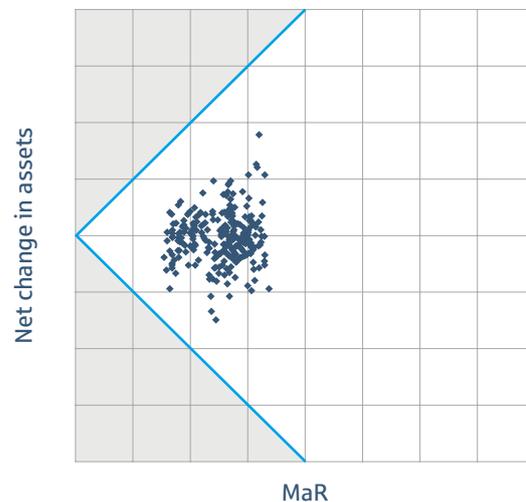
Back-testing

Helaba carries out clean mark-to-market back-testing daily for all market risk types to check the forecasting quality of the risk models. This involves determining the MaR figure for a holding period of one trading day with a one-tailed confidence level of 99% and a historical observation period of one year. The forecast risk figure is then compared with the hypothetical change in the net value of the trading book, which represents the change in the value of the portfolio over one trading day for an unchanged position and on the basis of new market prices. Any case in which the decrease in the net value of the trading book exceeds the potential risk figure constitutes a back-testing outlier.

Chart 4 shows the back-testing results of the Helaba risk models for the trading book across all types of market risk in financial year 2019. No negative outliers occurred (2018: two negative outliers).

Back-testing for the trading book in financial year 2019

Chart 4



The internal model for the general interest rate risk produced no negative outliers in 2019 in regulatory mark-to-market back-testing (2018: two negative outliers).

Stress test programme

A proper analysis of the effects of extraordinary but not unrealistic market situations requires the use of stress tests in addition to the daily risk quantification routine. Various portfolios are remeasured regularly under the assumption of extreme market scenarios. Portfolios are selected for stress testing on the basis of the level of exposure (significance) and the presence or absence of risk concentrations unless specific banking regulatory provisions apply. Stress tests are carried out daily on Helaba's options book. The results of the stress tests are included in market risk reporting to the Board of Managing Directors and are taken into consideration in the limit allocation process.

Methods available for use in stress testing include historical simulation, Monte Carlo simulation, a modified variance-covariance approach and a variety of scenario calculations – including those based on the main components of the correlation matrix. Helaba also performs stress tests to simulate extreme spread changes. The stress tests for market risks are supplemented by reverse stress tests and stress tests across risk types conducted in the course of Helaba's calculation of risk-bearing capacity.

Market risk (including interest rate risk) in the banking book

Helaba employs the MaR approach used for the trading book to map the market risk in the banking book. The risk figures calculated using this approach are supplemented with daily reports from which the maturity structure of the positions taken out can be ascertained. Regular stress tests with holding periods of between ten days and twelve months back up the daily risk measurement routine for the banking book.

The quantification of interest rate risks in the banking book is also subject to regulatory requirements, which stipulate a risk computation based on standardised interest rate shocks. The computation examines the effects of a rise and fall of 200 basis points in interest rates in line with the requirements of the banking regulator. As of the end of 2019, such an interest rate shock would, in the unfavourable scenario, have resulted in a negative change of € 180 m in the value of the Helaba Group banking book (31 December 2018: € 501 m). Of this figure, € 182 m (31 December 2018: € 480 m) is attributable to local currency and € –2 m (31 December 2018: € 21 m) to foreign currencies. The change compared with the position at the end of 2018 arose mainly because of the implementation of modified requirements imposed by the banking supervisory authorities (including EBA Guidelines on interest rate risk in the banking book) in

relation to interest rate risk in the banking book in conjunction with lower interest rates. Helaba carries out an interest rate shock test at least once every quarter.

Performance measurement

Risk-return comparisons are conducted at regular intervals to assess the performance of individual organisational units. Other aspects, including qualitative factors, are also included in the assessment in acknowledgement of the fact that the short-term generation of profits is not the sole objective of the trading units.

Liquidity and Funding Risk

Ensuring liquidity so as to safeguard its short-term solvency and avoid cost risks in procuring medium-term and long-term funding is a top priority at Helaba, which accordingly employs a comprehensive set of constantly evolving tools to record, quantify, contain and monitor liquidity and funding risks in the internal liquidity adequacy assessment process (ILAAP). The processes, tools and responsibilities in place for managing liquidity and funding risks have clearly demonstrated their value over recent years in the face of the global crisis in the financial markets and the resultant turmoil in the money and capital markets. Helaba's liquidity was once again fully assured at all times in 2019.

A liquidity transfer pricing system ensures that all liquidity costs associated with Helaba's various business activities (direct funding costs and liquidity reserve costs) are allocated transparently. The processes of containing and monitoring liquidity and funding risks are combined in the ILAAP and comprehensively validated on a regular basis.

Containment and monitoring

The Helaba Group operates a local containment and monitoring policy for liquidity and funding risks under which each Group company has responsibility for ensuring its own solvency, for potential cost risks associated with funding and for independently monitoring those risks. The corresponding conditions are agreed with Helaba Bank. The subsidiaries falling within the narrow Group companies report their liquidity risks regularly to Helaba as part of Group-wide risk management, allowing a Group-wide aggregated view. All Group companies are additionally included in the LCR determination and monitored in accordance with the CRR.

The Bank draws a distinction in liquidity risk management between short-term and structural liquidity management. Overall responsibility for short-term solvency and for structural liquidity management with regard to the funding of new lending business (maintaining the balanced medium- and long-term liquidity structure) rests with Asset/Liability Management. The same unit is also tasked with the central management of the liquidity buffer for both regulatory purposes (to maintain the LCR) and for collateral management.

The Risk Controlling unit reports daily on the short-term liquidity situation to the relevant managers and reports monthly in the Risk Committee on the overall liquidity risks assumed. Reporting also includes various stress scenarios such as increased drawings on liquidity lines, no availability of interbank liquidity in the financial markets and the possible impact on Helaba of a significant rating downgrade. The stress scenarios encompass both factors specific to the bank and broader market influences. Reverse stress tests are also conducted. Additional ad hoc reporting and decision-making processes for extreme market situations are in place.

Short-term liquidity risk

Helaba maintains a highly liquid portfolio of securities (liquidity buffer) that can be used to generate liquidity as required in order to assure its short-term liquidity. The current liquidity situation is managed with reference to a short-term liquidity status indicator that is based on a proprietary economic liquidity risk model and is determined daily. The model compares expected liquidity requirements for the next 250 trading days against the available liquidity from the liquid securities portfolio. The calculation of the available liquidity includes markdowns to take into account unexpected market developments affecting individual securities. Securities that are used for collateral purposes (for example repos and pledges) and are thus earmarked for a specific purpose are deducted from the free liquid securities portfolio. The same applies in respect of securities maintained as a liquidity buffer for intra-day liquidity management. The main currency for short-term liquidity at Helaba is the euro, with the US dollar also significant.

The short-term liquidity status concept has been chosen to allow various stress scenarios to be incorporated. The process involves comparing the net liquidity balance (liquidity needed) with the available liquidity. The defined limits are five days up

to one year depending on the specific scenario. Monitoring the limits is the responsibility of the Risk Controlling unit. The utilisation rate in the most relevant scenario (solvency) was 0% as at the reporting date (31 December 2018: 30%) as a result of the excellent level of liquidity adequacy. The figure remained at 0% (31 December 2018: 32%) when Frankfurter Sparkasse was included. The average utilisation rate in 2019 was unchanged from the previous year at 3% (2018: 3%), reflecting the excellent liquidity situation over the course of the year.

Helaba manages short-term liquidity in accordance with the regulatory LCR requirements in parallel with the economic model. The two perspectives are integrated through the ILAAP. The ratio stood at 225% on 31 December 2019 (31 December 2018: 126%).

Money market staff borrow/invest in the money market (interbank and customer business, commercial paper) and make use of ECB open market operations and facilities in performing the operational cash planning tasks necessary to ensure short-term liquidity. Intraday liquidity planning is carried out in the Cash Management unit.

Off-balance sheet loan and liquidity commitments are regularly reviewed with regard to potential drawdowns and features of relevance to liquidity and are integrated into liquidity management. Guarantees and warranties are similarly reviewed. Helaba determines and plans the liquidity to be held available using a scenario calculation that includes a market disturbance.

A total of € 1.8 bn in liquidity commitments had been drawn down for the securitisation platform initiated by Helaba as of the reporting date. This represents an increase of € 0.2 bn as compared with the previous year. No liquidity had been drawn down from stand-by lines in US public finance business as of the reporting date (as was the case at the end of 2018).

Credit agreements, in particular those of consolidated property companies, may include credit clauses that can result in distribution restrictions or even in the agreements being terminated. The Group faces no significant liquidity risk even if such a termination should threaten in individual cases.

Structural liquidity risk and market liquidity risk

The Asset/Liability Management unit manages the liquidity risks in Helaba's commercial banking activities, which consist essentially of lending transactions including floating-interest roll-over transactions, securities held for the purpose of safeguarding liquidity and medium- and long-term financing, via the central asset/liability management system (ZDS). Funding risk is managed on the basis of liquidity gap analyses where liquidity mismatches are limited. The NSFR introduced by the regulator through CRR II is used for management. The Bank prevents concentrations of risk from arising when obtaining liquidity by diversifying its sources of funding. Market liquidity risk is quantified in the MaR model for market risk. A scenario calculation using a variety of holding periods is carried out. The scaled MaR suggested no significant market liquidity risk as at 31 December 2019, as was also the case at 31 December 2018. Market liquidity is also monitored on the basis of the margin between bid and offer prices.

The Board of Managing Directors defines the risk tolerance for liquidity and funding risk at least annually. This covers the limit applicable for short-term and structural liquidity risk (funding risk), liquidity building for off-balance sheet liquidity risks and the definition of the corresponding models and assumptions. A comprehensive plan of action in the event of any liquidity shortage is maintained and tested for all locations.

Non-Financial Risk/Operational Risk

Work on refinement and standardisation in relation to non-financial risk began in 2018 in recognition of the increasing prominence of NFR in risk management. The aim of this work was to combine operational risk and its existing NFR sub-risk categories from 2019 in a complete framework for the containment and monitoring of non-financial risk centred on a comprehensive 3-LoD model with a minimum of overlap.

Principles of risk containment

Helaba identifies, assesses, monitors, controls and reports non-financial risk using an integrated management approach in accordance with the regulatory requirements.

The containment and monitoring of non-financial risk are segregated at disciplinary and organisational level at Helaba. Risk management is accordingly a local responsibility discharged by Helaba's individual units, which are supervised by specialist monitoring units with responsibility for sub-categories of non-financial risk.

The specialist central monitoring units are responsible for the structure of the methods and processes used to identify, assess, monitor, control and report the sub-categories of non-financial risk. The methods and processes used for the risk sub-categories follow minimum standards that have been specified centrally to ensure that the framework for non-financial risk is designed on a standardised basis.

The management of sub-categories of non-financial risk that form part of operational risk must comply in full with the established methods and procedures used for operational risk. This means that these risks are taken into account appropriately as part of the quantification of operational risk and, from a structural perspective, are thus identified, assessed and included in the calculation of the risk capital amount accordingly. In the case of sub-categories of non-financial risk that are not covered by operational risk, these risks are taken into account in a number of ways, such as risk exposure markups, safety margins and buffers. Overall, Helaba comprehensively ensures that the sub-categories of non-financial risk are taken into account in the risk-bearing capacity/ICAAP of the Helaba Group.

The central Risk Controlling unit is responsible for monitoring compliance with the minimum standards applicable to the non-financial risk framework.

Quantification

Risks are quantified for Helaba Bank, Frankfurter Sparkasse and Helaba Invest using an internal model for operational risk based on a loss distribution approach, which takes into account risk scenarios and internal and external losses to calculate economic risk exposure. This also includes internal losses and risk scenarios that relate to sub-categories of non-financial risk and form

part of operational risk. Such risks include legal risk, third-party risk, information risk and project risk. The summary below shows the risk profile as at the end of 2019 for Helaba Bank, Frankfurter Sparkasse, Helaba Invest and the other companies of the Helaba Group that are included in risk management at the level of individual risks.

Operational risks – risk profile

Economic risk exposure

in € m

	Reporting date 31.12.2019	Reporting date 31.12.2018
	VaR 99.9 %	VaR 99.9 %
Helaba Bank	217	229
Frankfurter Sparkasse, Helaba Invest and other companies included in risk management at the level of individual risks	88	94
Total	305	323

The analysis as at the reporting date using the economic internal perspective for the calculation of risk-bearing capacity shows an economic risk exposure of € 305 m (31 December 2018: € 323 m) for the Group from operational risk. The fall in this figure can be traced essentially to the updating of the risk scenarios.

Documentation system

The documentation system lays down details of the internal control procedures and the due and proper organisation of business. The defined framework for action is marked out in the documentation system in the form of regulations governing activities and processes.

Clear responsibilities have been defined within Helaba for the creation and continuous updating of the various components of the documentation system. The Process Management department assists the specialist units responsible for the activities and processes to create and publish the regulations.

Legal risk

The Legal Services unit is responsible for monitoring legal risks. It is represented on the Risk Committee of the Bank with an advisory vote and reports on the legal risks that have become quantifiable as ongoing or imminent court proceedings involving the Bank or its subsidiaries.

The legal aspects of major undertakings are coordinated with the Legal Services unit. Legal Services provides specimen texts and explanations for contracts and other declarations with particular legal relevance where expedient as a contribution to preventive risk management. The lawyers of the Legal Services unit have to be involved in the event of any deviations or new rulings. If the services of external legal experts are sought either in Germany or elsewhere, their involvement in principle proceeds under the management of Legal Services.

The Legal Services unit drafts agreements, general business conditions and other relevant legal declarations as part of its legal counselling support services in co-operation with the other units of the Bank. The Legal Services unit is involved in the examination and negotiation of any legal texts submitted by third parties.

If any mistakes or unexpected developments detrimental to the Bank are encountered, the lawyers help to identify and remedy the problems and avoid any recurrence in future. They assume responsibility for examining and evaluating events for factors of particular legal significance and conduct any proceedings launched. This applies in particular in respect of countering any claims asserted against the Bank.

The Legal Services unit monitors current developments in case law for the Bank and analyses potential impacts on the Bank.

Legal Services reports on legal risks by making submissions to the Board of Managing Directors, documenting ongoing and imminent court proceedings and coordinating on a formalised basis with other units.

Third-party risk – outsourcing

Outsourcing Governance defines the framework for the monitoring and containment of Helaba's outsourcing arrangements, including the associated roles and responsibilities. The actual monitoring and containment of outsourcing arrangements is performed directly by the relevant Local Sourcing Management (LSM) function. Central Sourcing Management defines the framework for the operational implementation of containment and monitoring. This includes developing and regularly updating methodologies and tools. Central Sourcing Management monitors the local implementation and application of the methods and procedures for local sourcing management as the central supervisory authority. Central Sourcing Management additionally provides executive management with a regular consolidated report on outsourcing arrangements in place. The overarching objectives, scope and guiding principles applicable within the scope are set out in Helaba's outsourcing strategy.

Information risk

Helaba's defined information security strategies and regulations provide the foundation for an appropriate level of security and for the secure utilisation of information processing. The level of information security maintained and the extent to which it is appropriate given the applicable circumstances are monitored and refined continuously through the information security management system (ISMS).

The identification and reporting of information risks can be triggered by various upstream processes. These processes are intended to ensure that discrepancies in relation to the requirements are identified (allowing risks to be detected at an early stage) and that appropriate actions to minimise these risks are defined and implemented. Associated documents are updated and refined on a regular basis.

Helaba also actively manages information risk (IT, non-IT and cyber risk). Information risk and the associated security measures and checks are reviewed, periodically and on an ad hoc basis, monitored, and contained to this end. The Bank thus takes proper account of all three aspects of information security –

availability, integrity (which includes authenticity) and confidentiality – in order to avoid any detrimental impact on its ability to operate.

Business continuity management

Helaba's units and branch offices have drawn up business continuity plans for the critical business processes as part of business continuity management activities. These business continuity plans are subject to tests and exercises to verify their effectiveness and are updated and enhanced on a regular basis to ensure that emergency operation and the restoration of normal operation both proceed properly.

Where IT services are outsourced to or procured from external service providers, the related contractual documents contain provisions relating to preventive measures and measures to limit risks. Specialist units of Helaba work together with IT service providers to conduct regular tests of the documented procedures for safeguarding operation and the technical restoration of data processing.

Accounting process

The objective of Helaba's internal control and risk management system in relation to the accounting process is to ensure proper and reliable financial reporting. The Helaba Group's accounting process involves individual reporting units that maintain self-contained posting groups and prepare local (partial) financial statements in accordance with HGB and IFRS. Helaba's reporting units comprise the Bank (Germany), the branch offices outside Germany, LBS, WIBank, all consolidated companies and sub-groups and all companies and sub-groups accounted for using the equity method.

Helaba's Accounting and Taxes unit consolidates the partial financial statements from the reporting units to produce both the single entity financial statements under HGB and the consolidated accounts under IFRS. Accounting and Taxes also analyses and prepares the closing data and communicates it to the Board of Managing Directors.

The components of the internal control and risk management system for the purposes of the accounting process are as follows:

- Control environment
- Risk assessment
- Controls and reconciliations
- Monitoring of the controls and reconciliations
- Process documentation
- Communication of results

The components of Helaba's control environment for the accounting process include appropriate staffing of the units involved, in particular Accounting and Taxes, with properly qualified personnel. Regular communication ensures that the individual employees receive all of the information they need for their work promptly. Any failures that occur despite all of the checks in place are addressed and remedied in a defined process. The IT system landscape used in the accounting process is subject to IT security strategies and rules that ensure compliance with the German generally accepted accounting principles (GoB)/German principles for the proper maintenance and archiving of books, records and documents in electronic form and for data access (GoBD).

Helaba focuses primarily on the probability of occurrence and the extent of any potential error when assessing risks in the accounting process. The impact on the closing statements (completeness, accuracy, presentation, etc.) should the risk eventuate is also assessed.

The accounting process includes numerous controls and reconciliations in order to minimise its risk content. Extensive IT-based controls and reconciliations are used in addition to the control measures (including the double verification principle) applied to ensure the accuracy of manual operations such as data entry and calculations. These IT-based controls include mechanisms for subsidiary ledger/general ledger reconciliation checks and HGB/IFRS consistency checks. The controlling and reconciliation processes are themselves monitored by means of statistical evaluations for the reconciliations and reviews of individual validation measures. Internal Audit is involved in the controlling process and carries out regular audits of accounting.

The procedure to be followed in accounting is set out in a number of different complementary forms of documentation. Accounting policies for HGB and IFRS define stipulations for the accounting methods to be used and also contain provisions on group accounting. The latter relate in particular to the parent company of the Group and the sub-groups included. Rules con-

cerning organisational factors and the preparation process are included in addition to the stipulations on approach, measurement, reporting and disclosure requirements that apply throughout the Group. The individual reporting units have direct responsibility for incorporating stipulations in varying degrees of detail concerning the procedure to be applied in the various processes and subprocesses followed in the preparation of the financial statements. Accounting policies and procedures are accessible to employees at all times via the Bank's intranet.

Accounting and Taxes performs analytical audit steps on the results of financial reporting (the closing figures determined). This entails plausibility checking the development of the figures over the course of the year. The closing figures are also cross-checked against planning outputs, expectations and extrapolations based on business progress. Finally, the figures are checked for consistency with analyses prepared independently elsewhere within Helaba. Primary and deputy responsibilities are assigned for this purpose at Group level for each reporting unit and each entry in the Notes. The figures are discussed regularly with the Board of Managing Directors following this preliminary analysis and validation.

Tax-related risk

Errors in operating procedures and processes that impact on legally required financial accounting and reporting can also have a bearing on tax matters in certain circumstances. The general requirements for the design of risk-related operational processes at the Bank and the special requirements from the internal control and risk management system for the accounting process apply in respect of activities involving procedures and processes with particular risk potential and to reduce the risk of errors. Banking business can also give rise to tax-related risk if the applicable tax laws are not properly observed in proprietary and customer business. The Bank additionally operates a tax compliance management system (TCMS) to ensure that Helaba always complies properly with its tax obligations and that reputation risks are avoided as far as possible in this connection. The TCMS, which has been designed to take into account legal and business management principles, focuses on compliance with tax regulations and the avoidance of tax-related risk. The identification, containment and monitoring of tax-related risk based on a 3-LoD model are a cornerstone of the TCMS. Risk-focused tasks, procedures and control requirements form an integral part of the Bank's operating business processes along with continuous monitoring. The TCMS also extends to the foreign branches.

The overarching objectives and principles are set out in Helaba's tax strategy, which forms an integral part of the business strategy.

The 'Taxes' department is responsible for the system of tax-related instructions (process cluster tax processes), which also regulates the over-arching tax-related control requirements. Central monitoring in the TCMS is performed by the 'Taxes' department in conjunction with tax compliance coordinators in the individual departments.

A reporting system covering the regular submission of information on tax-related risk has been established as part of the TCMS.

Other Risk Types

Business risk

Risk containment in respect of business risks encompasses all of the measures implemented in order to reduce, limit and avoid risks and to keep intentional risk exposure compliant with the risk strategy and the specified limits adopted by the Board of Managing Directors. Operational and strategic risk containment is the responsibility of the Bank's front office units and the management of the respective equity investments. The Risk Controlling unit quantifies business risks for the purposes of calculating risk-bearing capacity and analyses any changes.

The analysis as at the 31 December 2019 reporting date under the economic internal perspective for the calculation of risk-bearing capacity indicates that business risks increased slightly to €160 m in the year to 31 December 2019 (31 December 2018: €156 m).

Real estate risk

The Portfolio and Real Estate Management division handles risk containment for the real estate projects and real estate lending portfolios together with the Group companies. Risk containment encompasses all of the measures implemented in order to reduce, limit and avoid risks and to keep intentional risk exposure compliant with the risk strategy and the specified limits adopted by the Board of Managing Directors. The Risk Controlling unit's activities in relation to real estate risks focus on risk quantification and risk monitoring. Risk quantification includes determining the capital necessary to ensure that risk-bearing capacity is maintained.

The analysis as at the reporting date under the economic internal perspective shows a risk of €159 m (31 December 2018: €112 m) from real estate projects and real estate portfolios. This increase in the risk figure stems primarily from model adjustments. These risks continue to be fully covered by the expected income from the associated transactions.

Summary

The controlled acceptance of risks plays a central role at Helaba in the management of the company. We accept and manage risks on the basis of our comprehensive risk identification, quantification, containment and monitoring system. Although they are already very highly evolved and satisfy all statutory and supervisory requirements, we refine our methods and systems continuously. Our fundamental organisational principles put in place the structures necessary to ensure successful implementation of the risk strategy defined. Helaba, in conclusion, has at its disposal a stock of proven and effective methods and systems with which to master the risks it chooses to accept.

Non-Financial Statement

Under section 340i (5) of the German Commercial Code (Handelsgesetzbuch – HGB), Helaba is under an obligation to prepare a non-financial statement in which it describes the main effects of its business activities in certain non-financial areas (environmental, social and employee concerns, respect for human rights and the prevention and combating of bribery and corruption).

In a structured analysis process, the subjects credit finance, asset finance, provision of financial services, residential management, anti-corruption, employer branding and employee retention were identified as being material to Helaba's business activity. The concepts described here generally apply to the Group. If there is any variation from basic principle, this is indicated separately in the text.

In preparing the non-financial statement, Helaba used the German Sustainability Code (DNK) as orientation, and also put together a "DNK Declaration of Conformity" featuring the Global Reporting Initiative (GRI) indicators used in the code. Helaba provides comprehensive reports online on its sustainability activities ([nachhaltigkeit.helaba.de](https://www.helaba.de/nachhaltigkeit)). The declaration of conformity in accordance with the DNK can also be accessed on this website.

In the year under review and on the date of the report, and taking into account the risk management process at Helaba (net method), no material risks have been identifiable that have had or are very likely to have a serious negative impact on the areas specified above.

The statements in the non-financial statement have been subject to a voluntary external business management audit in accordance with ISAE 3000 (Revised) in which limited assurance is provided by an independent auditor. References to details outside the management report represent additional information and do not form an integral part of the non-financial statement or the management report.

Business Model and Sustainable Business Orientation

Helaba is a public-law credit institution with a mandate to operate in the public interest and has always embraced environmental and social responsibility, in addition to financial consid-

erations, as part of its fundamental identity. The business model enjoys strong regional roots and has a long-term focus. Helaba operates mainly in Germany, but also has a presence in selected international markets. Key features of Helaba's strategy are a conservative risk profile, close interconnection with the real economy and integration into the S-Group. Helaba's business model is described in detail in the section "Basic Information About the Group".

With a view to minimising negative effects on the environment and society and preventing reputational risk, Helaba has drawn up guiding sustainability principles applicable for the Group. These principles include standards of conduct approved by the Board of Managing Directors for business activities, business operations, employees and corporate social responsibility. Helaba's corporate values under the tagline "Values with impact" underline its aspirations to make a positive contribution to society and to strengthen Germany as a business location over the long term.

As part of Helaba's strategic agenda, the objective of the "Helaba in Bewegung" corporate culture transformation process launched in 2017 is to position Helaba in the market on a long-term viable basis and, to this end, to achieve targeted growth, establish future-proof processes and generate enhanced efficiency. As part of the project "Scope – Growth through Efficiency", which was launched at the end of April, Helaba is creating a new organisational structure at the end of the first quarter of 2020 in order to slim down the management levels, reduce interfaces and optimise processes. The basis for the success of this transformation is the refinement of the corporate culture, key features of which are mutual trust and more individual responsibility. Against this backdrop, particular importance is being attached to employee concerns and human resources development.

Helaba has also signed up to the Ten Principles of the UN Global Compact. With this step, the Bank recognises international standards for environmental protection, human and labour rights, and anti-corruption measures. At both national and international levels, Helaba applies the Universal Declaration of Human Rights and the Declaration on Fundamental Principles and Rights at Work issued by the International Labour Organization (ILO) as overarching principles for all its business activities.

Responsible Business Practices and Social Value Proposition

There is an impact on environmental, social and human rights issues from Helaba's business activities as a bank, from the management of the assets of institutional investors at the Helaba Invest subsidiary, from the housing portfolios of the GWH subsidiary in the real estate business, and from the private customer business operated by the subsidiary Frankfurter Sparkasse.

Helaba does not believe it has any material impact on the environment from its business operations in office buildings and its ecological footprint. Nevertheless, Helaba is committed to reducing this ecological footprint on a continuous basis. For example, Helaba's main office building (MAIN TOWER) is officially designated as a sustainable and energy-efficient building, having received platinum certification – the highest category available – in accordance with Leadership in Energy and Environmental Design (LEED) standards. Helaba relies on electricity generated from renewable sources for over 90% of its electricity needs in office buildings. Helaba regularly monitors environmental key performance indicators in relation to its operations and publishes the results transparently on its website.

It also uses a risk-based approach when outsourcing activities and processes. In Helaba's opinion, its supply chain has no material impact on human rights. In a further measure to ensure this is actually the case, Helaba requires all of its suppliers to accept its code of conduct as part of which it is mandatory for suppliers to document that they respect human rights.

Credit finance

Lending business is Helaba's core activity. There is a risk that businesses or projects financed by Helaba could have negative effects on the environment or society. At the same time, Helaba is making best efforts, as part of its risk management system, to minimise environmental, social and governance (ESG) risks, including the transitional and physical risks caused by climate change, that may arise from its financing activities.

In 2017, Helaba therefore developed sustainability and exclusion criteria for lending. These criteria have been integrated into the existing risk process and risk containment activities and apply throughout the Group. Accordingly, it has been set out in the specific risk strategy for default risk that it is prohibited to consciously finance projects that could have a serious detrimental environmental or social impact. This includes, but is not limited to, violations of human rights, the destruction of cultural

assets, infringements of employee rights, and environmental damage such as the destruction of the natural habitats of threatened species.

These overarching principles are complemented by sector-specific requirements applicable to sectors exposed to heightened ESG risk. Specific criteria have been adopted for the following sectors: energy, coal-fired power plants, dams and hydroelectric power plants, nuclear power plants, mining, oil and gas, agriculture and forestry, paper and pulp, and armaments. This ensures that the funding of activities with heightened ESG risk, such as fracking or the extraction of oil from tar sands, is ruled out. In 2020, Helaba will increase its efforts to withdraw from involvement with fossil fuels and will not enter into any new exposures directly connected with the value chain for power station coal (coal mining and coal-based power generation). What is more, it is stepping up its positive involvement in projects relating to climate change by financing energy-efficient and environmentally friendly technologies as well as renewable energy sources. The sustainability criteria for lending are published on Helaba's website and are therefore also visible to market players.

Helaba reviews its risk strategies annually and will adjust or expand sustainability criteria as required. For example, it was decided in the 2019 updating process to include gambling and pornography as new review criteria from 2020 and to specify compliance with the OECD recommendations on environmental and social due diligence (the OECD Common Approaches) as a mandatory requirement for all export finance.

The containment of default risk is integrated into the risk management system used throughout the Group. The basis is a comprehensive and universal risk strategy derived from the business strategy. This risk strategy was drawn up on a binding basis in accordance with the German Minimum Requirements for Risk Management (Mindestanforderungen an das Risikomanagement – MaRisk). The Board of Managing Directors is responsible for all of the risks to which Helaba is exposed as well as for ensuring compliance with the risk strategy and execution of risk management throughout the Group.

Institutional asset management

As an asset manager for institutional investors, Helaba Invest manages sustainability-related portfolios and offers customised solutions for investors. As at 31 December 2019, Helaba Invest had assets under management of €124.6 bn in special funds for institutional investors and retail funds. This figure included assets of €11.3 bn specifically relating to sustainability criteria, equating to a ratio of 9.1%.

Helaba Invest is a member of the German Investment Funds Association (BVI) and recognises this association's code of conduct. The code of conduct, which was extended in 2016 to include guidelines on socially responsible investing, reinforces the acceptance of corporate social responsibility by fund managers on the basis of ESG criteria. It therefore takes into account investor interests faced with practices amounting to market abuse, fair investor treatment with clear and understandable information, and rules for improving corporate governance. Helaba Invest has also pledged to uphold the BVI code of conduct for sustainable real estate portfolio management.

Helaba Invest is a signatory to the UN Principles for Responsible Investment and to the Carbon Disclosure Project (CDP). The company includes environmental, social and governance factors in its investment approaches and products. In an initial step, Helaba Invest rolled out ESG screening in 2019 for its retail equity funds. As part of the screening, it examines all investment securities to determine the extent to which they comply with international sustainability standards and conventions, such as the principles of the UN Global Compact. Since 2019, Helaba Invest has also been offering a number of fund products that encompass various aspects of sustainability in the form of ethical standards, risk management and climate-related issues.

In addition, Helaba Invest offers its customers separate sustainability reports. The main components of these reports are screening and an analysis of funds according to ESG criteria. Investors can also take ESG criteria into account in the investment process as part of investment compliance monitoring.

Provision of financial services

Within the Helaba Group, private customer business is primarily conducted by Frankfurter Sparkasse. Frankfurter Sparkasse's Charter specifies that its mission is to promote saving and other forms of wealth accumulation and to satisfy the demand for credit at local level. As the regional market leader in private customer business with the biggest branch network in Frankfurt am Main, Frankfurter Sparkasse has significant influence over the provision of financial services in its territory. It discharges its responsibility for the provision of access to financial services and meets its mandate to operate in the public interest by ensuring it has a broadly based presence in the territory, comprising 73 branches and advice centres, more than 20 self-service banking centres and around 200 automated teller machines (ATMs).

Frankfurter Sparkasse recognises financial inclusion as a key component of its mandate to operate in the public interest. To ensure that access to banking services is available to all sectors of the population, particularly economically and socially

disadvantaged customers, Frankfurter Sparkasse offers various types of basic account. As at 31 December 2019, customers held 1,461 basic accounts (31 December 2018: 1,328). Frankfurter Sparkasse makes it easier for the blind and visually impaired to access its services by ensuring that each of its physical branches has at least one ATM with a headphone socket. The online branch of the Frankfurter Sparkasse offers completely barrier-free access to its media operations, too.

Frankfurter Sparkasse pursues a business policy that is consistently focused on customer needs. Regular sales staff training sessions are held, covering the sales philosophy of the Sparkassen-Finanzgruppe and the implementation of guidelines and laws with a consumer focus. Frankfurter Sparkasse believes that it is of fundamental importance to ensure that the advice provided for customers is of high quality. For this reason, for example, quality targets are used as the basis for up to 40% of the measurement of customer advisor performance; these targets include customer satisfaction requirements. In the case of both retail and corporate customers, regular surveys and annual meetings are used to measure customer satisfaction; the results are used to specify targets. In addition, within the framework of the S-Group Concept in Hesse and Thuringia, reports on customer satisfaction are submitted to the S-Group bodies and the S-Group strategy is used to determine action plans and targets.

Residential management

GWH Immobilien Holding GmbH leases out and/or manages some 50,000 homes in its real estate business and therefore holds significant influence over environmental and social issues. The objectives it pursues are to provide high-quality, affordable homes for broad sections of the population and to reduce the detrimental effects of real estate on the environment. GWH is investing on a targeted basis in its existing housing stock and new construction projects to meet the rising demand for housing, particularly in urban centres such as the Rhine-Main and Rhine-Neckar regions. For example, 280 homes for rent were completed in 2019. GWH also provides local help and advice offices to maintain a trusting relationship with its tenants.

From an environmental perspective, GWH has established processes aimed at continuously optimising the energy and carbon footprint of its residential buildings. For example, it invests on an ongoing basis in improved insulation and more energy-efficient windows in its housing portfolio and uses its own energy service provider (Systemo GmbH) to ensure that more than one third of its homes are supplied with heating energy from energy-efficient combined heat and power (CHP) generation and renewable energy sources. It regularly checks that these activities have been successful by measuring the savings

achieved in CO₂ emissions. According to the latest evaluations, the total energy consumption in 2018 of 412,141 MWh was reduced by approximately 1.21 % as a result of heat insulation improvements and the modernisation of heating systems, saving 1,008 tonnes of CO₂ (previous year: 1,272 tonnes of CO₂). The slight fall in CO₂ savings compared with the previous year was mainly due to the fact that efficiency gains had already largely been exhausted. In the last two years, around 90 % of the residential units have received new energy certificates. At 123 kWh/m²/a (previous year: 124), the average energy consumption of GWH's residential properties is well below the German average of around 169 kWh/m²/a (last available value for 2015) as published by the nation's energy agency. Around 26 % of living space falls under energy efficiency classes A+ to C, 61 % under classes D to E and approximately 13 % under classes F to H.

In addition to environmental effects, social issues are also of significance for tenants. Among other things, GWH is involved in major housing schemes with wide-ranging sociocultural profiles. Around 20 % of the homes provided by GWH are rent-controlled (subsidised); around 30 % of the homes are located in areas subject to special neighbourhood management from a social perspective. The objective of the neighbourhood management scheme is to implement a range of measures aimed at improving the residents' quality of life and quality of living, as well as bringing about a degree of social equality. For instance, GWH makes premises available for social outreach purposes, including youth support schemes and community centres, and takes part in social projects. It supports housing development residents by setting up help and advice offices, finding local caretakers, and employing welfare officers as points of contact.

Combating Bribery and Corruption

It is a fundamental principle at Helaba that the Group will comply at all times with laws and regulations at local, national and international levels. The risk that legal provisions could be breached is considered legal risk and is managed as part of operational risk (see Risk Report).

In view of the nature of banking business, the prevention of criminal economic activity through a compliance management system with a preventive focus is of key importance at Helaba in this context. One of the measures taken by Helaba is to set up the independent functions of the Money Laundering and Fraud Prevention Compliance Office, which acts as the central authority within the meaning of section 25h KWG; these functions are being constantly updated with the involvement of the

branches and the relevant subsidiaries. The tasks of this office include the development and implementation of internal principles and adequate transaction- and customer-related safeguards and checks to prevent money laundering, the funding of terrorism, and other criminal acts such as fraud and bribery.

Any kind of active or passive corruption is prohibited at Helaba. This is laid down in the code of conduct, which serves as an overarching set of guidelines and framework of principles for all employees. Procedures and the company regulations set out binding rules and regulations and offer support for a wide variety of activities, including the handling of inducements and action to be taken if criminal economic activity is suspected, to ensure that business decisions are taken objectively and transparently on the basis of a clear fact-based rationale. As part of the regulatory requirements, Helaba holds regular training sessions, and it is mandatory for employees to attend these events every three years at least.

A whistleblowing system is in place, enabling any employee to report potentially unlawful transactions. Any employee in the Group can contact an external ombudsperson via a range of communications channels (web portal, postal mail, telephone), either anonymously or safe in the knowledge that their identities will not be disclosed.

As part of the preventive approach, an annual Group risk analysis report is prepared and submitted to the Board member responsible for these activities, the Board of Managing Directors as a whole and the Supervisory Board. In addition, Internal Audit conducts an independent assessment of risk management and the checks every year; it reports to the Board of Managing Directors on the efficiency of tools and compliance with them. In 2019, no corruption proceedings were notified to Helaba.

Appreciative Corporate Culture and Sustainable HR Activities

The knowledge and experience of employees is key to the long-term successful performance of Helaba as a provider of specialised financial services in a dynamic and complex market environment. The ability to adapt rapidly to changing market circumstances and customer requirements combined with innovative strength is becoming increasingly important in finding a competitive edge. The challenge for Helaba is mainly to present itself as an attractive employer for those who want to be actively involved in shaping this change process.

Attractive employer and employee professional development

Helaba is endeavouring to attract, develop and retain over the long term highly-qualified and motivated specialists, managers and high-potential trainees so that it can continue to address the ongoing regulatory changes, the advances in digitalisation in the financial sector and the issues presented by demographic change. To safeguard the availability of employee skills over the long term, Helaba is focusing on dialogue and feedback in addition to formal job descriptions. For example, managers make use of the annual appraisal meetings to make sure there is clarity about tasks and performance expectations, set targets, assess performance, and identify and discuss development potential or personal need for change.

Helaba provides a range of in-house services aimed at training and professional development to ensure that employee skills and qualifications are maintained and expanded. For example, it invested € 4.8 m in 2019 in employee skills development. All employees can access a needs-based range of internal seminars covering professional, personal, social and methodological development. Employees can also make use of external training services; sponsored opportunities in the form of work and study programmes or courses leading to professional qualifications are also available.

Helaba focuses particularly on young talent. It offers training courses and trainee programmes, thereby fulfilling its socially responsible role of enabling school-leavers and university graduates to start their careers. Helaba provides training at the Frankfurt, Erfurt and Kassel sites. In 2019, 19 women and 24 men started their training at Frankfurter Sparkasse. Frankfurter Sparkasse is therefore the largest provider of training places in the banking sector in the Rhine-Main region. After a few years of vocational experience, high-potential individuals have the opportunity to undertake professional development at Helaba based on their strengths and areas of learning; since 2019, they have been able to receive systematic preparation for future tasks with increased responsibility as part of the “Nauta” programme for high-potential employees, which has been specially developed for Helaba.

Occupational health management at Helaba is designed to maintain the physical and mental well-being of employees by focusing on preventive measures, nurture an awareness of the need for a healthy lifestyle and improve quality of life. Events, presentations and seminars provide regular information for employees on health issues such as healthy eating, physical activity in day-to-day office work and avoiding workplace stress. A comprehensive company sports programme is provided to help employees maintain their physical fitness. Since 2019, an employee assistance programme including a qualified counselling service has been available for employees facing challenging personal or professional circumstances. Employees can make use of this service if they have professional, family, health or other personal issues, for example in connection with arranging child care, help at home or care for relatives requiring support and assistance.

Corporate culture and new work

Demographic change and the associated processes of social change are presenting new challenges for the world of work and require new strategies for the workplace. Helaba is opening up opportunities for mobile, agile working in a programme with the tagline “NewWork@Helaba”, which involves the planned relocation of approximately half of the employees of Helaba Bank in 2020 to a new, state-of-the-art office building at the Offenbach site.

As part of the “Helaba in Bewegung” transformation process, the working environment at Helaba going forward will be characterised by faster decision-making processes, individual responsibility, self-organisation and proactive learning. The transition from traditional to forward-looking office landscapes represents a comprehensive change for employees. New space concepts require different types of leadership, management and collaboration. The objective is therefore to create a sound understanding of the new office and working environment and eliminate uncertainties about the new approach. The plan is to ensure that the process is supported by employees specially trained as change agents.

Life-stage model and diversity management

Employees have differing requirements as far as their working arrangements are concerned, depending on their personal situation and stage of life. The life-stage model introduced in 2019 provides a framework for employees at different stages in their professional careers and is thus intended to increase Helaba's appeal as an employer. The model sets out the types of support available to employees at each of the stages in their lives and shows how employees can plan their own development in co-operation with their managers. The initial range of services is already in place with plans for further expansion. New additions in 2019 were the "Nauta" programme for high-potential employees, the "HOPS" job-shadowing scheme to promote networking and information-sharing between employees throughout the process chains and the "Helaba Connect" mentoring programme, which encourages the sharing of knowledge and experience across generations and corporate units and which will be extended to all employees from 2020.

Helaba has signed both the Diversity Charter and the UN Global Compact and established key principles in its code of conduct, underlining its commitment to a working environment without discrimination in which the diverse skills and capabilities of employees are properly valued. With a view to becoming more successful in providing equality of opportunity in HR development, selection and appointments, Helaba attaches particular importance to the greater advancement of women and to the development of HR tools that are differentiated by age in order to make the most of the potential presented by all employees and exploit the long-term prospects available in the Group. To this end, a diversity management programme has been set up; it offers an open platform for discussion and information-sharing on the topics of gender, age and integration in the Bank. The activities included in the life-stage model are intended to eliminate potential structural constraints and help both women and men equally in their efforts to achieve their professional goals. Newly introduced HR tools in 2019 also included professional development seminars and a mentoring programme specifically designed for women.

Diversity in the Helaba workforce, key figures

	31.12.2019	31.12.2018	31.12.2017
Proportion of women	47.8 %	48.1 %	47.8 %
Proportion of female managers	21.8 %	22.0 %	22.0 %
Proportion of women on the Board of Managing Directors (Helaba Bank)	0.0 %	0.0 %	0.0 %
Proportion of women on the Supervisory Board (Helaba Bank)	29.4 %	23.3 %	22.2 %
Proportion aged > 50	48.4 %	44.9 %	42.3 %
Proportion aged 30–50	45.7 %	46.9 %	50.3 %
Proportion aged < 30	8.0 %	8.2 %	7.4 %
Proportion of employees with disabilities (as defined by s. 2 SGB IX)	6.1 %	5.9 %	5.6 %

Basic principles under employment law and remuneration policy

Around 95 % of employees work in Germany. Relevant employment law and health & safety provisions are a fixed integral component of the internal rules, regulations and processes. Some 95 % of employees have a permanent employment contract. As provided for in the Hessian Act concerning Personnel Representation (HPVG), the Human Resources Council (HRC) represents the interests of the employees and monitors compliance with the regulations intended to protect these interests. As the representative body, the Human Resources Council is the first point of contact for senior management in all matters concerning employees. The General Human Resources Council at Helaba is supported by personnel representative bodies at individual sites and at Frankfurter Sparkasse and by the body representing young trainees and the severely disabled. The Human Resources Council takes part in activities at Helaba on the basis of co-determination, involvement and consultation, primarily in relation to organisational, personnel and social matters.

Helaba's remuneration strategy and remuneration principles set out the relationship between business strategy, risk strategy and remuneration. The remuneration for around 60 % of employees is collectively agreed, with the pay for more than 80 % of this proportion being set under the collective agreement for public-sector banks. Remuneration for the remaining 40 % or so is not subject to a collective salary agreement. The remuneration systems for the employees and the Board of Managing Directors of Helaba and Frankfurter Sparkasse satisfy the requirements specified in the German Regulation on the Supervisory Requirements for Institutions' Remuneration Systems (IVV) and are published annually in the form of a separate report (remuneration report pursuant to section 16 IVV) on Helaba's website (www.helaba.com).

Overall, a low employee turnover rate of 3.6 % (departure initiated by the employee), an average period of service of 14.9 years and a low absenteeism rate of 4.6 % (absence caused by illness as evidenced by a doctor's certificate) are testimony to a high degree of satisfaction and significant employee commitment.

Consolidated Financial Statements

72	Consolidated Income Statement
73	Consolidated Statement of Comprehensive Income
74	Consolidated Statement of Financial Position
76	Consolidated Statement of Changes in Equity
77	Consolidated Cash Flow Statement
80	Notes
269	Responsibility Statement

Consolidated Income Statement

for the period 1 January to 31 December 2019

		2019	2018	Change	
	Notes	in € m	in € m	in € m	in %
Net interest income	(4)	1,191	1,072	119	11.1
Interest income		3,951	3,525	426	12.1
thereof: Calculated using the effective interest method		2,421	2,311	110	4.8
Interest expenses		-2,760	-2,453	-307	-12.5
Loss allowances	(5)	-86	45	-131	>-100.0
Net interest income after loss allowances		1,105	1,117	-12	-1.1
Dividend income	(7)	18	36	-18	-50.0
Net fee and commission income	(8)	395	349	46	13.2
Fee and commission income		514	464	50	10.8
Fee and commission expenses		-119	-115	-4	-3.5
Net trading income	(9)	80	32	48	>100.0
Gains or losses on other financial instruments mandatorily measured at fair value through profit or loss	(10)	194	21	173	>100.0
Gains or losses on financial instruments designated voluntarily at fair value	(11)	-146	-8	-138	>-100.0
Net income from hedge accounting	(12)	15	-	15	-
Gains or losses on derecognition of financial instruments not measured at fair value through profit or loss	(13)	8	6	2	33.3
thereof: From financial assets measured at amortised cost		1	1	-	-
Share of profit or loss of equity-accounted entities	(14)	24	13	11	84.6
Other net operating income	(15)	361	328	33	10.1
General and administrative expenses	(16)	-1,394	-1,374	-20	-1.5
Depreciation and amortisation	(17)	-127	-77	-50	-64.9
Profit before taxes		533	443	90	20.3
Taxes on income	(18)	-53	-165	112	67.9
Consolidated net profit		480	278	202	72.7
thereof: Attributable to non-controlling interests		2	2	-	-
thereof: Attributable to shareholders of the parent		478	276	202	73.2

Consolidated Statement of Comprehensive Income

for the period 1 January to 31 December 2019

	2019	2018	Change	
	in € m	in € m	in € m	in %
Consolidated net profit according to the consolidated income statement	480	278	-418	> -100.0
Items that will not be reclassified to the consolidated income statement:	-173	5	-178	> -100.0
Remeasurement of net defined benefit liability	-293	10	-303	> -100.0
Change in fair value of equity instruments measured at fair value through other comprehensive income	-9	3	-12	> -100.0
Credit risk-related change in fair value of financial liabilities designated voluntarily at fair value	64	-11	75	> 100.0
Taxes on income on items that will not be reclassified to the consolidated income statement	65	3	62	> 100.0
Items that will be subsequently reclassified to the consolidated income statement:	45	-83	128	> 100.0
Change in fair value of debt instruments measured at fair value through other comprehensive income	62	-89	151	> 100.0
Unrealised gains (+)/losses (-) recognised in the reporting period	61	-85	146	> 100.0
Gains (-)/losses (+) reclassified to the consolidated income statement in the reporting period	1	-4	5	> 100.0
Gains/losses from currency translation of foreign operations	2	8	-6	-75
Unrealised gains (+)/losses (-) recognised in the reporting period	2	10	-8	-80
Gains (-)/losses (+) reclassified to the consolidated income statement in the reporting period	-	-2	2	100
Gains or losses from fair value hedges of currency risk	-4	-42	38	91
Unrealised gains (+)/losses (-) recognised in the reporting period	-4	-42	38	91
Taxes on income on items that will be subsequently reclassified to the consolidated income statement	-15	40	-55	> -100.0
Other comprehensive income after taxes	-128	-78	-50	-64
Comprehensive income for the reporting period	352	200	152	76
thereof: Attributable to non-controlling interests	2	2	-	-
thereof: Attributable to shareholders of the parent	350	198	152	77

Consolidated Statement of Financial Position

as at 31 December 2019

Assets

in € m

		31.12.2019	31.12.2018	Change	
	Notes	in € m	in € m	in € m	in %
Cash on hand, demand deposits and overnight money balances with central banks and banks	(20), (37)	14,555	7,342	7,213	98.2
Financial assets measured at amortised cost	(21), (37)	130,326	106,755	23,571	22.1
Trading assets	(22)	19,304	16,989	2,315	13.6
Other financial assets mandatorily measured at fair value through profit or loss	(23)	8,433	3,911	4,522	> 100.0
Financial assets designated voluntarily at fair value	(24)	3,978	377	3,601	> 100.0
Positive fair values of hedging derivatives under hedge accounting	(25)	1,102	608	494	81.3
Financial assets measured at fair value through other comprehensive income	(26), (37)	23,803	22,494	1,309	5.8
Shares in equity-accounted entities	(27)	48	45	3	6.7
Investment property	(28)	2,509	2,420	89	3.7
Property and equipment	(29)	653	438	215	49.1
Intangible assets	(30)	101	80	21	26.3
Income tax assets	(31)	719	593	126	21.2
Current income tax assets		161	103	58	56.3
Deferred income tax assets		558	490	68	13.9
Non-current assets and disposal groups classified as held for sale	(32)	81	42	39	92.9
Other assets	(33)	1,416	874	542	62.0
Total assets		207,028	162,968	44,060	27.0

Equity and liabilities

in € m

	Notes	31.12.2019	31.12.2018	Change	
		in € m	in € m	in € m	in %
Financial liabilities measured at amortised cost	(21), (37)	155,364	125,222	30,142	24.1
Trading liabilities	(22)	18,473	12,763	5,710	44.7
Negative fair values of non-trading derivatives	(23)	6,759	1,791	4,968	>100.0
Financial liabilities designated voluntarily at fair value	(24)	12,799	11,480	1,319	11.5
Negative fair values of hedging derivatives under hedge accounting	(25)	1,907	490	1,417	>100.0
Provisions	(34)	2,465	2,087	378	18.1
Income tax liabilities	(31)	153	157	-4	-2.5
Current income tax liabilities		144	141	3	2.1
Deferred income tax liabilities		9	16	-7	-43.8
Other liabilities	(33)	398	516	-118	-22.9
Equity	(35)	8,710	8,462	248	2.9
Subscribed capital		2,509	2,509	-	-
Capital reserves		1,546	1,546	-	-
Additional Tier 1 capital instruments		354	354	-	-
Retained earnings		4,788	4,414	374	8.5
Accumulated other comprehensive income (OCI)		-488	-360	-128	-35.6
Non-controlling interests		1	-1	2	>100.0
Total equity and liabilities		207,028	162,968	44,060	27.0

Consolidated Statement of Changes in Equity

for the period 1 January to 31 December 2019

in € m

Equity attributable to shareholders of the parent company								
	Sub- scribed capital	Capital reserves	Additional Tier 1 capital	Retained earnings	Accu- mulated other compre- hensive income	Subtotal	Non- controlling interests	Total equity
As at 31.12.2017	2,509	1,546	–	4,225	–243	8,037	–3	8,034
Adjustments due to first-time application of new financial reporting requirements (IFRS 9)				3	–39	–36		–36
As at 1.1.2018	2,509	1,546	–	4,228	–282	8,001	–3	7,998
Issue of additional Tier 1 capital instruments			354			354		354
Dividend payment				–90		–90		–90
Comprehensive income for the reporting period				276	–78	198	2	200
thereof: Consolidated net profit				276		276	2	278
thereof: Other comprehensive income after taxes					–78	–78	–	–78
As at 31.12.2018	2,509	1,546	354	4,414	–360	8,463	–1	8,462
Dividend payment				–104		–104		–104
Comprehensive income for the reporting period				478	–128	350	2	352
thereof: Consolidated net profit				478		478	2	480
thereof: Other comprehensive income after taxes					–128	–128	–	–128
Reclassifications within equity				0	0	–		–
As at 31.12.2019	2,509	1,546	354	4,788	–488	8,709	1	8,710

Consolidated Cash Flow Statement

for the period 1 January to 31 December 2019

in € m

	2019	2018
Consolidated net profit	480	278
Non-cash items in consolidated net profit and reconciliation to cash flow from operating activities:		
Loss allowances and modifications in respect of financial assets; depreciation, amortisation, impairment losses and reversals of impairment losses in respect of non-financial assets	237	37
Additions to and reversals of provisions outside the scope of application of IFRS 9	71	-11
Other non-cash expense/income	-111	-128
Gains or losses from the derecognition of non-financial assets and financial instruments	-67	-58
Other adjustments	-1,234	-909
Subtotal	-624	-791
Changes in assets and liabilities from operating activities after adjustment for non-cash items:		
Loans and receivables measured at amortised cost:	-23,456	-6,687
Trading assets/liabilities	5,574	-338
Other loans and receivables mandatorily measured at fair value through profit or loss	-247	-66
Loans and receivables designated voluntarily at fair value	-3,406	220
Loans and receivables measured at fair value through other comprehensive income	-156	-482
Other assets/liabilities from operating activities	1,135	269
Financial liabilities measured at amortised cost	30,053	3,348
Financial liabilities designated voluntarily at fair value	1,090	1,157
Interest received	3,550	3,494
Interest paid	-2,348	-2,457
Dividends and profit distributions received	18	36
Income tax payments	6	-198
Cash flow from operating activities	11,189	-2,495

in € m

	2019	2018
Proceeds from the disposal of:		
Financial assets measured at amortised cost excluding loans and receivables	4	29
Other financial assets mandatorily measured at fair value through profit or loss excluding loans and receivables	1,347	11
Financial assets measured at fair value through other comprehensive income excluding loans and receivables	7,642	3,435
Investment property	106	90
Property and equipment	30	29
Payments for the acquisition of:		
Other financial assets mandatorily measured at fair value through profit or loss excluding loans and receivables	-1,704	-30
Financial assets designated voluntarily at fair value excluding loans and receivables	-7	-
Financial assets measured at fair value through other comprehensive income excluding loans and receivables	-8,742	-3,495
Investment property	-162	-291
Property and equipment	-103	-31
Intangible assets	-44	-30
Effect of changes in basis of consolidation:		
Proceeds from the disposal of subsidiaries and other operations	5	61
Payments made for the acquisition of subsidiaries and other operations	-2,220	-
Other effects from changes in bases of consolidation	-	-25
Cash flow from investing activities	-3,848	-247
Payments received from the issue of additional Tier 1 capital instruments	-	354
Dividend payments	-104	-92
Change in cash and cash equivalents from other financing activities (subordinated liabilities) ¹⁾	-15	-630
Cash flow from financing activities	-119	-368

in € m

	2019	2018
Cash and cash equivalents at 1.1.	7,342	10,478
Cash flow from operating activities	11,189	–2,495
Cash flow from investing activities	–3,848	–247
Cash flow from financing activities ¹⁾	–119	–368
Effect of exchange rate changes, measurement changes and changes in basis of consolidation	–9	–26
Cash and cash equivalents at 31.12.	14,555	7,342
thereof: Cash on hand	85	93
thereof: Demand deposits and overnight money balances with central banks and banks	14,470	7,249

¹⁾Non-cash changes in subordinated liabilities amounted to an increase of € 1 m (31 December 2018: increase of € 5 m) and were attributable to accrued interest and measurement effects.

The consolidated cash flow statement is prepared using the indirect method and shows the composition of and changes to cash and cash equivalents in the financial year. The changes in cash and cash equivalents are attributable to operating activities, investing activities and financing activities.

The cash flow from operating activities comprises proceeds from and payments for loans and receivables, financial liabilities, trading assets/liabilities and other assets or liabilities. The interest and dividend payments resulting from operating activities (including leasing interest expenses) are shown separately. Other adjustments relate to net interest income, dividend income and taxes on income excluding deferred taxes.

The cash flow from investing activities comprises proceeds and payments relating to bonds and other fixed-income securities, equity shares and other variable-income securities, shareholdings, investment property, property and equipment, intangible assets as well as proceeds and payments in connection with the sale or acquisition of subsidiaries and other operations. Further disclosures concerning the consolidated entities purchased or sold are set out in Note (2).

The cash flow from financing activities comprises proceeds and repayments related to subordinated liabilities as well as proceeds from capital contributions and repayments from equity. The dividends paid out in the financial year are also recognised under this cash flow category.

Cash and cash equivalents correspond to the cash reserve, which comprises cash on hand and demand deposit balances with central banks as well as demand deposits and overnight money balances with banks.

The cash and cash equivalents as at 31 December 2019 included € 856 m relating to entities consolidated for the first time (31 December 2018: € 0 m). Deconsolidations in the reporting period led to the derecognition of cash and cash equivalents amounting to € 1 m (2018: derecognition of € 5 m).

The volume of assets and liabilities increased in the reporting period as a result of the acquisition of a subsidiary and a miscellaneous operation; carrying amounts on the date of initial recognition are presented in Note (2).

The informative value of the consolidated cash flow statement is generally limited in the case of banks. This statement is therefore considered of minor importance for the Helaba Group and is not used to manage the Group's liquidity levels or structure the consolidated statement of financial position.

Notes

82 Accounting Policies

- 82 (1) Basis of Presentation
- 88 (2) Consolidation of Entities
- 95 (3) Financial Instruments

99 Consolidated Income Statement Disclosures

- | | |
|---|---|
| <ul style="list-style-type: none"> 99 (4) Net Interest Income 102 (5) Loss Allowances 103 (6) Gains or Losses from Non-Substantial Modification of Contractual Cash Flows 103 (7) Dividend Income 104 (8) Net Fee and Commission Income 106 (9) Net Trading Income 107 (10) Gains or Losses on Other Financial Instruments Mandatorily Measured at Fair Value Through Profit or Loss 108 (11) Gains or Losses on Financial Instruments Designated Voluntarily at Fair Value | <ul style="list-style-type: none"> 108 (12) Net Income from Hedge Accounting 109 (13) Gains or Losses on Derecognition of Financial Instruments not Measured at Fair Value through Profit or Loss 110 (14) Share of Profit or Loss of Equity-Accounted Entities 111 (15) Other Net Operating Income 113 (16) General and Administrative Expenses 114 (17) Depreciation and Amortisation 115 (18) Taxes on Income 117 (19) Segment Reporting |
|---|---|

121 Consolidated Statement of Financial Position Disclosures

- | | |
|---|---|
| <ul style="list-style-type: none"> 121 (20) Cash on Hand, Demand Deposits and Overnight Money Balances with Central Banks and Banks 121 (21) Financial Instruments Measured at Amortised Cost 126 (22) Trading Assets and Trading Liabilities 129 (23) Other Financial Instruments Mandatorily Measured at Fair Value through Profit or Loss 132 (24) Financial Instruments Designated Voluntarily at Fair Value 134 (25) Hedge Accounting 139 (26) Financial Assets Measured at Fair Value through Other Comprehensive Income | <ul style="list-style-type: none"> 141 (27) Shares in equity-accounted entities 143 (28) Investment Property 145 (29) Property and Equipment 147 (30) Intangible Assets 149 (31) Income Tax Assets and Liabilities 151 (32) Non-Current Assets and Disposal Groups Classified as Held for Sale, and Associated Liabilities 151 (33) Other Assets and Liabilities 152 (34) Provisions 162 (35) Equity |
|---|---|

166 Disclosures on Financial Instruments and Off-Balance Sheet Transactions

166	(36) Risk Management	226	(44) Breakdown of Maturities
166	(37) Credit Risks Attributable to Financial Instruments	229	(45) Subordinated Financial Instruments
202	(38) Provision of Collateral	230	(46) Issuing Activities
204	(39) Transfer of Financial Instruments	231	(47) Contingent Liabilities and Other Off-Balance Sheet Obligations
205	(40) Fair Values	233	(48) Letters of Comfort
221	(41) Derivatives	233	(49) Fiduciary Transactions
224	(42) Offsetting Financial Instruments		
226	(43) Foreign Currency Volumes		

234 Other Disclosures

234	(50) Leases	251	(56) Positions on Supervisory Boards and Other Executive Bodies
239	(51) Report on Business Relationships with Structured Entities	252	(57) Report on Events After the Reporting Date
241	(52) Significant Restrictions on Assets or on the Transfer of Funds	253	(58) List of Shareholdings of Landesbank Hessen-Thüringen Girozentrale in Accordance with Section 315a in Conjunction with Section 313 (2) HGB
242	(53) Related Party Disclosures		
248	(54) Members of the Supervisory Board		
250	(55) Members of the Board of Managing Directors		

Notes

Accounting Policies

(1) Basis of Presentation

Basis of accounting

The consolidated financial statements of Landesbank Hessen-Thüringen Girozentrale, Frankfurt am Main/Erfurt (Helaba), a legal entity under public law, for the year ended 31 December 2019 have been prepared pursuant to section 315e (1) of the German Commercial Code (Handelsgesetzbuch, HGB) and Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 (IAS Regulation) in accordance with the International Financial Reporting Standards (IFRSs) as published by the International Accounting Standards Board (IASB) and adopted by the European Union (EU).

The consolidated financial statements comprise the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of financial position, the consolidated statement of changes in equity, the consolidated cash flow statement and the notes. The segment reporting is included within the notes. The group management report in accordance with section 315 HGB includes a separate report on the opportunities and risks of future development (opportunity and risk report) in which the risk management system is also explained.

The reporting currency of the consolidated financial statements is the euro (€). Euro amounts are generally rounded to the nearest million.

The IFRSs and International Financial Reporting Standards Interpretations (IFRICs) that were in force as at 31 December 2019 have been applied in full. The relevant requirements of German commercial law as specified in section 315e HGB have also been observed.

These consolidated financial statements have been prepared by the Board of Managing Directors as at 25 February 2020 and will be submitted for approval by the Board of Public Owners on 31 March 2020.

The necessary assumptions, estimates and assessments in connection with recognition and measurement are applied in accordance with the relevant standard, are continuously reviewed and are based on past experience and other factors, such as planning, expectations and forecasts of future events. Estimation uncertainty arises in particular from judgements in connection with:

- the inclusion of entities in the consolidation (see Note (2))
- credit risk, especially when determining the impairment of financial assets, loan commitments and guarantees using the expected credit loss method (see Note (37))
- impairment of assets, including goodwill, other intangible assets and right-of-use assets under leases (see Notes (17) and (30))
- the calculation of the fair values of certain financial assets and liabilities (see Note (40))
- the recognition of deferred tax assets (see Note (31))
- provisions and other obligations (see Note (34)).

These assumptions, estimates and assessments affect the assets and liabilities reported as at the reporting date and the income and expenses reported for the year.

IFRSs applied for the first time

The 2019 financial year was the first year in which mandatory application was required for the following IFRSs and IFRICs adopted by the EU and of significance for the Helaba Group. With the exception of IFRS 16, the adoption of the new or amended standards and interpretations had little or no impact on the consolidated financial statements.

- Amendments to IAS 19 Employee Benefits – Plan Amendment, Curtailment or Settlement
The IAS 19 amendments clarify that, if a defined benefit plan is amended, curtailed or settled, the current service cost and the net interest for the remainder of the financial year must be recalculated using the latest actuarial assumptions that have been used for the remeasurement of the net liability. The amendments must be applied prospectively.
- Amendments to IAS 28 Investments in Associates and Joint Ventures – Long-term Interests
The amendments to IAS 28 clarify that an entity applies IFRS 9, including the impairment stipulations, to long-term interests in an associate or joint venture that form part of the net investment in the associate or joint venture but to which the equity method is not applied. Generally speaking, first-time application must be retrospective, but various simplification options are available.

- IFRS 16 Leases

The central idea of this new standard is that lessees generally have to recognise all leases and the associated contractual rights and obligations in the statement of financial position. From the perspective of the lessee, the previous distinction between finance and operating leases as specified by IAS 17 will no longer be required in the future.

In respect of all leases, the lessee must recognise in the statement of financial position a lease liability for the obligation to make future lease payments. At the same time, the lessee must recognise an asset representing the right to use the underlying asset. The amount of the right-of-use asset on initial recognition must generally equate to the present value of the future lease payments plus directly assignable costs. During the term of the lease, the lease liability is reduced in accordance with the principles of financial mathematics in a manner similar to that specified for finance leases in IAS 17 whereas the right-of-use asset is depreciated. If there is evidence of impairment, the right-of-use asset must also be tested for impairment in accordance with the rules specified in IAS 36. Exemptions from this accounting treatment are available, in particular, for short-term leases and leases in which the underlying asset is of low value.

In contrast, the rules for lessors in the new standard largely correspond to the existing provisions in IAS 17. Leases continue to be classified either as finance or operating leases. Leases in which substantially all the risks and rewards of ownership are transferred must be classified as finance leases; all other leases are classified as operating leases. The classification criteria in IAS 17 have been carried over and included in IFRS 16.

IFRS 16 also includes a range of other provisions covering recognition, disclosures in the notes and sale-and-leaseback transactions.

The new stipulations must be applied retrospectively. However, a number of transitional arrangements can be used.

The modified retrospective approach was used to change over to the IFRS 16 requirements. This means that all IFRS 16 regulations were only applied to the latest reporting period (2019), while comparative periods were not adjusted retrospectively. At first-time application, Helaba made use of the following practical expedients:

- The present value of leases existing at the date of transition that were previously recognised as operating leases was determined by discounting all lease payments outstanding as at 1 January 2019 with the incremental borrowing rate applicable at the same date.
- The right-of-use asset was measured in the amount of the lease liability. If the Helaba Group had previously recognised a provision for anticipated losses in connection with the lease in accordance with IAS 37 in the past, this provision was netted with the right-of-use asset.
- Leases with lease terms ending no later than twelve months after the date of first-time application (i.e. expiring 31 December 2019 or earlier) were not recognised by the Helaba Group in the statement of financial position. Such leases were accounted for as short-term leases in the 2019 financial year.
- When determining lease liabilities as a lessee, the Helaba Group took into account whether future purchase or extension options, or early termination options, would be exercised; such considerations were based on knowledge as at the date of first-time application of IFRS 16.

On the date of first-time application, there were no leases that had been recognised in the past as finance leases by Helaba as lessee. In the case of subleases in which Helaba was the intermediate lessor, Helaba carried out a remeasurement in accordance with the requirements of IFRS 16.

As a lessee, the Helaba Group also decided to make use of the following exemption or exception rules provided under IFRS 16:

- no recognition of right-of-use assets or lease liabilities for short-term leases or for leases of low-value assets
- no application of IFRS 16 to leases of intangible assets
- no separation of individual lease and non-lease components in multiple-element arrangements.

The following table shows the adjusted opening statement of financial position as at 1 January 2019:

Assets

in € m

	31.12.2018	Adjustments due to IFRS 16	1.1.2019
Cash on hand, demand deposits and overnight money balances with central banks and banks	7,342	–	7,342
Financial assets measured at amortised cost	106,755	–	106,755
Trading assets	16,989	–	16,989
Other financial assets mandatorily measured at fair value through profit or loss	3,911	–	3,911
Financial assets designated voluntarily at fair value	377	–	377
Positive fair values of hedging derivatives under hedge accounting	608	–	608
Financial assets measured at fair value through other comprehensive income	22,494	–	22,494
Shares in equity-accounted entities	45	–	45
Investment property	2,420	51	2,471
Property and equipment	438	189	627
Intangible assets	80	–	80
Income tax assets	593	–	593
Non-current assets and disposal groups classified as held for sale	42	–	42
Other assets	874	–	874
Total assets	162,968	240	163,208

Equity and liabilities

in € m

	31.12.2018	Adjustments due to IFRS 16	1.1.2019
Financial liabilities measured at amortised cost	125,222	245	125,467
Trading liabilities	12,763	–	12,763
Negative fair values of non-trading derivatives	1,791	–	1,791
Financial liabilities designated voluntarily at fair value	11,480	–	11,480
Negative fair values of hedging derivatives under hedge accounting	490	–	490
Provisions	2,087	–5	2,082
Income tax liabilities	157	–	157
Other liabilities	516	–	516
Equity	8,462	–	8,462
Total equity and liabilities	162,968	240	163,208

The initial application of IFRS 16 had a notable effect on the recognition of leased real estate and heritable building rights.

The table below shows the reconciliation from the operating lease liabilities as at 31 December 2018 to the opening carrying amount of the lease liabilities as at 1 January 2019:

in € m

Reconciliation

1.1.2019

Operating lease liabilities as at 31.12.2018	182
Application exemption for short-term leases	–1
Recognition of heritable building rights	49
Lease-related liabilities (service components)	20
Inclusion of any lease terms extending beyond the non-cancellable lease term in the calculation of the lease liability	24
Other	–5
Gross lease liabilities as at 1.1.2019	269
Discount	–24
Lease liability as at 1.1.2019	245

The lease liabilities were discounted using the incremental borrowing rate as at 1 January 2019. The weighted average discount rate was approximately 9%. The long maturities of the heritable building rights at GWH had a significant impact on the discount rate.

In the reporting period, the first-time application of IFRS 16 meant that rental expenses were replaced by depreciation charges on right-of-use assets and interest expenses in the consolidated income statement. Please refer to Note (50) for further disclosures relating to leases in the Helaba Group.

- **IFRIC 23 Uncertainty over Income Tax Treatments**
This interpretation is to be applied to the determination of taxable profit (tax loss) when there is uncertainty over income tax treatments under IAS 12. It does not apply to taxes or duties outside the scope of application of IAS 12, nor does it include any regulations regarding interest or late payment fines in connection with uncertain tax treatments. The interpretation provides guidance particularly for the following issues:
 - decision whether an entity shall consider uncertain tax treatments independently
 - assumptions for taxation authorities' examinations
 - determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates
 - effect of changes in facts and circumstances.

An entity is required to use judgement to determine whether each uncertain tax treatment should be considered independently or whether some uncertain tax treatments should be considered together. The decision should be based on which approach provides better predictions of the resolution of the uncertainty. Helaba has applied the new rules using the modified retrospective method. The application has not led to any adjustment of retained earnings.

- **Annual Improvements to IFRSs – 2015–2017 Cycle**
The annual improvements include changes to IFRSs with an impact on recognition, measurement and reporting of transactions, and also terminology and editorial adjustments. The new stipulations must be applied retrospectively. The following standards were affected by the improvements in this cycle:
 - IFRS 3 Business Combinations
 - IFRS 11 Joint Arrangements
 - IAS 12 Income Taxes
 - IAS 23 Borrowing Costs.

New financial reporting standards for future financial years

The standards and interpretations listed below have been issued by the IASB and IFRS Interpretations Committee (IFRSIC), but have only been partially adopted by the EU and will only become mandatory in later financial years, and have thus not been applied early by Helaba, nor is any early application planned. These standards and interpretations are expected to have little or no impact on the consolidated financial statements.

- Amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors – Definition of Materiality
- Amendments to IFRS 3 Business Combinations – Definition of a Business
- IFRS 17 Insurance Contracts
- Amendments to IFRS 9, IAS 39 and IFRS 7: end of the first phase of the “IBOR Reform and its Effects on Financial Reporting” project. The amendments address accounting issues prior to the switch to alternative benchmark interest rates and aim to ensure that existing hedge accounting relationships can continue to be recognised.
 - **IBOR reform and its effects on financial reporting**
The Bank is implementing a project to manage the requirements under a changeover initiated by regulators in which the Bank must switch away from the current benchmark interest rates, namely the Euro OverNight Index Average (EONIA), Euro Interbank Offered Rate (EURIBOR), London Interbank Offered Rate (LIBOR). At the Bank alone, this affected assets with a total carrying amount of € 62.0 bn, liabilities with a carrying amount of € 4.3 bn and portfolios of derivatives with a notional amount (non-netted) of € 486.7 bn as at 31 December 2019. Of these amounts, assets of € 16.9 bn and portfolios of derivatives with a notional amount of € 11.0 bn related to the EONIA benchmark interest rate, which will be replaced by the euro short-term rate (€STR). The implementation of the reforms, only some of which have been finalised at the moment, will require modifications to contracts and IT systems. It is not yet possible to make a definitive assessment about the actual impact of new contractual standards and the specification of possible compensation payments on standardised agreements, which are of great significance for Helaba in its business involving derivatives and clearing counterparties and in the interbank business. More recent agreements in the customer business have already incorporated modified contractual arrangements that can be used as a fallback if the existing basis of calculations can no longer be applied. Helaba is also preparing IT systems for modi-

fications to the calculation of interest. Helaba does not anticipate any material impact from the application of the first phase of the IFRS amendments in 2020. Further implications from potential contractual adjustments and changes in market parameters in future financial years cannot yet be quantified but, overall, are not expected to be in an amount that is material to the financial circumstances of the Bank.

- Revised Conceptual Framework and Adjustments of Links in IFRSs

Amendments to recognised amounts, changes to estimates, restatement of prior-year figures

The measurement model for determining the fair values of private equity funds was refined in the first quarter of 2019. This modification of the measurement model constituted a change in accounting estimates in accordance with IAS 8.32 et seq. On the date of the changeover, the refinement of the calculation approach led to an increase of € 3 m in other financial assets mandatorily measured at fair value through profit or loss. This amount was recognised in the consolidated income statement under gains or losses on other financial instruments mandatorily measured at fair value through profit or loss.

As a result of a change in actuary, changes were made to estimates used in the measurement of pension provisions in the reporting year. These changes led to an overall increase of € 12 m in pension provisions, which was reported in other comprehensive income.

To improve the clarity of the consolidated financial statements, the Helaba Group has made changes to the order of the disclosures in the notes, amalgamated some notes and allocated significant accounting policies to the relevant notes. The main changes are as follows:

- The accounting policy disclosures for financial instruments (with the exception of the disclosures relating to the categorisation and classes of financial instruments) have been integrated into the relevant notes (see consolidated income statement disclosures and consolidated statement of financial position disclosures). The disclosures relating to the categorisation and classes of financial instruments are presented in Note (3).
- Note (6) Gains or Losses from Modification of Contractual Cash Flows has been renamed Gains or Losses from Non-Substantial Modification of Contractual Cash Flows.

- The disclosures on revenue from contracts with customers in accordance with IFRS 15 are no longer presented in a separate note under other disclosures, but have been integrated into Note (8) Net Fee and Commission Income instead.
- The disclosures on auditors' fees and on employees are no longer presented in separate notes under other disclosures, but have been included in Note (16) General and Administrative Expenses. The disclosures on financial assets and financial liabilities in the respective measurement categories have each been amalgamated into one note. In this regard, the disclosures on financial instruments designated voluntarily at fair value (Note (24)) and the hedge accounting disclosures (Note (25)) have been integrated into the consolidated statement of financial position disclosures. The capital management and regulatory ratio disclosures have been integrated into Note (35) Equity.
- The disclosures on calculating the fair values of financial instruments and on calculating the fair values of investment property, together with the other disclosures on the fair values of financial instruments, have been integrated into Note (40) Fair Values.

Adjustments have also been made to the classes of financial instruments. The class referred to as positive and negative fair values of derivatives represents an overarching class for the following derivative exposures: derivatives held for trading (trading book), non-trading derivatives (banking book and used for economic hedging) and hedging derivatives (hedge accounting).

A financial instrument class referred to as demand deposits and overnight money balances with central banks and banks has been introduced to facilitate the presentation of figures separately from the loans and receivables class. In this regard, the breakdown of loans and receivables measured at amortised cost in Note (37) Credit Risks Attributable to Financial Instruments has been consistently subdivided in all tables into "demand deposits and overnight money balances with central banks and banks" and "loans and receivables". In addition, the presentation of the changes in figures in the tables in Note (37) has been modified in order to improve the clarity of the breakdown. To this end, some of the items in the breakdown have been aggregated.

Note (53) Related Party Disclosures has been modified with the aim of providing the users of the financial statements with information appropriate to their needs: only recognised income and expenses are now disclosed.

In Notes (8), (15), (16), (21), (24), (31), (37), (40), (44), (47), (49), (50) and (51), adjustments have also been made to the prior-year figures within the disclosures. Please refer to the relevant Notes for details.

(2) Consolidation of Entities

Principles of consolidation

Under the provisions specified in IFRS 10, an investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. All present facts and circumstances must be used as the basis for establishing whether control exists. An investor must continuously monitor the situation and reassess whether it controls an investee if facts and circumstances change.

With regard to establishing whether an entity qualifies as a subsidiary, the Helaba Group will, if there are material circumstances indicating such a likelihood, review whether Helaba can directly or indirectly exercise power of control over the relevant activities of the entity concerned. In such a review, Helaba will:

- determine the purpose and design of the entity concerned,
- identify the relevant activities
- determine whether Helaba, on the basis of its rights, has the opportunity to direct the relevant activities
- assess the extent of the risk from the entity or the extent of its participation in the returns generated by the entity
- assess whether Helaba has the ability to exploit its power of control to influence the level of its participation in the returns.

The review includes an evaluation of voting rights and also an analysis of other rights and circumstances that in substance could lead to an opportunity for control. The review also considers indicators as to whether there is a de facto agency relationship in accordance with IFRS 10.

If an entity meets the criteria for cellular structures (silos), each step in the review is carried out for each one of these identified structures. Such a structure is deemed to be in existence if, within a legal entity, an asset or group of assets is segregated such that it is considered, in substance and for the purposes of IFRS 10, as a self-contained asset and there is little or no interconnected risk between the asset concerned and other assets or groups of assets in the legal entity in question.

If the outcome of the process for determining the purpose and design of the entity, and for identifying the relevant activities, is that the voting rights are a critical factor in the assessment of the opportunity for control, it will generally be assumed that the Helaba Group has control over the entity where the Group, directly or indirectly, has or can control more than half of the voting rights in the entity. Notwithstanding the above, it must be assumed that the Helaba Group does not have any opportunity for control if another investor has the ability in practice to direct the relevant activities because this investor can control the majority of the voting rights for the key activities or because the Helaba Group is only acting as a (de facto) agent on behalf of another investor within the meaning of IFRS 10. A review is also conducted to establish whether there are joint management arrangements and, as a result, the opportunity for control is limited.

In the same way, Helaba carries out an assessment in cases in which the Helaba Group does not hold a majority of the voting rights but in which it has the opportunity in practice to unilaterally direct the relevant activities or in which another investor is only acting as a (de facto) agent within the meaning of IFRS 10 on behalf of the Helaba Group. In circumstances other than one in which Helaba holds a general majority of the voting rights, this ability to control may arise, for example, in cases in which contractual agreements give the Helaba Group the opportunity to direct the relevant activities of the entity or potential control over voting rights.

If there are options or similar rights relating to voting rights, these are taken into account in the assessment of whether any party is able to exercise control through voting rights, provided that such options or similar rights are considered substantive. Such assessment takes into account any conditions or exercise periods and also evaluates the extent to which the exercise of such options or similar rights would be economically advantageous.

The test as to whether, regardless of any legal basis, there is an opportunity to exercise control in substance involves the check to establish whether a formal holder of voting rights or the holder of a right that could lead to control over an entity is acting as a (de facto) agent within the meaning of IFRS 10. In this case, in an analysis of the substance of the arrangement, the (de facto) agent is deemed to be acting on behalf of another investor if the agent does not have any material business interests of its own in the entity concerned. This scenario may also arise if this other investor does not have any direct rights to issue instructions but the circumstances are so geared to the requirements of the investor in practice that the investor is exposed to most of the variability of returns from the entity.

A threshold value for participation in the expected variability of returns is used as an initial indicator for the existence of a (de facto) agent within the meaning of IFRS 10. If, from a legal perspective, the Helaba Group has the opportunity to direct the relevant activities of an entity, a threshold value is used as the basis for assessing whether there is any indicator that an interest should be assigned to third parties; the Helaba Group's consolidation duties in accordance with IFRS 10 are also determined on this basis. Such an assignment of the opportunity to exercise control applies, for instance, to the securities investment funds managed by Helaba Invest on behalf of third parties.

If it is unclear whether the Helaba Group has the opportunity to direct the relevant activities of an entity and the Helaba Group is exposed to approximately 90 % or more of the variability of returns, an individual in-depth review is carried out to establish whether the Helaba Group has the opportunity to exercise control over the entity.

The checks described above are carried out periodically for all cases exceeding a materiality threshold. A new assessment is carried out if there are any material changes in the basis of the assessment or if the materiality threshold is exceeded. A multi-stage process is used in which an initial assessment is carried out on the basis of checklists by the local units with customer or business responsibility. This initial procedure consists of an analysis of the opportunities to exercise influence based on legal structures and an assessment of indicators of the exposure to the variability of returns from the entity concerned. Variability of returns takes into account all expected positive and negative contributions from the entity that in substance are dependent on the performance of the entity and subject to fluctuation as a result.

IFRS 11 Joint Arrangements sets out the rules for the accounting treatment of joint ventures or joint operations if two or more parties exercise joint control over an entity. To establish whether there is joint control, the first step is to determine who exercises power of control over the relevant activities, a procedure that is similar to that used in the case of subsidiaries. If this control is exercised collectively by two or more parties on a contractual basis, a joint arrangement is deemed to be in existence. To date, the review of the cases involving joint arrangements has regularly led to a classification of these arrangements as joint ventures. The review takes into account separate agreements on joint decision-making or on the exercise of voting rights, the minimum number of votes necessary for decisions, the number of shareholders and associated proportions of voting rights, possible (de facto) agent relationships and, on a case-by-case basis, consent requirements under other contractual relationships.

In an existing shareholding, there is generally a significant influence if at least 20 % of the voting rights are held. Other parameters and circumstances are taken into account in addition to the extent of the voting rights to assess whether the Helaba Group can exercise a significant influence in practice over entities in other scenarios. These parameters and circumstances include, for example, employee representation on the management or supervisory bodies of the entity or, where applicable, the existence of consent requirements for key decisions to be made by the entity concerned. If such factors are identified during the course of the review, the Helaba Group may be deemed to have a significant influence in such cases even though its equity investment is equivalent to less than 20 % of voting rights. An in-depth analysis is carried out covering all opportunities for the exercise of influence and the relationships between the shareholders.

The review of the existence of joint control or associate relationships is regularly carried out as part of the process for identifying subsidiaries subject to consolidation.

All material subsidiaries and other entities directly or indirectly controlled by the Helaba Group are fully consolidated in the consolidated financial statements. Material joint ventures and investments in associates are recognised and measured using the equity method as specified in IAS 28. In individual cases where the entity concerned is only of minor significance in the context of the economic circumstances of the Group from both individual and overall perspectives, the entity concerned has not been

consolidated or been recognised and measured using the equity method. Materiality is reviewed and decided upon by comparing the volume of total assets (assessed as being long term) and level of profit for the entity concerned against threshold values. The threshold values are determined on the basis of the average total assets and levels of profit for the Group over the last five years.

Entities are consolidated for the first time on the date of acquisition, or on the date an opportunity for control arises as defined in IFRS 10, using the acquisition method. The assets and liabilities are measured at the fair value on the date of this first-time consolidation. Any positive differences arising from this initial acquisition accounting process are recognised as goodwill under intangible assets on the face of the statement of financial position. This goodwill is subject to an impairment test at least once a year (see Note (30)). If any negative goodwill arises from this initial consolidation, the fair values are first reviewed before the resulting amount is recognised immediately in profit or loss.

Any shares in subsidiaries not attributable to the parent company are reported as a share of equity attributable to non-controlling interests within the consolidated equity; the equivalent net profit and comprehensive income is reported respectively as net profit attributable to non-controlling interests on the face of the consolidated income statement and comprehensive income attributable to non-controlling interests on the face of the statement of comprehensive income. Non-controlling interests are determined at the time of initial recognition on the basis of the fair values of the assets and liabilities attributable to these non-controlling interests and then updated.

In the case of a business combination achieved in stages (step acquisition), the entity is consolidated from the date on which control is obtained. Any investments acquired prior to the date on which control is obtained are remeasured at fair value on the date of acquisition and used as the basis for acquisition accounting. The difference between the carrying amounts of these previously recognised investments and the fair value is recognised in profit or loss after recycling any components of the carrying amounts hitherto recognised in other comprehensive income (resulting from remeasurement using the equity method or because the assets are designated as financial assets measured at fair value through other comprehensive income).

If entities that have previously been consolidated or accounted for using the equity method no longer have to be included in the consolidation, they are deconsolidated with recognition in profit or loss, or no longer accounted for using the equity method, on the date on which the consolidation requirement no

longer applies. The remaining investments are recognised in accordance with IFRS 9 either at fair value through other comprehensive income for strategic investments or at fair value through profit or loss for non-strategic investments, or in accordance with IAS 28 for investments measured using the equity method.

If investments in subsidiaries, joint ventures or associates are intended for disposal in the short term, and the other relevant criteria are satisfied, these investments are measured in accordance with IFRS 5 and the assets, liabilities and share of net profit/loss reported under a separate item on the face of the consolidated statement of financial position and consolidated income statement.

Any intercompany balances between consolidated entities and any income and expenses arising between such entities are eliminated. Intercompany profits and losses arising on transactions between consolidated entities are also eliminated.

Investments in associates and joint ventures are recognised in the statement of financial position at their acquisition cost from the date on which significant influence is obtained or the date on which joint control is established. The carrying amount is remeasured in subsequent years taking into account pro rata changes in equity and the amortisation of identified hidden reserves and charges. The pro rata net profit or loss for the year from such investments, any impairment losses and other loss allowances are reported under share of profit or loss of equity-accounted entities on the face of the consolidated income statement. The share of other comprehensive income of equity-accounted entities is reported as a separate line item in the consolidated statement of comprehensive income.

If the recoverable amount of an investment accounted for using the equity method is less than the current carrying amount, an impairment loss is recognised. If the reasons for a previously recognised impairment loss no longer exist, the impairment loss is reversed, but only up to a maximum of the pro rata carrying amount that would have been recognised, including any amortisation, if the impairment loss had not been applied.

In addition to the parent company Helaba, a total of 115 entities are consolidated in the Helaba Group (31 December 2018: 117 entities). Of this total, 88 (31 December 2018: 81) entities are fully consolidated and 27 entities are included using the equity method (31 December 2018: 36). The fully consolidated companies are subsidiaries and special purpose entities in accordance with IFRS 10, including collective investment undertakings.

The consolidated financial statements do not include 30 subsidiaries, 18 joint ventures and ten associates that are of minor significance for the presentation of the financial position and financial performance of the Helaba Group. The shares in these entities are reported under financial assets measured at fair value through other comprehensive income if they constitute

material strategic equity investments; otherwise, they are reported under financial assets mandatorily measured at fair value through profit or loss.

The changes in the basis of consolidation during the reporting period were related to the subsidiaries shown below.

Changes in the group of fully consolidated entities

Entities added

Dritte OFB PE GmbH & Co. KG, Frankfurt am Main	This entity was established in prior years and has now become material with the implementation of project development activities; initial consolidation January 2019
FHP Friedenauer Höhe Dritte GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Erste GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Fünfte GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Projekt GmbH, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Sechste GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Vierte GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Zweite GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
GWH Komplementär I. GmbH, Frankfurt am Main	Established and consolidated for the first time in June 2019
GWH Projekt Braunschweig GmbH & Co. KG, Frankfurt am Main	Established and consolidated for the first time in June 2019
GWH Projekt I. GmbH & Co. KG, Frankfurt am Main	Established and consolidated for the first time in June 2019
GWH WohnWertInvest Deutschland II, Frankfurt am Main	Established and consolidated for the first time in November 2019
HP Holdco LLC, New York, USA	Established and consolidated for the first time in November 2019
KOFIBA-Kommunalfinanzierungsbank GmbH, Berlin	Added and consolidated for the first time in May 2019
RAMIBA Verwaltung GmbH, Pullach	Opportunity to exercise control over the main operating activities of the entity in accordance with IFRS 10 as a result of loan agreement provisions. Consolidated from the end of 2019 as a result of materiality assessment
OFB Schiersteiner Berg GmbH & Co. KG, Frankfurt am Main	Established and consolidated for the first time in May 2019

A total purchase price of € 8 m was paid to acquire the FHP entities.

Entities removed

Hello Darmstadt Projektentwicklung GmbH & Co. KG, Darmstadt	Shares sold in December 2019
KOFIBA-Kommunalfinanzierungsbank GmbH, Berlin	Merger of the entity into Helaba in September 2019
LHT MSIP, LLC, Wilmington, USA	Deconsolidated in February 2019 because the entity was no longer material following the sale of the investment fund units held by the entity
LHT Power Three LLC, Wilmington, USA	Deconsolidated in February 2019 because the entity was no longer material following the sale of the investment fund units held by the entity
LHT TCW, LLC, Wilmington, USA	Deconsolidated in February 2019 because the entity was no longer material following the sale of the investment fund units held by the entity
LHT TPF II, LLC, Wilmington, USA	Deconsolidated in February 2019 because the entity was no longer material following the sale of the investment fund units held by the entity
Logistica CPH K/S, Kastrup, Denmark	Deconsolidated in June 2019 because the entity was no longer material following the sale of the real estate held by the entity
MAVEST Vertriebsgesellschaft mbH, Frankfurt am Main	Merged into GSG Siedlungsgesellschaft für Wohnungs- und Städtebau mbH, Frankfurt am Main, in June 2019
TE Kronos GmbH, Frankfurt am Main	Deconsolidated in May 2019 because the entity was no longer material following the sale of the shares held by the entity

The income from the deconsolidation of Logistica CPH K/S amounted to less than € 1 m. The expense from the deconsolidation of TE Kronos GmbH and the income from LHT Power Three LLC (including the three LHT subsidiaries) amounted to € 1 m in each case. The deconsolidation of Hello Darmstadt Projektentwicklung GmbH & Co. KG gave rise to income of € 3 m. These figures are reported under other net operating income.

Changes in the group of equity-accounted entities

Entities added

AIRE Eschborn FS2 Verwaltungs GmbH, Frankfurt am Main	Shares added in June 2019
---	---------------------------

Entities removed

FHP Friedenauer Höhe Dritte GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Erste GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Fünfte GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Projekt GmbH, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Sechste GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Vierte GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
FHP Friedenauer Höhe Zweite GmbH & Co. KG, Berlin	Switched from equity-accounted entities to fully consolidated entities as a result of the purchase of the shares from the other shareholder/partner in May 2019
Multi Park Mönchhof Dritte GmbH & Co. KG, Langen	After the limited partners left the partnership, the entity was merged into the general partner in January 2019 (by way of accrual of the assets to the general partner)
Multi Park Mönchhof GmbH & Co. KG, Langen	After the limited partners left the partnership, the entity was merged into the general partner in January 2019 (by way of accrual of the assets to the general partner)
Westhafen-Gelände Frankfurt am Main GbR, Frankfurt am Main	Entity wound up in November 2019

Acquisition of KOFIBA-Kommunalfinanzierungsbank GmbH

Effective 2 May 2019, Helaba acquired all the shares in KOFIBA-Kommunalfinanzierungsbank GmbH (KOFIBA) for a purchase price of €352 m. KOFIBA is a Pfandbrief bank operating in Germany. Since 2012, it has no longer undertaken any significant new business in accordance with the resolution plan for the Dexia Group, the previous owner of this bank. The aim of the deal was to integrate the transferred assets and liabilities into Helaba's IT systems in order to leverage cost synergies in contrast to a scheduled resolution involving maintaining KOFIBA as an independent going concern. Following the merger of the bank into Helaba in the third quarter, the integration of the transactions was completed in the fourth quarter of 2019.

The figures presented below show the additions to the items in the statement of financial position at fair value on the date of initial recognition prior to the elimination of intergroup transactions between Helaba and KOFIBA-Kommunalfinanzierungsbank GmbH:

Assets acquired

in € m

	2.5.2019
Cash on hand, demand deposits and overnight money balances with central banks and banks	24
Financial assets measured at amortised cost	15,604
Other financial assets mandatorily measured at fair value through profit or loss	3,220
Financial assets designated voluntarily at fair value	3,554
Positive fair values of hedging derivatives under hedge accounting	750
Financial assets measured at fair value through other comprehensive income	2,758
Income tax assets	84
Other assets	8
Total	26,002

Liabilities acquired

in € m

	2.5.2019
Financial liabilities measured at amortised cost	17,657
Negative fair values of non-trading derivatives	3,317
Financial liabilities designated voluntarily at fair value	2,292
Negative fair values of hedging derivatives under hedge accounting	2,199
Provisions	3
Other liabilities	18
Total	25,486
Net assets	516

After the recognition of all assets and liabilities at fair value, which produced a net asset balance of € 516 m, the initial consolidation of KOFIBA gave rise to the recognition of negative goodwill amounting to € 163 m, which was reported under other net operating income.

The additions to financial assets measured at amortised cost came to a nominal amount of € 12,455 m and did not include any uncollectible loans or receivables. The acquisition also gave rise

to off-balance sheet commitments with a nominal amount of € 17 m (comprising financial guarantees of € 10 m and other off-balance sheet commitments of € 7 m). KOFIBA's contribution to earnings from the date of initial recognition amounted to a loss of € 8 m. There would have been no difference in this contribution if the entity had been included at the beginning of the financial year.

See Note (15) for disclosures on the effects in profit or loss from the initial elimination of intercompany balances in relation to lending relationships.

Acquisition of a credit portfolio comprising international land transport finance

Effective 3 May 2019, Helaba acquired a credit portfolio with a value of €1,109 m from DVB Bank SE; no shares were transferred as part of this deal. The deal represented the acquisition of a

business within the meaning of IFRS 3 and included personnel in addition to the credit portfolio, which is focused on international land transport finance and, to a lesser extent, refinancing. The acquired business strengthens Helaba's market position in this financing segment.

The figures presented below show the additions to the items in the statement of financial position at fair value on the date of initial recognition:

Assets acquired in € m

	3.5.2019
Financial assets measured at amortised cost	1,145
Other financial assets mandatorily measured at fair value through profit or loss	19
Total	1,164

Liabilities acquired in € m

	3.5.2019
Financial liabilities measured at amortised cost	64
Provisions	1
Total	65
Net assets	1,099

The difference between the acquired net assets and the payment obligation under the acquisition amounted to €10 m. An intangible asset of €3 m was determined on the basis of customer relationships. Goodwill of €7 m related to further income projections in this financing segment. For further information on goodwill, please refer to Note (30).

The additions to financial assets measured at amortised cost came to a nominal amount of €1,147 m and did not include any uncollectible loans or receivables. The acquisition also gave rise to off-balance sheet commitments with a nominal amount of €265 m (comprising financial guarantees of €23 m and loan commitments of €242 m).

(3) Financial Instruments

In the Helaba Group, financial instruments are recognised and measured in accordance with the provisions of IFRS 9 Financial Instruments. In the case of cash transactions, non-derivative financial instruments are recognised for the first time in the statement of financial position on the settlement date, and derivatives on the trade date. The recognition of amounts in the consolidated statement of financial position and consolidated income statement is based on the measurement categories and classes of financial instruments described below.

Categories of financial instruments

On initial recognition, financial assets are allocated to a measurement category, which then serves as a basis for subsequent measurement. The categorisation of debt instruments is based

on the allocation to a business model (business model criterion) and by an assessment as to whether the asset satisfies the SPPI (solely payments of principal and interest) criterion. Financial liabilities are generally measured at amortised cost unless they are intended for trading, they are derivatives or the fair value option is exercised.

To determine the underlying business model for financial assets, an assessment must be carried out at portfolio level to establish whether the cash flows for the financial instruments to be classified are to be generated by collecting the contractual cash flows (“hold to collect” business model) or also by selling the financial instrument (“hold to collect and sell” business model), or whether a different business model is involved. Examples of different business models are an intention to trade or management on the basis of the fair value. In the first step, financial instruments are classified according to the business models used for these portfolios. Financial assets are allocated to the “hold to collect” business model if financial instruments in the portfolio concerned are only expected to be sold rarely or in small volumes. The assessment does not take into account the sale of such financial instruments shortly before the maturity date or in the event of a rise in default risk on the part of the borrower. Any other non-material disposals (i.e. unrelated to the frequency or volume criteria) lead to a review of the business model criterion for future classifications of financial assets.

A financial asset is reviewed on an individual transaction basis to assess whether the SPPI criterion is satisfied. The SPPI criterion is deemed to be satisfied if the contractual cash flows from the financial asset are exclusively the same as those in a lending relationship (i.e. from an economic perspective, solely payment of principal and interest). Other components of cash flows that represent other risks (such as market risk and leverage effects) rather than just interest for the term of the loan and the credit quality of the borrower generally mean that the SPPI criterion under IFRS 9 is not satisfied. Only contractual components of very minor financial significance (for example, because they are very unlikely to materialise or only have a very marginal impact on the cash flows) can be compatible with the requirements of the SPPI criterion.

- Measured at amortised cost (AC)

Financial assets in the “hold to collect” business model that satisfy the SPPI criterion and for which the fair value option has not been exercised are measured at amortised cost (AC). Non-derivative financial liabilities that are not intended for trading and for which the fair value option has not been exercised are also measured at amortised cost.

- Measured at fair value through profit or loss (FVTPL)

The financial instruments measured at fair value through profit or loss (FVTPL) measurement category is used for all financial instruments that do not meet the SPPI condition, that are not allocated to either the “hold to collect” or “hold to collect and sell” business models, or for which the fair value option (FVO) has been exercised. Business models other than “hold to collect” and “hold to collect and sell” therefore cover all other portfolios and include, for example, portfolios of financial instruments held for trading purposes or managed on the basis of fair value. A distinction is made within this measurement category (FVTPL) between financial instruments mandatorily measured at fair value through profit or loss and financial instruments (voluntarily) designated at fair value through profit or loss (financial instruments to which the fair value option is applied (FVTPL FVO)). To ensure that the importance of trading activities is properly reflected in financial statements, a further breakdown is applied to the financial instruments mandatorily measured at fair value through profit or loss measurement category for the purposes of reporting in the consolidated statement of financial position and consolidated income statement. This breakdown consists of two subcategories: assets and liabilities held for trading (FVTPL HfT) and other financial assets mandatorily measured at fair value through profit or loss (FVTPL MAND).

- Measured at fair value through other comprehensive income (FVTOCI)

The financial instruments measured at fair value through other comprehensive income measurement category consists of financial assets that are allocated to the “hold to collect and sell” business model and for which the SPPI criterion is satisfied unless the fair value option has been exercised. Generally speaking, equity instruments do not satisfy the SPPI criterion and have to be measured at fair value through profit or loss. However, IFRS 9 offers an irrevocable election option at the time of initial recognition whereby equity instruments as defined in IAS 32 may be measured at fair value through other comprehensive income if such instruments are acquired for non-trading purposes. The net gains or losses on the remeasurement of debt instruments recognised in other comprehensive income (OCI) are reclassified to profit or loss (i.e. they are recycled to the income statement) on derecognition of the financial instrument concerned. However, the net gains or losses on remeasurement of equity instruments recognised in OCI are not recycled to the income statement on the recognition of the financial instrument concerned; instead, these net gains or losses are reclassified within equity from OCI to retained earnings (i.e. there is no recycling).

Please refer to the relevant line items in the consolidated statement of financial position disclosures for further information on the measurement categories.

Classes of financial instruments

The classes of financial assets and financial liabilities described below, which have different characteristics, are used for the financial instrument disclosures in the notes. In some of the disclosures, these classes are broken down into sub-classes. The definition of these classes is based on the classes of instruments specified by the FINREP financial reporting framework developed by the European Banking Authority (EBA).

- Demand deposits and overnight money balances with central banks and banks
This class encompasses all demand deposits and credit balances with central banks and banks repayable on demand that are not classified as loans and receivables.
- Bonds and other fixed-income securities
This class comprises debt instruments in the form of securities held by the Helaba Group. Certain characteristics, such as the nature of the collateral, subordination or the existence of a compound instrument, have no bearing on the classification. A distinction is made between money market instruments and medium- and long-term bonds based on the original maturity of the security concerned. All bonds and other fixed-income securities, regardless of what they are actually called, are deemed to be money market instruments if their original maturity is one year or less. Examples of money market instruments are commercial paper and certificates of deposit.
- Loans and receivables
All non-derivative debt instruments not classified as bonds or other fixed-income securities are treated as loans and receivables. In addition to loans and deposits repayable on demand (with the exception of credit balances that are reported under cash on hand, demand deposits and overnight money balances with central banks and banks), such instruments include fixed-term loans, credit card receivables, trade accounts receivable, finance lease receivables and reverse repos.
- Positive and negative fair values of derivatives
The Helaba Group holds derivatives for trading (trading book) and for hedging purposes (banking book). In the case of derivatives held for hedging purposes, a distinction is made between derivatives used for economic hedging as part of hedge management for which the formal documentation requirements specified in IFRS 9 are not satisfied (economic hedges) and derivatives used in qualifying hedging relationships in accordance with IFRS 9.
- Equity shares and other variable-income securities
This class comprises equity instruments and other securities for which no fixed interest payments have been agreed. The class largely consists of shares or participation documents evidencing a share in the assets of a public limited company or entity with a similar legal structure, provided that the involvement is not intended to support Helaba's own business operations by establishing a lasting relationship (in which case the securities must be allocated to the shareholdings class). This class also includes shares/units in securities investment funds in the form of special institutional funds and retail funds (such as equity funds, fixed-income funds, mixed funds and real estate funds).
- Shareholdings
The shareholdings class comprises equity shares in unconsolidated affiliated companies, non-equity-accounted joint ventures, non-equity-accounted associates and other equity investments. This class also includes shares in entities that are of minor significance and are therefore not fully consolidated or accounted for using the equity method.
- Receivables from the purchase of endowment insurance policies
This class consists of endowment insurance policies purchased on the secondary market by two subsidiaries.
- Securitised liabilities
Securitised liabilities comprise the debt instruments issued by the Helaba Group as securities. The class brings together issued money market instruments, medium-/long-term bonds and equity/index certificates, reflecting the composition of the bonds and other fixed-income securities asset class. This class of liabilities also includes subordinated bearer bonds, profit-participation certificates and silent participation certificates issued by the Helaba Group.
- Deposits and loans
The definition of deposits and loans is based on the definition of the term "Deposits" in Part 2 of Annex II of Regulation (EU) No 1071/2013 of the European Central Bank of 24 September 2013 concerning the balance sheet of the monetary financial institutions sector. The class comprises amounts invested with the Helaba Group by creditors except amounts arising from the issue of negotiable securities. The class includes deposits on savings accounts, overnight deposit accounts

and term deposit accounts as well as (promissory note) loans taken out by the Helaba Group, plus lease liabilities under long-term leases. For the purposes of the aforementioned Annex, deposits and loans are further subdivided into deposits and loans repayable on demand (overnight deposits), deposits and loans with agreed maturity, deposits and loans redeemable at notice and repurchase agreements (repos).

- Liabilities arising from short-selling of securities

If, during the term of a securities lending transaction or repo, the Helaba Group sells borrowed securities to third parties, its obligation to return the securities to the original lender or seller is recognised as a liability arising from short-selling of securities.

- Other financial liabilities

Other financial liabilities comprise all financial liabilities that are not classified as negative fair values of derivatives, securitised liabilities, deposits and loans, liabilities under short-term leases or under leases in which the underlying asset is of low value, or liabilities arising from short-selling of securities. Examples of other financial liabilities include dividends to be distributed, charges under executory contracts and trade payables.

- Loan commitments

Loan commitments are firm obligations entered into by the Helaba Group to provide a loan to a potential borrower on the basis of terms and conditions contractually established in advance. Loan commitments also include forward loans in which the Helaba Group enters into an irrevocable agreement with a potential borrower to issue a loan at a future point in time on the basis of terms specified when the agreement is signed (forward interest rate). Loan commitments that constitute derivatives or for which the fair value option was exercised on initial recognition are measured at fair value both on initial measurement and in any subsequent remeasurement. The loan commitments covered by this class comprise solely loan commitments to which the impairment rules under IFRS 9 apply. Loan commitments that do not fall within the scope of the impairment requirements under IFRS 9 are classified as sundry obligations and reported under sundry obligations (within the scope of IAS 37). Examples of such loan commitments are loan commitments in which the party making the commitment can legally withdraw from the commitment unilaterally and unconditionally at any time and in which therefore no default risk arises.

- Financial guarantees

A financial guarantee is a contract in which the guarantor is obliged to make a specified payment that compensates the beneficiary of the guarantee for a loss incurred. Such a loss arises because a specified debtor fails to meet contractual payment obligations in relation to a debt instrument. The guarantor's obligation arising in connection with a financial guarantee is recognised on the date the contract is signed. The Helaba Group recognises financial guarantees in which it is the guarantor at fair value, which is zero when the contract is signed if the expected payments (present value of the obligation) are the same as the consideration in the form of premium instalments paid in arrears and on an arm's-length basis (present value of premiums). When a financial guarantee is subsequently remeasured in accordance with the rules under IFRS 9 for recognising impairment losses, a provision is recognised for anticipated losses that may arise from a claim under the guarantee. Financial guarantees for which the fair value option was exercised on initial recognition are measured at fair value both on initial measurement and in any subsequent remeasurement.

Consolidated Income Statement Disclosures

(4) Net Interest Income

The net interest income item encompasses the interest income and interest expenses arising from financial assets and liabilities with the exception of net interest income in connection with financial instruments held for trading, which is reported as part of net trading income.

Net interest income also includes the net interest income or expense from pension obligations and the interest cost arising from the unwinding of the discount on non-current provisions and other liabilities recognised at present value.

In the case of financial instruments measured at fair value, differences may arise between the transaction price and the fair value (day-one profit or loss). Any day-one profit or loss is normally recognised immediately in profit or loss. If the calculation of the fair value is not based on observable measurement parameters, the day-one profit or loss must be recognised in profit or loss over the maturity of the asset concerned using the effective interest method.

From the date on which a hedge is established using hedge accounting, the difference between the amortised cost and the repayment amount of a designated hedge is recognised on a pro rata basis under net interest income.

The Helaba Group reports positive interest on financial liabilities under interest income, and negative interest on financial assets under interest expense. On the other hand, cash flows resulting from derivatives are offset against each other and reported either in interest income or interest expense in the same way that cash flows for each derivative are netted in a normal interest rate environment.

in € m

	2019	2018
Interest income from	3,951	3,525
Financial assets measured at amortised cost	2,327	2,192
thereof: Calculated using the effective interest method	2,228	2,099
Bonds and other fixed-income securities	–	1
Loans and receivables	2,327	2,191
Non-trading financial assets mandatorily measured at fair value through profit or loss	1,055	755
Bonds and other fixed-income securities	26	28
Loans and receivables	2	9
Derivatives not held for trading	1,027	718
Financial assets designated voluntarily at fair value	22	11
Bonds and other fixed-income securities	3	3
Loans and receivables	19	8
Financial assets measured at fair value through other comprehensive income	193	212
thereof: Calculated using the effective interest method	193	212
Bonds and other fixed-income securities	187	207
Loans and receivables	6	5
Hedging derivatives under hedge accounting	209	220
Financial liabilities (negative interest)	79	67
Financial liabilities measured at amortised cost	79	67
Other	66	68
Cash on hand and demand deposit balances	3	4
Commitment fees	63	64

in € m

	2019	2018
Interest expense on	-2,760	-2,453
Financial liabilities measured at amortised cost	-1,311	-1,310
Securitised liabilities	-479	-439
Deposits and loans	-832	-871
Derivatives not held for trading	-606	-720
Financial liabilities designated voluntarily at fair value	-165	-189
Securitised liabilities	-72	-77
Deposits and loans	-93	-112
Hedging derivatives under hedge accounting	-540	-121
Financial assets (negative interest)	-99	-76
Financial assets measured at amortised cost	-99	-76
Provisions and other liabilities	-39	-37
Unwinding of discount on provisions for pension obligations	-35	-34
Unwinding of discount on other provisions	-1	-1
Sundry liabilities	-3	-2
Total	1,191	1,072

Interest income not calculated using the effective interest method largely consisted of early redemption fees and non-recurring loan fees.

(5) Loss Allowances

The “Loss allowances” item in the income statement includes all impairment expenses and income in relation to financial assets in the measurement categories AC (including trade accounts receivable and lease receivables) and FVTOCI (recycling) where such commitments and guarantees are subject to the IFRS 9 impairment requirements. This includes additions to cumulative loss allowances, reversals, direct write-downs, recoveries on

loans and receivables previously written off as well as necessary adjustments to loss allowances in the case of modifications of stage 3 financial assets and in the case of purchased or originated credit-impaired (POCI) financial assets. This item also includes the additions and reversals of provisions in respect of credit risk arising on loan commitments and financial guarantees within the scope of application of the IFRS 9 impairment model.

in € m

	2019	2018
Financial assets measured at amortised cost	-78	43
Loans and receivables	-78	43
Additions to cumulative loss allowances	-345	-220
Reversals of cumulative loss allowances	260	262
Direct write-offs	-3	-8
Recoveries on amounts previously written off	10	9
Financial assets measured at fair value through other comprehensive income	-	-
Bonds and other fixed-income securities	1	-
Additions to cumulative loss allowances	-	-1
Reversals of cumulative loss allowances	1	1
Loans and receivables	-1	-
Additions to cumulative loss allowances	-1	-
Loan commitments	1	-
Additions to provisions	-98	-36
Reversals of provisions	99	36
Financial guarantees	-9	2
Additions to provisions	-34	-19
Reversals of provisions	25	21
Total	-86	45

(6) Gains or Losses from Non-Substantial Modification of Contractual Cash Flows

If the modification is not substantial, the gross carrying amount of the financial instrument is recalculated as the present value of the renegotiated or modified contractual cash flows discounted using the original effective interest rate. Gains or losses from this adjustment are reported in this item if they arise from financial assets in stages 1 or 2 or from financial liabilities. Gains and losses from the modification of financial assets in stage 3 or POCI assets are reported under loss allowances (see Notes (5) and (37)). Likewise, please refer to Note (37) for general disclosures on modifications and the distinction between substantial and non-substantial modifications.

The gains and losses from non-substantial modification of contractual cash flows in respect of these instruments amounted to a net gain of less than € 1 m in the reporting period, which was unchanged compared with the equivalent figure in the previous year.

(7) Dividend Income

Dividend income from equity instruments mandatorily measured at fair value and from equity instruments measured at fair value through other comprehensive income on the basis of the FVTOCI option is reported in this line item as soon as a legal right to payment is established. Dividend income from equity instruments allocated to the trading book is recognised as part of net trading income. Dividend income includes dividends from public limited companies, profit distributions from other companies, income under profit transfer agreements with unconsolidated affiliated companies and distributions from special institutional funds and retail funds.

in € m

	2019	2018
Related to financial assets mandatorily measured at fair value through profit or loss	16	34
Equity shares and other variable-income securities	8	28
Shares in unconsolidated affiliates	5	1
Other equity investments	3	5
Related to financial assets measured at fair value through other comprehensive income	2	2
Other equity investments	2	2
Total	18	36

(8) Net Fee and Commission Income

Net fee and commission income comprises income and expenses from banking service business. Fee and commission income and expenses from trading-related activities are reported within net trading income. Income from non-banking services is recognised as sundry income within other net operating income.

	2019	2018 ¹⁾
Lending and guarantee business	60	52
Account management and payment transactions	117	109
Asset management	105	92
Securities and securities deposit business	42	41
Management of public-sector subsidy and development programmes	40	38
Other fees and commissions	31	17
Total	395	349

in € m

¹⁾ Prior-year figures restated: In the previous year, other intermediary fees and commissions of € 4 m had been reported under fees and commissions from asset management and are now shown under other fees and commissions.

Revenue recognition in accordance with IFRS 15

Revenue from contracts with customers is recognised in accordance with the provisions of IFRS 15. No options available under IFRS 15 have been applied in the recognition of revenue. Fees in connection with identified independent service obligations performed at a specific time and that are not included in the effective interest rate are recognised on the date of performance. Where these services are not invoiced individually and immediately to the customer, invoices are issued at least once a year. Fees that are paid for services delivered over a period of time are recognised on the reporting date according to the percentage of completion.

The following table shows income items in the reporting period that included revenue as defined in IFRS 15, broken down by type of service and segment:

in € m

	Real Estate	Corporates & Markets	Retail & Asset Management	WIBank	Other	Consolidation/ reconciliation	Group
Fee and commission income	19	159	312	41	–	–17	514
Lending and guarantee business	19	48	1	–	–	1	69
Account management and payment transactions	–	65	60	–	–	–1	124
Asset management	–	–	116	–	–	–8	108
Securities and securities deposit business	–	20	85	–	–	–7	98
Management of public-sector subsidy and development programmes	–	–	–	40	–	–	40
Other	–	26	50	1	–	–2	75
Revenue in accordance with IFRS 15 under other operating income	–	–	46	–	69	–11	104
Total	19	159	358	41	69	–28	618

The following table shows the figures for the prior-year period:

in € m

	Real Estate	Corporates & Markets	Retail & Asset Management	WIBank	Other	Consolidation/ reconciliation	Group
Fee and commission income	17	127	296	41	–	–17	464
Lending and guarantee business	17	42	1	–	–	–	60
Account management and payment transactions	–	60	56	–	–	–	116
Asset management	–	–	114	–	–	–6	108
Securities and securities deposit business	–	13	81	–	–	–9	85
Management of public-sector subsidy and development programmes	–	–	–	38	–	–	38
Other	–	12	44	3	–	–2	57
Revenue in accordance with IFRS 15 under other operating income	–	–	34	–	68	–12	90
Total	17	127	330	41	68	–29	554

As at 31 December 2019, Helaba had contractual liabilities of €2 m (31 December 2018: €2 m) that are expected to crystallise in 2020 with income of at least the same amount.

(9) Net Trading Income

Net trading income includes remeasurement and disposal gains or losses on financial instruments held for trading, interest and dividends resulting from trading assets as well as fees and commissions in connection with trading activities. All gains and losses from the currency translation of financial assets and liabilities, regardless of measurement category, are recognised as currency gains and losses within net trading income.

	in € m	
	2019	2018
Equity-/index-related transactions	–	1
Equity shares and other variable-income securities	10	–22
Equities	10	–22
Equity/index certificates	–2	18
Issued equity/index certificates	–8	5
Interest-rate-related transactions	55	27
Bonds and other fixed-income securities	97	–14
Loans and receivables	36	25
Repayable on demand and at short notice	–	2
Other fixed-term loans	36	23
Short-selling of securities	2	–
Issued money market instruments	–11	–2
Deposits and loans	6	2
Payable on demand	3	1
Securities repurchase transactions (repos)	3	1
Interest-rate derivatives	–75	16
Currency-related transactions	52	11
Foreign exchange	93	50
FX derivatives	–41	–39
Credit derivatives	–11	4
Commodity-related transactions	11	7
Net fee and commission income or expense	–27	–18
Total	80	32

(10) Gains or Losses on Other Financial Instruments Mandatorily Measured at Fair Value Through Profit or Loss

The gains or losses from fair value measurement and from the derecognition of financial instruments not held for trading mandatorily measured at fair value through profit or loss are reported under this item. The unrealised remeasurement gains or losses result from the non-exchange-rate-related change in fair value, disregarding accrued interest (change in clean fair value).

	2019	2018
Derivatives not held for trading	106	63
Equity/index certificates	9	-4
Interest-rate derivatives	83	74
Cross-currency derivatives (FX derivatives)	14	-7
Bonds and other fixed-income securities	78	-37
Loans and receivables	7	-2
Equity shares and other variable-income securities	5	-10
Shareholdings	-5	3
Shares in unconsolidated affiliates	1	2
Shares in non-equity-accounted associates	-2	-
Other equity investments	-4	1
Receivables from the purchase of endowment insurance policies	3	4
Total	194	21

in € m

(11) Gains or Losses on Financial Instruments Designated Voluntarily at Fair Value

This line item is used to report the realised and unrealised gains or losses on financial assets and financial liabilities designated voluntarily at fair value. They comprise only the non-exchange-rate-related changes in fair value. In the case of the measurement of financial liabilities, changes in fair value attributable to changes in Helaba's own credit risk are not recognised in this income statement item, but in accumulated OCI instead.

	2019	2018
Bonds and other fixed-income securities	5	6
Loans and receivables	133	-2
Securitised liabilities	-54	-21
Deposits and loans	-230	9
Total	-146	-8

in € m

(12) Net Income from Hedge Accounting

The changes in value of the hedged items and hedging instruments included in hedging relationships, together with any ineffective portions, relating to the hedged risk (interest rate risk, currency risk) are reported under net income from hedge accounting. The hedging costs associated with hedging currency risks are disclosed in the accumulated other comprehensive income (OCI).

Only interest rate risks are hedged using micro hedges. Group hedges are used to hedge currency risk.

If a financial asset in the FVTOCI (recycling) measurement category forms part of a hedge subject to hedge accounting, the portion of the remeasurement gains or losses attributable to the hedged risk is recognised under net income from hedge accounting.

Please refer to Note (25) for the disclosures on the positive and negative fair values of hedging derivatives covered by hedge accounting.

The following table shows the ineffective portion of hedges reported in the income statement or in other comprehensive income (OCI):

in € m

	Consolidated income statement: Recognised ineffective portion of hedges		Comprehensive income: Recognised hedge costs	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Fair value hedges – micro hedges	17	1	–	–
Hedging of interest rate risk	17	1	–	–
Change in fair value of hedging derivatives in the reporting period	–107	84	–	–
Interest-rate-related change in fair value of hedged items in the reporting period	124	–83	–	–
Fair value hedges – group hedges	–2	–1	–4	–42
Hedging of currency risk	–2	–1	–4	–42
Change in fair value of hedging derivatives in the reporting period	–482	–430	–4	–42
Spot-rate-related change in fair value of hedged items in the reporting period	480	429	–	–
Total	15	–	–4	42

(13) Gains or Losses on Derecognition of Financial Instruments not Measured at Fair Value through Profit or Loss

This item consists of the net gains or losses from the early derecognition (as a result of disposal or substantial modification) of financial instruments measured at amortised cost in stages 1 and 2 and of financial assets measured at fair value through other comprehensive income in stages 1 and 2.

For financial assets measured at amortised cost, the recognition of the gain or loss on derecognition is based on the stage under the impairment model at the time of derecognition. In the case of financial assets in stage 1, the previously recognised cumulative loss allowances are first reversed through the loss allow-

ances item in the income statement. A net gain or loss on derecognition in the amount of the difference between the selling price and the gross carrying amount is then recognised. For instruments in stage 2, the cumulative loss allowances are first utilised and the difference between the selling price and gross carrying amount after utilisation is then recognised as a net gain or loss on derecognition. In the case of impaired financial assets in stage 3, the main factor determining fair value in a sale transaction is the credit risk. The cumulative loss allowances are therefore first adjusted until the selling price equates to the net carrying amount. Accordingly, all effects from the sale of financial assets in stage 3 are recognised under loss allowances (see Note (37)). Generally speaking, the same system is used for financial assets measured at fair value through other comprehensive income. In addition, the non-credit-risk-related changes in fair value accumulated up to that point in accumulated OCI are recycled to profit or loss.

in € m

	2019	2018
Related to financial assets measured at amortised cost	1	1
Bonds and other fixed-income securities	–	1
Gains on derecognition	–	1
Loans and receivables	1	–
Gains on derecognition	1	–
Related to financial assets measured at fair value through other comprehensive income	–1	4
Bonds and other fixed-income securities	–1	4
Related to financial liabilities measured at amortised cost	8	1
Deposits and loans	8	1
Total	8	6

(14) Share of Profit or Loss of Equity-Accounted Entities

The share of profit or loss of equity-accounted entities comprises the earnings contributions of equity-accounted joint ventures and associates, which are recognised in the income statement.

in € m

	2019	2018
Share of profit or loss of equity-accounted joint ventures	21	9
Share of profit or loss	23	11
Impairment losses or impairment loss reversals	–2	–2
Share of profit or loss of equity-accounted associates	3	4
Share of profit or loss	3	4
Total	24	13

(15) Other Net Operating Income

in € m

	2019	2018 ¹⁾
Gains (+) or losses (-) from the disposal of non-financial assets	59	52
Investment property	25	18
Inventories	34	34
Impairment losses (-) or reversals of impairment losses (+) on non-financial assets	-23	-5
Intangible assets	-1	-
Other intangible assets	-1	-
Inventories	-22	-5
Additions (-) to or reversals (+) of provisions	-71	11
Provisions for off-balance sheet liabilities (excluding loan commitments and financial guarantees)	-	1
Restructuring provisions	-86	-9
Sundry provisions	15	19
Income from the recognition of negative goodwill	163	-
Income or expense from the elimination of intragroup transactions of subsidiaries consolidated for the first time	-29	-
Income from the deconsolidation of subsidiaries	3	36
Other net operating income	216	201
Investment property	189	184
Property and equipment	17	12
Inventories	10	5
Rental income under non-cancellable subtenancy arrangements	3	3
Income from non-banking services	31	29
Profit transfer expenses	-	-1
Sundry other operating income and expenses	9	2
Total	361	328

¹⁾ Prior-year figures restated: In the previous year, rental expenses of € 11 m had been reported under other net operating income and are now shown under expenses for business premises within general and administrative expenses.

The additions to the restructuring provisions were attributable for the most part to the "Scope" efficiency programme launched by Helaba in 2019. Further disclosures on the restructuring provisions can be found in Note (34).

Other provisions included reversals of € 12 m related to a provision for interest on retrospective tax payments. This was offset by additions to provisions amounting to € 19 m attributable to obligations in connection with share transactions. For further disclosures on other provisions, please refer to Note (34).

The contribution to other net operating income from the initial inclusion of KOFIBA arose largely from the recognition of the negative goodwill of € 163 m, the expense from the elimination of intragroup transactions of subsidiaries consolidated for the first time amounting to € 29 m and a restructuring provision of € 9 m.

As in the previous year, the impairment losses on non-financial assets related to property held for sale.

Sundry other operating income and expenses included revenue recognised in accordance with IFRS 15. Please refer to (8) for further disclosures.

The following table shows a breakdown of the income and expenses from investment property included in other net operating income:

	2019	2018 ¹⁾
Income from investment property	382	358
Rental and lease income	349	334
Gains on derecognition	25	18
Other income	8	6
Expenses from investment property	-168	-156
Operating and maintenance expenses	-164	-153
thereof: From property leased out	-164	-153
Miscellaneous expenses	-4	-3
Total	214	202

in € m

¹⁾ Prior-year figure restated: In the previous year, rental expenses of € 4 m had been reported under other net operating income and are now shown under general and administrative expenses.

(16) General and Administrative Expenses

in € m

	2019	2018 ¹⁾
Personnel expenses	-683	-655
Wages and salaries	-539	-523
Social security	-80	-75
Expenses for pensions and other benefits	-64	-57
Other administrative expenses	-711	-719
Business operating costs	-116	-114
Audit and consultancy services	-127	-127
IT expenses	-270	-262
Expenses for business premises	-40	-73
Cost of advertising, public relations and representation	-36	-38
Mandatory contributions	-122	-105
thereof: Mandatory contributions to the European Single Resolution Fund	-42	-40
Total	-1,394	-1,374

¹⁾ Prior-year figures restated: In the previous year, rental expenses of €11 m had been reported under other net operating income and are now shown under expenses for business premises within general and administrative expenses.

The initial application of IFRS 16 led to a decline in expenses for business premises but, at the same time, to an increase in depreciation because of the recognition of right-of-use assets within investment property and property and equipment (see Note (17)).

In the reporting year, audit and consultancy services included the following fees for services provided by group companies of Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft:

in € m

	31.12.2019	31.12.2018
Audit fees	6	5
Other attestation services	1	1
Total	7	6

The fees for financial statements auditing services include the fees for audits of financial statements required under EU law, the fees for the review of interim financial statements by an auditor and those for audits of annual financial statements not prescribed under EU law.

Fees for other attestation services related to statutory, contractually agreed or voluntary review or attestation services, particularly attestations for protection schemes and statutory notifications, project reviews, reviews of the service-related internal control system and reviews of the custody business and securities service business.

The following table shows a breakdown of the average number of employees in the Helaba Group in the reporting year:

	Female		Male		Total	
	2019	2018	2019	2018	2019	2018
Bank as a whole	1,580	1,562	1,862	1,857	3,442	3,419
Bank	1,194	1,171	1,602	1,585	2,796	2,756
WIBank	259	250	173	173	432	423
LBS	127	141	87	99	214	240
Group subsidiaries	1,400	1,364	1,401	1,344	2,801	2,708
Group	2,980	2,926	3,263	3,201	6,243	6,127

(17) Depreciation and Amortisation

in € m

	2019	2018
Investment property	-43	-38
Buildings leased out	-43	-38
Property and equipment	-59	-20
Owner-occupied land and buildings	-45	-10
Operating and office equipment	-13	-10
Machinery and technical equipment	-1	-
Intangible assets	-25	-19
Purchased software	-25	-19
Total	-127	-77

Depreciation increased in the reporting year as a consequence of the initial application of IFRS 16.

Where applicable, investment property and property and equipment is depreciated on a straight-line basis over its normal useful life with due regard to legal and contractual restrictions. This does not apply to low-value assets, which are written off in full in the year of acquisition. Right-of-use assets derived from

leases are generally depreciated on a straight-line basis over the term of the lease concerned. In those instances in which a purchase option has been factored into the measurement of the right-of-use asset, or the underlying asset will be transferred to Helaba at the end of the lease term, the right-of-use asset is depreciated on a straight-line basis over the normal useful life of the underlying asset concerned.

The bands used for the useful lives of investment property are as follows, depending on the type of property usage in each case:

- | | |
|--|-------------|
| ▪ Residential and commercial property | 40–80 years |
| ▪ Office buildings, other office and business premises | 40–60 years |
| ▪ Special property | 20–60 years |

The range of anticipated useful lives for property and equipment is as follows:

- | | |
|-------------------------------------|-------------|
| ▪ Buildings | 25–80 years |
| ▪ Operating and office equipment | 1–46 years |
| ▪ Machinery and technical equipment | 1–24 years |

Additional impairment losses are recognised if there are indications of impairment and the carrying amount of an asset is greater than the higher of value in use and fair value less costs to sell. If the reason for originally recognising an impairment loss no longer applies, the impairment loss is reversed, but only to the extent that the carrying amount of the asset does not exceed its amortised cost. Impairment losses are recognised under other net operating income (see Note (15)).

With the exception of goodwill, the Helaba Group's intangible assets are amortised over their finite useful lives. In most cases, software is amortised over a period of three years. Impairment losses in respect of intangible assets are reported under other net operating income (see Note (15)). Please refer to Note (30) for information on impairment tests applied to intangible assets.

(18) Taxes on Income

	2019	2018
Current taxes	6	–198
Deferred taxes	–59	33
Total	–53	–165

in € m

The current tax income in the reporting year was primarily attributable to the Bank in Germany (€23 m; 2018: tax expense of €122 m), Frankfurter Sparkasse (€28 m; 2018: € tax expense of €48 m) and the New York branch (tax expense of €37 m; 2018: tax expense of €23 m). It included expenses relating to prior years amounting to €132 m (2018: €129 m).

As in the previous year, the current tax expense in the reporting year was not material due to the utilisation of tax losses not previously taken into account.

The deferred tax expense recognised in the reporting year related mainly to the occurrence and reversal of temporary differences amounting to €59 m (2018: deferred tax income of €33 m). This included a deferred tax expense relating to prior years of €82 m (2018: deferred tax income of €190 m). There was no material tax expense in the reporting year arising from changes in tax rates. The net outcome from new tax loss carryforwards and the utilisation of such carryforwards in the reporting year was a deferred tax expense of €3 m (2018: deferred tax income of €9 m).

in € m

	2019	2018
Profit before taxes	533	443
Applicable income tax rate in %	32	32
Expected income tax expense in the financial year	-170	-142
Effect of variance in tax rates	-5	8
Effect of changes in the tax rate	-	2
Effect of prior-period taxes recognised in the financial year	49	8
Tax-exempt income and trade tax reduction	116	15
Non-deductible operating expenses and trade tax addition	-40	-34
Impairment losses and adjustments	6	-13
Other effects	-9	-9
Income tax expense	-53	-165

In addition to income taxes recognised in the income statement, other deferred taxes are recognised in relation to components of other comprehensive income. The following table shows a breakdown of the gains and losses recognised in other comprehensive income and the related deferred taxes:

in € m

	Before tax		Taxes		After tax	
	2019	2018	2019	2018	2019	2018
Items that will not be reclassified to the consolidated income statement:	-238	2	65	3	-173	5
Remeasurement of net defined benefit liability	-293	10	86	-	-207	10
Change in fair value of equity instruments measured at fair value through other comprehensive income	-9	3	-1	-	-10	3
Credit risk-related change in fair value of financial liabilities designated voluntarily at fair value	64	-11	-20	3	44	-8
Items that will be reclassified to the consolidated income statement:	60	-123	-15	40	45	-83
Change in fair value of debt instruments measured at fair value through other comprehensive income	62	-89	-16	26	46	-63
Gains/losses from currency translation of foreign operations	2	8	-	-	2	8
Gains or losses from fair value hedges of currency risk	-4	-42	1	14	-3	-28
Total	-178	-121	50	43	-128	-78

(19) Segment Reporting

The following table shows the segment reporting for the year under review:

in € m

	Real Estate	Corporates & Markets	Retail & Asset Management	WIBank	Other	Consolidation/ reconciliation	Group
Net interest income	404	354	236	60	131	6	1,191
Loss allowances	13	-68	-3	-	-28	-	-86
Net interest income after loss allowances	417	286	233	60	103	6	1,105
Net fee and commission income	19	151	196	40	-8	-3	395
Net trading income	-	86	2	-	-	-8	80
Gains or losses on hedge accounting and other financial instruments measured at fair value (not held for trading)	-	2	20	-	33	8	63
Share of profit or loss of equity-accounted entities	-	-	4	-	20	-	24
Other net income/expense	-25	31	287	1	117	-24	387
Total income	411	556	742	101	265	-21	2,054
General and administrative expenses	-154	-495	-554	-74	-290	46	-1,521
Profit before taxes	257	61	188	27	-25	25	533
Assets (€ bn)	30.8	72.1	32.7	24.6	49.4	-2.6	207.0
Risk-weighted assets (€ bn)	16.9	24.1	7.5	1.2	10.1	-	59.8
Allocated capital (€ m)	1,995	2,812	2,392	140	1,157	-	8,496
Return on equity (%)	12.9	2.2	7.9	18.7	-	-	6.3
Cost-income ratio (%)	38.6	79.3	74.3	74.0	-	-	71.1

The figures for the previous year are shown below:

in € m

	Real Estate	Corporates & Markets	Retail & Asset Management	WIBank	Other	Consolidation/reconciliation	Group
Net interest income	386	384	268	51	31	-48	1,072
Loss allowances	-14	-	-4	-	64	-1	45
Net interest income after loss allowances	372	384	264	51	95	-49	1,117
Net fee and commission income	17	117	183	40	-7	-1	349
Net trading income	-	54	-	-	-	-22	32
Gains or losses on hedge accounting and other financial instruments measured at fair value (not held for trading)	-	-7	-6	-1	5	22	13
Share of profit or loss of equity-accounted entities	-	-	3	-	10	-	13
Other net income/expense	-1	33	295	1	71	-29	370
Total income	388	581	739	91	174	-79	1,894
General and administrative expenses	-146	-462	-534	-72	-291	54	-1,451
Profit before taxes	242	119	205	19	-117	-25	443
Assets (€ bn)	30.2	71.1	30.6	23.5	21.8	-14.2	163.0
Risk-weighted assets (€ bn)	16.4	20.8	6.6	1.2	9.3	-	54.3
Allocated capital (€ m)	2,007	2,513	2,384	145	1,110	-	8,158
Return on equity (%)	12.1	4.7	8.6	13.2	-	-	5.4
Cost-income ratio (%)	36.3	79.5	71.8	78.9	-	-	78.5

The segment report is broken down into the four operating segments explained below.

- Products related to financing major commercial projects and existing properties are Helaba's particular speciality in the Real Estate segment. The product range includes traditional real estate loans in Germany and abroad, financing for open-ended real estate funds as well as development/portfolio financing. Office buildings, retail outlets and residential portfolios make up the bulk of the business in this area, although the segment also provides finance for retail parks and logistics centres.
- In the Corporates & Markets segment, Helaba offers products for all customer groups. The Corporate Finance division provides specially tailored finance for companies, structured and arranged to specific customer requirements, through its constituent product groups Corporate Loans, Project Finance,

Transport Finance, Foreign Trade Finance, Acquisition Finance, Asset-Backed Finance, Investment and Leasing Finance and Tax Engineering. The Bank's activities in the Sparkasse Lending Business division concentrate on supporting Sparkassen and their customers with financing arrangements based on credit standing and cash flow (primarily jointly extended loans). Activities in the Banks and International Business division focus on trade finance and documentary business. The Sales Public Authorities division provides advice and products for municipal authorities and their corporations. In addition to the lending products, this segment also includes the trading and sales activities from the Capital Markets division and payment services from the Cash Management division.

- The Retail & Asset Management segment encompasses retail banking, private banking, Landesbausparkasse Hessen-Thüringen and asset management activities. Frankfurter Sparkasse offers the conventional products of a retail bank. The Frankfurter Bankgesellschaft Group rounds off the range of private banking products available from Helaba. The asset management products at Helaba Invest Kapitalanlagegesellschaft mbH also include traditional asset management and administration, the management of special and retail funds for institutional investors and support for master investment trust clients. The Settlement/Custody Services business complements the traditional asset management value chain by providing a custodian bank function. The Real Estate Management business, including the real estate subsidiaries such as the GWH Group and Helicon KG, also forms part of this segment. The range of products is broad, covering support for third-party and own real estate, project development and facility management.
- The WIBank segment mainly comprises the Wirtschafts- und Infrastrukturbank Hessen (WIBank) business line. In its capacity as the central development institution for Hesse, WIBank administers development programmes on behalf of the State of Hesse. This segment therefore brings together the earnings from the public-sector development and infrastructure business in the fields of housing, municipal and urban development, public infrastructure, business/enterprise and employment promotion, agriculture and environmental protection.

In line with management reporting, the segment information is based on internal management (contribution margin accounting) and also on external financial reporting.

For internal management purposes, net interest income in the lending business is calculated using the market interest rate method from the difference between the customer interest rate and the market interest rate for an alternative transaction with a matching structure. Gains or losses on maturity transformation are reported as net interest income in Asset/Liability Management.

The net trading income, gains or losses on non-trading derivatives and financial instruments to which the fair value option is applied, net income from hedge accounting, gains and losses on bonds measured at fair value through other comprehensive income, gains and losses on debt instruments and equity instruments mandatorily measured at fair value through profit or loss and share of profit or loss of equity-accounted entities are determined in the same way as the figures for external financial reporting under IFRSs.

Other net income/expense consists of dividend income, other net operating income and gains or losses on derecognition of financial instruments not measured at fair value through profit or loss.

General and administrative expenses comprise the costs directly assignable to the segments plus the costs of internal services provided by other units. The costs of these services are allocated on the basis of arm's-length pricing agreements or volume drivers according to the user-pays principle. The final component is the allocation of corporate centre costs, generally also based on the user-pays principle.

The assets line shows the assets in the statement of financial position allocated to the relevant units. Contribution margin accounting is used for allocating these items to the operating segments. The risk exposure item comprises the risk exposure of the banking and trading book, including the market risk exposure in accordance with the Capital Requirements Regulation (CRR). The average equity stated in the statement of financial position for the divisions is distributed based on risk exposures and allocated for the subsidiaries and equity investments in relation to the equity stated in the statement of financial position (allocated capital).

The return ratios reflect the profit before taxes expressed as a percentage of the allocated capital. The cost-income ratio is the ratio of general and administrative expenses to profit before taxes net of general and administrative expenses and of loss allowances.

The Other segment contains the contributions to income and expenses that cannot be attributed to the operating segments. In particular, this column includes the net income from centrally consolidated equity investments such as the OFB Group as well as the costs of the central units that cannot be allocated to the individual segments in line with the user-pays principle. The net income or expense from Treasury activities in the Asset/Liability Management business, from central own funds investing activities, from strategic planning decisions and from the centrally held liquidity securities is also recognised under this segment. The acquisition of DKD was completed in May of this year. After the deal was completed, DKD was initially renamed KOFIBA-Kommunalfinanzierungsbank GmbH. Since September, it has been fully integrated into Helaba. All KOFIBA transactions and their contributions to earnings are treated as a wind-down portfolio and allocated in full to the Other segment. The expense arising from the addition to the restructuring provision for the "Scope" efficiency programme launched in the reporting year is also reported in this segment.

Effects arising from consolidation and intragroup adjustments between the segments are reported under consolidation/reconciliation. Effects that arise from the reconciliation between the segment figures and the consolidated income statement, in particular in relation to net interest income, are also reported under consolidation/reconciliation. Since the contribution margin statement shows net interest income on the basis of the

market interest rate method, differences also result in the case of non-recurring income and net interest income attributable to other periods.

Income after loss allowances is attributable to products and services as follows:

	2019	2018
Real estate lending	410	388
Property management and development	290	272
Corporate loans	313	335
Municipal lending business	32	34
Treasury products	145	133
Trading products	122	106
Loans to financial institutions	27	28
Fund management/asset management	135	141
Home savings business	36	38
Sparkasse lending business	15	29
Public development and infrastructure business	101	91
Retail	366	348
Other products/reconciliation	62	-49
Group	2,054	1,894

in € m

The breakdown by region is as follows:

	2019	2018
Germany	1,823	1,647
Europe (excluding Germany)	98	106
Rest of world (excluding Europe)	133	141
Group	2,054	1,894

in € m

Consolidated Statement of Financial Position Disclosures

(20) Cash on Hand, Demand Deposits and Overnight Money Balances with Central Banks and Banks

in € m

	31.12.2019	31.12.2018
Cash on hand	85	93
Demand deposit balances with central banks	12,932	6,613
With Deutsche Bundesbank	12,201	5,767
Financial assets measured at amortised cost	12,201	5,767
With other central banks	731	846
Financial assets measured at amortised cost	731	846
Demand deposits and overnight money balances with banks	1,538	636
Financial assets measured at amortised cost	1,204	346
Financial assets mandatorily measured at fair value	334	290
Total	14,555	7,342

(21) Financial Instruments Measured at Amortised Cost

In the Helaba Group, financial instruments measured at amortised cost mainly consist of loans and receivables and of non-derivative financial liabilities that are not held for trading and for which the fair value option has not been exercised.

The net carrying amount of financial assets reported in the statement of financial position is the gross carrying amount of the financial instruments reduced by the loss allowances determined in accordance with the impairment model under IFRS 9. Please refer to Note (37) for information on the application of the impairment model to financial assets measured at amortised cost.

Within hedge accounting, the carrying amounts of financial instruments in this measurement category that form the hedged items in micro fair value hedges are adjusted for the changes in the fair value corresponding to the hedged risk. Please refer to Note (25) for information on hedge accounting.

Derivative components embedded in financial liabilities within this measurement category must be evaluated to assess whether there is a separation requirement. If there is a separation requirement, the derivative must be categorised (normally as mandatorily measured at fair value through profit or loss) and accounted for separately. The host contract is classified independently (excluding any separated derivative components) and can be allocated to the AC measurement category.

For detailed disclosures on issuance activities, see Note (46).

For disclosures on liabilities arising under leases, please refer to Note (50).

The following table shows the financial assets measured at amortised cost:

in € m

	31.12.2019	31.12.2018
Bonds and other fixed-income securities	–	4
thereof: Listed	–	4
Medium- and long-term bonds	–	4
Loans and receivables	130,326	106,751
Repayable on demand and at short notice	11,498	5,820
Credit card receivables	10	–
Trade accounts receivable, including factoring	3,335	3,057
Receivables from finance leases	1	2
Other fixed-term loans	115,428	97,805
Promissory note loans	3,030	2,644
Registered bonds	870	757
Forwarding loans	7,840	7,406
Time deposits	3,440	3,352
Bausparkasse building loans	936	912
Sundry other fixed-term loans	99,312	82,734
Other receivables not classified as loans	54	67
Total	130,326	106,755

The following table shows a breakdown of the other fixed-term loans by financing purpose:

in € m

	31.12.2019	31.12.2018
Commercial real estate loans	32,858	32,209
Residential building loans	6,250	5,942
Consumer loans to private households	216	189
Infrastructure loans	28,736	18,614
Asset finance	7,062	6,281
Leasing funding	4,400	3,976
Import/export finance	16	17
Other financing purposes	35,890	30,577
Total	115,428	97,805

The following table shows a breakdown of financial liabilities measured at amortised cost:

in € m

	31.12.2019	31.12.2018 ¹⁾
Securitised liabilities	59,715	45,455
Issued money market instruments	13,286	4,099
Commercial paper (CP)	4,479	2,137
Certificates of deposit (CD)	8,105	1,221
Asset-backed commercial paper (ABCP)	702	741
Medium- and long-term bonds issued	46,429	41,356
Mortgage Pfandbriefe	10,813	10,309
Public Pfandbriefe	13,272	10,657
Structured (hybrid) bonds	1,582	1,676
Other medium- and long-term bonds	20,762	18,714
Deposits and loans	95,390	79,558
thereof: Liabilities under long-term leases	221	18
Payable on demand	35,978	34,753
With an agreed term	52,746	38,218
With an agreed period of notice	6,608	6,524
Securities repurchase transactions (repos)	58	63
Other financial liabilities	259	209
Total	155,364	125,222

¹⁾ Prior-year figures restated: In the previous year, lease liabilities of € 18 m were reported under other financial liabilities and are now shown under deposits and loans.

The following table shows the financial assets measured at amortised cost, together with the deposits and loans and other liabilities measured at amortised cost, broken down by region and counterparty:

in € m

	Germany		European Union (excluding Germany)		World (excluding European Union)		Total	
	31.12.2019	31.12.2018 ¹⁾	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Bonds and other fixed-income securities	-	-	-	4	-	-	-	4
Other financial corporations	-	-	-	4	-	-	-	4
Loans and receivables	83,632	71,078	32,197	22,505	14,497	13,168	130,326	106,751
Central banks	65	-	-	-	-	-	65	-
Central giro institutions	371	455	-	-	-	-	371	455
Sparkassen	5,737	6,410	-	-	-	-	5,737	6,410
Other banks	2,727	1,376	6,885	2,265	865	716	10,477	4,357
Other financial corporations	5,256	5,671	4,087	3,440	691	865	10,034	9,976
Non-financial corporations	32,248	28,963	19,087	16,101	12,713	11,367	64,048	56,431
Government	29,741	20,964	2,116	675	52	47	31,909	21,686
Households	7,487	7,239	22	24	176	173	7,685	7,436
Total	83,632	71,078	32,197	22,509	14,497	13,168	130,326	106,755
Deposits and loans	89,396	75,044	2,473	2,240	3,521	2,274	95,390	79,558
Central banks	2,182	2,191	-	-	448	-	2,630	2,191
Central giro institutions	1,286	788	-	-	-	-	1,286	788
Sparkassen	9,156	9,460	-	-	-	-	9,156	9,460
Other banks	20,178	18,340	692	425	1,619	939	22,489	19,704
Other financial corporations	23,186	14,617	946	729	411	250	24,543	15,596
Non-financial corporations	5,449	6,144	437	723	638	825	6,524	7,692
Government	7,833	3,967	261	230	193	3	8,287	4,200
Households	20,126	19,537	137	133	212	257	20,475	19,927
Other financial liabilities	259	209	-	-	-	-	259	209
Sparkassen	2	2	-	-	-	-	2	2
Other banks	2	1	-	-	-	-	2	1
Other financial corporations	17	21	-	-	-	-	17	21
Non-financial corporations	169	141	-	-	-	-	169	141
Government	5	6	-	-	-	-	5	6
Households	64	38	-	-	-	-	64	38
Total	89,655	75,253	2,473	2,240	3,521	2,274	95,649	79,767

¹⁾ Prior-year figures restated: In the previous year, lease liabilities of € 18 m were reported under other financial liabilities and are now shown under deposits and loans.

(22) Trading Assets and Trading Liabilities

This item consists solely of financial instruments held for trading purposes and mandatorily measured at fair value through profit or loss (FVTPL HfT).

Loans and receivables held for trading mainly comprise promissory note loans and, to a lesser extent, repos and money trading transactions.

For detailed disclosures on issuance activities, see Note (46).

Please refer to note (41) for detailed information on derivatives.

The following tables show a breakdown of trading assets and trading liabilities by product:

in € m

	31.12.2019	31.12.2018
Positive fair values of trading derivatives	12,348	8,994
thereof: Traded OTC	12,342	8,984
thereof: Exchange-traded	6	10
Equity-/index-related transactions	272	427
Interest-rate-related transactions	11,128	7,629
Currency-related transactions	931	907
Credit derivatives	17	31
Bonds and other fixed-income securities	5,951	6,570
thereof: Listed	5,878	6,152
Money market instruments	176	52
Medium- and long-term bonds	5,775	6,518
Loans and receivables	979	1,395
Repayable on demand and at short notice	3	3
Receivables from securities repurchase transactions (reverse repos)	16	134
Other fixed-term loans	960	1,258
Equity shares and other variable-income securities	26	30
thereof: Listed	26	30
Equities	26	30
Trading assets	19,304	16,989

in € m

	31.12.2019	31.12.2018
Negative fair values of trading derivatives	10,180	7,505
thereof: Traded OTC	10,166	7,455
thereof: Exchange-traded	14	50
Equity-/index-related transactions	271	417
Interest-rate-related transactions	9,045	6,222
Currency-related transactions	846	838
Credit derivatives	17	27
Commodity-related transactions	1	1
Securitised liabilities	1,137	853
Issued money market instruments	1,102	822
Commercial paper (CP)	852	350
Certificates of deposit (CD)	250	472
Issued equity/index certificates	35	31
Deposits and loans	7,145	4,353
Payable on demand	851	1,073
With an agreed term	6,294	3,280
Liabilities arising from short-selling	11	52
Trading liabilities	18,473	12,763

The following table presents the non-derivative trading assets and trading liabilities by region and counterparty:

in € m

	Germany		European Union (excluding Germany)		World (excluding European Union)		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
Bonds and other fixed-income securities	1,759	1,458	2,951	3,687	1,241	1,425	5,951	6,570
Central giro institutions	244	111	–	–	–	–	244	111
Sparkassen	67	–	–	–	–	–	67	–
Other banks	1,027	821	2,811	3,456	1,130	1,256	4,968	5,533
Other financial corporations	35	60	30	55	55	130	120	245
Non-financial corporations	39	108	32	66	–	4	71	178
Government	347	358	78	110	56	35	481	503
Loans and receivables	827	1,036	112	339	40	20	979	1,395
Central banks	–	28	–	–	–	–	–	28
Central giro institutions	53	–	–	–	–	–	53	–
Sparkassen	180	150	–	–	–	–	180	150
Other banks	188	287	42	24	–	–	230	311
Other financial corporations	–	–	3	3	–	–	3	3
Non-financial corporations	138	83	66	312	40	20	244	415
Government	268	488	1	–	–	–	269	488
Equity shares and other variable-income securities	24	26	2	4	–	–	26	30
Other banks	–	3	–	–	–	–	–	3
Other financial corporations	–	2	1	4	–	–	1	6
Non-financial corporations	24	21	1	–	–	–	25	21
Non-derivative trading assets	2,610	2,519	3,065	4,031	1,281	1,445	6,956	7,995

in € m

	Germany		European Union (excluding Germany)		World (excluding European Union)		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
Deposits and loans	6,797	4,189	283	147	65	17	7,145	4,353
Sparkassen	1,869	1,381	–	–	–	–	1,869	1,381
Other banks	46	66	5	44	25	17	76	127
Other financial corporations	1,920	1,518	278	103	40	–	2,238	1,621
Non-financial corporations	132	36	–	–	–	–	132	36
Government	2,829	1,185	–	–	–	–	2,829	1,185
Households	1	3	–	–	–	–	1	3
Liabilities arising from short-selling	–	52	–	–	11	–	11	52
Other banks	–	26	–	–	1	–	1	26
Other financial corporations	–	–	–	–	10	–	10	–
Government	–	26	–	–	–	–	–	26
Non-derivative trading liabilities	6,797	4,241	283	146	76	17	7,156	4,405

(23) Other Financial Instruments Mandatorily Measured at Fair Value through Profit or Loss

The following financial instruments are reported in this item of the statement of financial position:

- Derivatives that are not held for trading and not used for hedging purposes. Derivatives recognised in this item are derivative financial instruments used for economic hedging as part of hedge management (economic hedges); the documentation requirements for hedge accounting in accordance with IFRS 9 are not satisfied.
- Bonds that do not satisfy the SPPI criterion and that are not held for trading purposes.
- Loans and receivables that do not satisfy the SPPI criterion and that are not held for trading purposes.
- Equity instruments that Helaba has not elected to measure at fair value through other comprehensive income.

in € m

	31.12.2019	31.12.2018
Positive fair values of non-trading derivatives	5,876	2,046
thereof: Traded OTC	5,876	2,046
Interest-rate-related transactions	5,755	1,976
Currency-related transactions	121	70
Bonds and other fixed-income securities	1,945	1,525
thereof: Listed	1,624	1,287
Money market instruments	1	–
Medium- and long-term bonds	1,944	1,525
Loans and receivables	319	64
Repayable on demand and at short notice	2	–
Other fixed-term loans	317	61
Other receivables not classified as loans	–	3
Equity shares and other variable-income securities	157	110
thereof: Listed	5	3
Investment units	157	110
Shareholdings	65	71
Shares in unconsolidated affiliates	16	18
Shares in non-equity-accounted joint ventures	5	4
Shares in non-equity-accounted associates	4	5
Other equity investments	40	44
Receivables from the purchase of endowment insurance policies	71	95
Total	8,433	3,911

in € m

	31.12.2019	31.12.2018
Negative fair values of non-trading derivatives	6,759	1,791
thereof: Traded OTC	6,759	1,790
thereof: Exchange-traded	–	1
Equity-/index-related transactions	–	1
Interest-rate-related transactions	6,104	1,738
Currency-related transactions	655	52
Total	6,759	1,791

The following table shows the other non-derivative financial instruments mandatorily measured at fair value through profit or loss by region and counterparty:

in € m

	Germany		European Union (excluding Germany)		World (excluding European Union)		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
Bonds and other fixed-income securities	114	116	1,166	872	665	537	1,945	1,525
Other banks	12	12	79	41	34	28	125	81
Other financial corporations	26	29	460	326	184	146	670	501
Non-financial corporations	74	73	622	493	418	328	1,114	894
Government	2	2	5	12	29	35	36	49
Loans and receivables	302	38	5	7	12	19	319	64
Other banks	–	–	–	–	–	3	–	3
Other financial corporations	1	38	1	2	12	16	14	56
Non-financial corporations	105	–	4	5	–	–	109	5
Government	196	–	–	–	–	–	196	–
Equity shares and other variable-income securities	115	82	30	13	12	15	157	110
Other financial corporations	115	81	30	13	12	15	157	109
Non-financial corporations	–	1	–	–	–	–	–	1
Shareholdings	64	71	1	–	–	–	65	71
Other banks	1	1	–	–	–	–	1	1
Other financial corporations	32	37	–	–	–	–	32	37
Non-financial corporations	31	33	1	–	–	–	32	33
Receivables from the purchase of endowment insurance policies	71	95	–	–	–	–	71	95
Other financial corporations	71	95	–	–	–	–	71	95
Total	666	402	1,202	892	689	571	2,557	1,865

Please refer to note (41) for detailed information on derivatives.

(24) Financial Instruments Designated Voluntarily at Fair Value

By applying the fair value option voluntarily, it is possible to use the FVTPL measurement category for financial instruments that would otherwise be allocated to the AC or FVTOCI (recycling) measurement categories based solely on the business model criterion or SPPI condition. The fair value option can be used for financial assets and financial liabilities if there is an economic relationship between the financial instrument concerned and other financial instruments and the application of the fair value option will prevent an accounting mismatch in the income statement.

The fair value option can also be used for financial liabilities if one of the following criteria is satisfied:

- The financial liability is managed on a fair value basis.
- The financial liability is a structured product and, if the fair value option were not applied, the host contract and the embedded derivative would have to be accounted for separately.

The Helaba Group uses the fair value option in individual cases in which there is an economic relationship between the financial instruments concerned and other financial instruments – for example in an economic hedge where hedge accounting is not applied – and these other financial instruments need to be measured at fair value in accordance with IFRS 9. In the case of financial liabilities, the Helaba Group uses the fair value option particularly for structured products.

Helaba determines the cumulative changes in carrying amounts attributable to credit risk for financial instruments to which the fair value option is applied. For each of these financial instruments, the calculation is based on the difference between the latest measurement and the historical measurement on the date of addition. This difference is then adjusted for any changes in value resulting from market factors not related to credit risk.

When the fair value option is applied, changes in the fair value of financial instruments are generally recognised through profit or loss. However, the portion of a change in the fair value of financial liabilities attributable to changes in the Helaba Group's own credit quality is recognised in accumulated other comprehensive income. Cumulative changes in fair value recognised in other comprehensive income are not reclassified to profit or loss, even in the event of early derecognition of financial liabilities prior to maturity. However, the changes in fair value accumulated in other comprehensive income up to the point of derecognition are reclassified to retained earnings within equity.

The following table shows the fair values of financial assets designated voluntarily at fair value and the changes in fair value attributable to a change in credit risk:

in € m

	Changes attributable to credit risk					
	Carrying amount (fair value)		Reporting period		Cumulative	
	31.12.2019	31.12.2018	2019	2018	31.12.2019	31.12.2018
Bonds and other fixed-income securities	136	124	-1	5	2	3
thereof: Listed	136	124				
Loans and receivables	3,842	253	-11	1	-19	-4
Total	3,978	377	-12	6	-17	-1

The following overview shows the settlement amounts of liabilities for which the fair value option is used, the current carrying amounts and the cumulative changes in fair value attributable to changes in the Helaba Group's own credit risk.

in € m

	Carrying amount (fair value)		Settlement amount		Cumulative changes attributable to credit risk	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
	Securitized liabilities	6,024	7,062	5,933	7,034	-8
Deposits and loans	6,775	4,418	7,275	5,799	-48	16
Total	12,799	11,480	13,208	12,833	-56	8

For detailed disclosures on issuance activities, see Note (46).

The following table shows the financial instruments designated voluntarily at fair value by region and counterparty:

in € m

	Germany		European Union (excluding Germany)		World (excluding European Union)		Total	
	31.12.2019	31.12.2018 ¹⁾	31.12.2019	31.12.2018	31.12.2019	31.12.2018 ¹⁾	31.12.2019	31.12.2018
Bonds and other fixed-income securities	133	121	3	3	–	–	136	124
Other banks	–	–	3	3	–	–	3	3
Government	133	121	–	–	–	–	133	121
Loans and receivables	3,792	253	50	–	–	–	3,842	253
Other financial corporations	–	1	–	–	–	–	–	1
Non-financial corporations	71	16	50	–	–	–	121	16
Government	3,721	236	–	–	–	–	3,721	236
Total	3,925	374	53	3	–	–	3,978	377
Deposits and loans	6,721	4,418	54	–	–	–	6,775	4,418
Sparkassen	513	353	–	–	–	–	513	353
Other banks	195	207	–	–	–	–	195	207
Other financial corporations	5,634	3,464	54	–	–	–	5,688	3,464
Non-financial corporations	157	223	–	–	–	–	157	223
Government	222	171	–	–	–	–	222	171
Total	6,721	4,418	54	–	–	–	6,775	4,418

¹⁾ Prior-year figures restated: In the previous year, one figure with the country code for Germany was included under World (excluding European Union), but is now reported under Germany.

(25) Hedge Accounting

The Helaba Group enters into derivatives for both trading and hedging purposes. If derivatives are demonstrably used to hedge risks, special hedge accounting rules can be applied under IFRS 9, subject to certain preconditions, in order to eliminate accounting mismatches (in annual financial statements) that could arise from differences between the measurement of hedging instruments and that of hedged items.

Please refer to the Helaba Group's general risk strategy and specific risk strategies in the management report for a description of the overarching risk management strategy for managing market risk in the banking book. The Helaba Group applies hedge accounting on a selective basis for the derivatives used in the context of managing market risk in the banking book. It is not necessary to apply hedge accounting to all banking book derivatives because the risk exposures in connection with some of the banking book derivatives balance each other out and, in addition, some of the hedged banking book transactions are themselves measured at fair value through profit or loss.

Two hedge accounting models are used in the Helaba Group:

- Fair value hedges for interest rate risk

Fair value hedge accounting is used for interest rate swaps and those cross-currency swaps with a fixed and variable interest-bearing component to offset in the income statement the changes in the fair value of the designated swaps against the interest-rate-related changes in fair value of fixed-interest issues, loans or securities on the assets side of the statement of financial position. Hedged banking book transactions are allocated to each swap individually (micro hedges). Interest-rate-related changes in the fair value of hedged items are deemed to be those changes in fair value that arise from changes in the currency-specific interest rate swap curves with the predominant variable market interest rate basis (hedged risk). Together with any gains or losses from currency translation in connection with foreign currency transactions, these interest-rate-related changes in fair value make up the majority of the market-risk-related changes in the fair value of hedged items. As the hedging relationships do not involve any basis risk that could be systematically countered through a hedge ratio, one unit of hedge always hedges one unit of hedged item in the designated hedges (and the hedge ratio is therefore always 1:1). Nevertheless, the resulting offsetting in the income statement (net income from hedge accounting) is not perfect; a certain degree of hedging ineffectiveness is to be expected, particularly for the following reasons:

- Differences in the discounting for hedged items and hedging instruments resulting from the fact that, unlike hedged items, derivative hedging instruments backed by cash collateral are measured on the basis of overnight index swap (OIS) yield curves (OIS discounting).
 - Interest rate measurement gains or losses from the variable side of derivative hedges (which cannot be offset by any corresponding measurement gains or losses on fixed-interest hedged items).
- Fair value hedges for currency risk
- Cross-currency basis swaps are used as instruments in fair value hedges of currency risk. Changes in the fair value of the swaps arising from a change in the currency basis element are reported as hedge costs under other comprehensive income in the statement of comprehensive income (change from the fair value hedges of currency risk) and, on a cumulative basis, in the reserve for fair value hedges of currency risk, which is a component of accumulated OCI. The remain-

ing change in the fair value of the designated cross-currency basis swaps is recognised in net income from hedge accounting together with the spot-rate-related change in the fair value of the hedged items (hedged risk). Together with any interest-rate-related changes in fair value in fixed-rate transactions, these spot-rate-related changes in the fair value of hedged items make up the majority of the market-risk-related changes in the fair value of hedged items. As the hedging relationships do not involve any basis risk that could be systematically countered through a hedge ratio, one unit of hedge always hedges one unit of hedged item (and the hedge ratio is therefore always 1:1). Nevertheless, the resulting offsetting in the income statement is not completely perfect because the interest rate measurement gains and losses from the floating rates on both sides of the cross-currency basis swaps are not matched by any corresponding measurement gains or losses in the hedged items, which are only measured at spot rates. For this reason (and other reasons of minor significance), a certain degree of hedge ineffectiveness is always anticipated.

Hedged items are not allocated individually to the cross-currency basis swaps. Rather, a group hedge is designated for each currency. Each group hedge consists of the swaps and the primary banking book transactions in the currency concerned.

If cross-currency basis swaps are derecognised, the cumulative cross-currency basis spread elements recognised in OCI are recycled in the income statement. The same applies if a formerly designated cross-currency basis swap is de-designated. Over the maturity of the hedge, the cross-currency basis spread element in OCI decreases as a result of the residual maturity effect. Other measurement changes relating to hedges are recognised under hedging gains or losses.

In the Helaba Group, prospective effectiveness is determined using regression analysis; the critical terms match method is used for currency risks.

If ineffectiveness is identified, the hedge is terminated, even if the ineffectiveness is predominantly attributable to credit-risk-related fair value fluctuations.

The following table shows the notional amounts and the positive and negative fair values of the hedging derivatives used in hedge accounting:

in € m

	Notional amount		Positive fair values		Negative fair values	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Fair value hedges – micro hedges	55,150	44,941	965	471	1,509	66
thereof: Traded OTC	55,150	44,941	965	471	1,509	66
Hedging of interest rate risk	55,150	44,941	965	471	1,509	66
Interest rate swaps	55,094	44,886	965	471	1,507	66
Cross-currency swaps	56	55	–	–	2	–
Fair value hedges – group hedges	17,242	16,080	137	137	398	424
thereof: Traded OTC	17,242	16,080	137	137	398	424
Foreign currency hedges	17,242	16,080	137	137	398	424
Cross-currency swaps	17,242	16,080	137	137	398	424
Total	72,392	61,021	1,102	608	1,907	490

The following table shows the notional amounts by remaining maturity of the hedging derivatives used in hedge accounting as at 31 December 2019:

in € m

	Less than three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges – micro hedges	1,079	1,884	29,570	22,617	55,150
Hedging of interest rate risk	1,079	1,884	29,570	22,617	55,150
Interest rate swaps	1,079	1,884	29,514	22,617	55,094
Cross-currency swaps	–	–	56	–	56
Fair value hedges – group hedges	720	869	11,231	4,422	17,242
Hedging of currency risk	720	869	11,231	4,422	17,242
Cross-currency swaps	720	869	11,231	4,422	17,242
Total	1,799	2,753	40,801	27,039	72,392

The following table shows the remaining maturities of the hedging derivatives as at the prior-year reporting date:

in € m

	Less than three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges – micro hedges	2,289	4,135	23,519	14,998	44,941
Hedging of interest rate risk	2,289	4,135	23,519	14,998	44,941
Interest rate swaps	2,289	4,135	23,464	14,998	44,886
Cross-currency swaps	–	–	55	–	55
Fair value hedges – group hedges	296	1,449	10,027	4,308	16,080
Hedging of currency risk	296	1,449	10,027	4,308	16,080
Cross-currency swaps	296	1,449	10,027	4,308	16,080
Total	2,585	5,584	33,546	19,306	61,021

The carrying amounts of the hedged items and the accumulated hedge adjustments on continued and terminated hedges are shown in the following table:

in € m

	Carrying amount of hedged items		Accumulated hedge adjustments		Accumulated hedge adjustments on terminated hedges	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Hedging of interest rate risk						
Financial assets measured at amortised cost	13,169	5,304	157	100	714	64
Loans and receivables	13,169	5,304	157	100	714	64
Financial assets measured at fair value through other comprehensive income	13,623	13,014	-1	165	77	1
Bonds and other fixed-income securities	13,623	13,014	-1	165	77	1
Financial liabilities measured at amortised cost	33,157	26,613	769	390	372	212
Securitised liabilities	21,200	19,913	448	154	163	86
Deposits and loans	11,957	6,700	321	236	209	126
Hedging of currency risk						
Financial assets measured at amortised cost	15,729	14,640	-	-	-	-
Loans and receivables	15,729	14,640	-	-	-	-
Financial assets measured at fair value through other comprehensive income	1,689	1,439	-	-	-	-
Bonds and other fixed-income securities	1,689	1,439	-	-	-	-

(26) Financial Assets Measured at Fair Value through Other Comprehensive Income

In the Helaba Group, this item in the statement of financial position mainly consists of bonds and other fixed-income securities, together with equity instruments that the Helaba Group has elected to measure at fair value through other comprehensive income. The Helaba Group applies this option to identified strategic shareholdings. The financial instruments are mea-

sured at fair value. Gains and losses on remeasurement at fair value are reported – after taking into account deferred taxes – in other comprehensive income.

Debt instruments in the FVTOCI (recycling) measurement category are also subject to the stipulations of the IFRS 9 impairment model. Please refer to Note (37) for further disclosures.

No equity instruments measured at fair value through other comprehensive income were derecognised in the reporting period.

in € m

	31.12.2019	31.12.2018
Bonds and other fixed-income securities	23,122	21,965
thereof: Listed	22,439	21,254
Money market instruments	990	474
Medium- and long-term bonds	22,132	21,491
Loans and receivables	649	488
Other fixed-term loans	649	488
Shareholdings	32	41
Shares in unconsolidated affiliates	5	5
Other equity investments	27	36
Total	23,803	22,494

The following table shows the financial assets measured at fair value through other comprehensive income by region and counterparty:

in € m

	Germany		European Union (excluding Germany)		World (excluding European Union)		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
Bonds and other fixed-income securities	7,658	6,309	10,297	10,406	5,167	5,250	23,122	21,965
Central giro institutions	511	402	–	–	–	–	511	402
Other banks	1,947	1,780	8,691	8,673	4,514	4,620	15,152	15,073
Other financial corporations	8	15	352	300	179	230	539	545
Non-financial corporations	63	51	21	67	13	81	97	199
Government	5,129	4,061	1,233	1,366	461	319	6,823	5,746
Loans and receivables	400	268	196	167	53	53	649	488
Other financial corporations	–	–	107	99	–	–	107	99
Non-financial corporations	398	263	89	68	53	53	540	384
Government	2	5	–	–	–	–	2	5
Shareholdings	32	41	–	–	–	–	32	41
Other banks	14	20	–	–	–	–	14	20
Other financial corporations	18	21	–	–	–	–	18	21
Total	8,090	6,618	10,493	10,573	5,220	5,303	23,803	22,494

(27) Shares in equity-accounted entities

In the reporting period, a total of 32 (31 December 2018: 34) joint ventures and 2 (31 December 2018: 2) associates were accounted for using the equity method.

The breakdown of equity-accounted investments is shown below:

in € m

	31.12.2019	31.12.2018
Investments in joint ventures	44	39
Non-financial corporations	44	39
Investments in associates	4	6
Other financial corporations	1	3
Non-financial corporations	3	3
Total	48	45

There are no listed companies among the equity-accounted entities.

The share of losses of equity-accounted entities not recognised for the reporting period amounted to € 0 m (2018: € 1 m); the cumulative total of such unrecognised losses amounted to € 1 m as at 31 December 2019 (31 December 2018: € 2 m).

The table below contains summarised financial information about equity-accounted joint ventures and associates based on the Helaba Group's equity-accounted interest in the assets, liabilities, profit or loss from continuing operations and comprehensive income.

in € m

	Joint ventures		Associates	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Financial information – total				
Total assets	288	469	25	21
Total liabilities	189	388	1	1
Profit or loss from continuing operations	39	16	17	15
Comprehensive income	39	16	17	15
Financial information – proportionate				
Total assets	127	265	4	6
Total liabilities	81	223	–	–
Profit or loss from continuing operations	20	8	3	4
Comprehensive income	20	8	3	4

(28) Investment Property

Investment property is defined as property held to generate rental income in the long term or for capital appreciation, or both.

With regard to the classification of mixed-use property, in other words property in which some areas are rented out and other areas are used by Helaba itself, a check is first performed to determine whether the individual components can be sold or rented out separately and whether there is an active market for these components. If it is not possible for the property to be split, the property is only classified as investment property if the owner-occupancy area is insignificant in relation to the overall

size of the property. Property in which Helaba Group companies themselves occupy a significant area is recognised in accordance with IAS 16 and reported under property and equipment.

Investment property is measured at amortised cost. Subsequent additional costs are only capitalised if they give rise to a further economic benefit. In contrast, maintenance costs are expensed as incurred. Borrowing costs are capitalised as part of the acquisition costs in accordance with the provisions in IAS 23. The component approach is used if material parts of the property differ significantly in terms of useful life. Gains or losses on the disposal of investment property are reported in other net operating income (see Note (15)).

in € m

	31.12.2019	31.12.2018
Land and buildings leased to third parties	2,265	2,174
thereof: Right-of-use assets under leases	53	–
Undeveloped land	39	44
Vacant buildings	–	2
Investment property under construction	205	200
Total	2,509	2,420

Real estate and leasing right-of-use assets held by the GWH Group accounted for € 2,311 m (31 December 2018: € 2,231 m) of the total investment property. The contractual obligations to purchase, construct or develop investment property in the GWH Group amounted to € 450 m (31 December 2018: € 306 m).

The fair values of the properties and right-of-use assets as at 31 December 2019 came to a total of € 4,329 m (31 December 2018: € 4,099 m) and were allocated to Level 3. Please refer to Note (40) for information on determining fair value.

The table below shows the changes in investment property:

	2019	2018
	in € m	
Cost		
As at 31.12. of the prior year	2,846	2,636
Adjustments due to first-time application of new financial reporting requirements (IFRS 16)	51	–
As at 1.1.	2,897	2,636
Additions	162	291
Additions from original acquisition/construction	162	291
Disposals	–85	–32
Reclassifications	–1	–49
Reclassifications to the portfolio of owner-occupied land and buildings	–	–1
Reclassifications to property held for sale	–1	–
Reclassifications to non-current assets and disposal groups held for sale	–	–48
As at 31.12.	2,973	2,846
Accumulated depreciation		
As at 1.1.	–422	–387
Depreciation	–43	–38
Disposals	4	3
As at 31.12.	–461	–422
Accumulated impairment losses		
As at 1.1.	–4	–10
Reclassifications	–	6
Reclassifications to non-current assets and disposal groups held for sale	–	6
Changes due to currency translation and other adjustments	1	–
Other adjustments	1	–
As at 31.12.	–3	–4
Carrying amounts as at 31.12.	2,509	2,420

(29) Property and Equipment

Property and equipment comprises assets used by the Helaba Group itself, including the following: land and buildings, operating and office equipment, properties under construction (provided that they are not being constructed or developed for future use as investment property) and assets leased out to third parties under operating leases.

Property and equipment is measured at amortised cost. This cost comprises the purchase price and all directly assignable costs incurred in order to bring the asset to working condition. Subsequent additional costs are only capitalised if they give rise to a further economic benefit. In contrast, maintenance costs for property and equipment are expensed as incurred. Gains or losses on the disposal of property and equipment are reported in other net operating income (see Note (15)).

in € m

	31.12.2019	31.12.2018
Owner-occupied land and buildings	570	381
thereof: Right-of-use assets under leases	161	–
Operating and office equipment	57	53
thereof: Right-of-use assets under leases	5	–
Machinery and technical equipment	26	4
Total	653	438

Some parts of the owner-occupied land and buildings are leased out. The carrying amount of land and buildings leased out by the Helaba Group (under operating leases) stood at €71 m as at 31 December 2019 (31 December 2018: €73 m).

The changes in property and equipment were as follows:

in € m

	Owner-occupied land and buildings		Operating and office equipment		Machinery and technical equipment		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
Cost								
As at 31.12. of the prior year	589	571	215	216	4	3	808	790
Adjustments due to first-time application of new financial reporting requirements (IFRS 16)	185	–	4	–	–	–	189	–
As at 1.1.	774	571	219	216	4	3	997	790
Changes in basis of consolidation	–	–	–	–	20	–	20	–
Additions	66	16	13	13	3	1	82	30
Disposals	–4	–	–6	–13	–	–	–10	–13
Reclassifications	–13	1	–	–	–	–	–13	1
Reclassifications from the portfolio of investment property	–	1	–	–	–	–	–	1
Reclassifications to non-current assets and disposal groups held for sale	–13	–	–	–	–	–	–13	–
Changes due to currency translation and other adjustments	1	1	–	–1	–	–	1	–
As at 31.12.	824	589	226	215	27	4	1,077	808
Accumulated depreciation								
As at 1.1.	–204	–195	–162	–164	–	–	–366	–359
Depreciation	–45	–10	–13	–10	–1	–	–59	–20
Disposals	–	–	6	13	–	–	6	13
Changes due to currency translation and other adjustments	–1	1	–	–1	–	–	–1	–
As at 31.12.	–250	–204	–169	–162	–1	–	–420	–366
Accumulated impairment losses								
As at 1.1.	–4	–4	–	–	–	–	–4	–4
As at 31.12.	–4	–4	–	–	–	–	–4	–4
Carrying amounts as at 31.12.	570	381	57	53	26	4	653	438

For disclosures on right-of-use assets arising under leases, please refer to Note (50).

(30) Intangible Assets

The main items reported under intangible assets are software, goodwill arising from acquisition accounting, and intangible assets acquired as part of a business combination.

Gains or losses on the disposal of intangible assets are reported in other net operating income (see Note (15)).

As in the previous year, there were no contractual obligations to acquire intangible assets.

in € m

	31.12.2019	31.12.2018
Goodwill	7	-
Concessions, industrial and similar rights	1	-
Software	92	80
thereof: Purchased	91	79
thereof: Internally generated	1	1
Other intangible assets	1	-
Total	101	80

The goodwill as at 31 December 2019 resulted from the acquisition of an operation from DVB Bank SE consisting of a credit portfolio of international land transport finance. Please refer to Note (2) for further information. The goodwill is assigned to the land transport finance portfolio of the Transport Finance department, which has been identified as the relevant cash-generating unit (part of the Corporates & Markets segment).

Goodwill is subject to an impairment test at least once a year and additionally if there are any indications of impairment. The goodwill was tested for impairment on 31 December 2019 using an income capitalisation approach based on the income and expenses assigned to the cash-generating unit in the latest

medium-term planning. An annual growth rate of 0.5% is assumed for 2025 and the years thereafter. Present value was calculated as at 31 December 2019 on the basis of the current base interest rate of 0.2% plus a market risk premium of 7.0%. The net carrying amount for the cash-generating unit was determined from the capital allocated in accordance with the RWAs committed. The comparison between the recoverable amount (value in use) and the carrying amount (including goodwill and capitalised customer base) as at the reporting date did not indicate the requirement for the recognition of any impairment loss. If the underlying discount rate were increased by 1.0%, this would lead to a full write-off.

The intangible assets changed as follows:

in € m

	Goodwill		Concessions and industrial rights		Purchased software		Internally generated software		Other intangible assets		Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Cost												
As at 1.1.	144	144	-	-	295	267	1	-	-	-	440	411
Changes in basis of consolidation	7	-	-	-	-	-1	-	-	2	-	9	-1
Additions	-	-	1	-	36	32	-	1	-	-	37	33
Additions from Bank's own internal development	-	-	-	-	3	2	-	1	-	-	3	3
Other additions	-	-	1	-	33	30	-	-	-	-	34	30
Disposals	-	-	-	-	-38	-4	-	-	-	-	-38	-4
Changes due to currency translation and other adjustments	-	-	-	-	1	1	-	-	-	-	1	1
As at 31.12.	151	144	1	-	294	295	1	1	2	-	449	440
Cumulative amortisation												
As at 1.1.	-	-	-	-	-185	-170	-	-	-	-	-185	-170
Changes in basis of consolidation	-	-	-	-	-	1	-	-	-	-	-	1
Amortisation	-	-	-	-	-25	-19	-	-	-	-	-25	-19
Disposals	-	-	-	-	7	4	-	-	-	-	7	4
Changes due to currency translation and other adjustments	-	-	-	-	-	-1	-	-	-	-	-	-1
As at 31.12.	-	-	-	-	-203	-185	-	-	-	-	-203	-185
Cumulative impairment losses												
As at 1.1.	-144	-144	-	-	-31	-31	-	-	-	-	-175	-175
Impairment losses	-	-	-	-	-	-	-	-	-1	-	-1	-
Disposals	-	-	-	-	31	-	-	-	-	-	31	-
As at 31.12.	-144	-144	-	-	-	-31	-	-	-1	-	-145	-175
Carrying amounts as at 31.12.	7	-	1	-	91	79	1	1	1	-	101	80

(31) Income Tax Assets and Liabilities

Taxes on income are recognised and measured in accordance with the provisions in IAS 12. Current income tax assets and liabilities are calculated using the latest tax rates that will be applicable when the tax concerned arises.

Deferred tax assets and liabilities are generally recognised for temporary differences between the carrying amounts of assets and liabilities in the statement of financial position in accordance with IFRS and those in the corresponding tax base. They are measured using the tax rates that have been enacted as at the reporting date concerned and that will be relevant for the date on which the deferred taxes are realised. Deferred tax

liabilities are recognised for temporary differences that will result in a tax expense when the differences reverse. If a tax refund is anticipated on reversal of temporary differences and it is probable that this refund can be utilised, then deferred tax assets are recognised. Deferred tax assets are only recognised for tax loss carryforwards if it is sufficiently probable that they will be able to be utilised in the future. Deferred tax assets and liabilities are netted provided that they relate to the same type of tax, tax authority and maturity. They are not discounted. Deferred taxes on temporary differences in other comprehensive income are also recognised in other comprehensive income (OCI).

The deferred income tax assets and liabilities relate to the following items:

in € m

	Deferred income tax assets		Deferred income tax liabilities	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018 ¹⁾
Financial assets and liabilities measured at amortised cost	1,024	469	2,538	289
Financial assets, financial liabilities, trading assets and trading liabilities measured at fair value through profit or loss	4,570	1,066	2,783	1,139
Financial assets measured at fair value through other comprehensive income	10	16	257	96
Other assets	61	67	104	28
Provisions for employee benefits	407	309	8	5
Other provisions	95	42	10	5
Other liabilities	69	54	6	8
Tax loss carryforwards	19	22	–	–
Deferred tax assets and liabilities, gross	6,255	2,045	5,706	1,570
Netted against deferred tax liabilities/assets	–5,697	–1,555	–5,697	–1,555
Total	558	490	9	16
thereof: Non-current	378	358	9	16

¹⁾ Prior-year figures restated: The line “thereof: Non-current” did not include the consolidation amount in the previous year.

Deferred tax assets and deferred tax liabilities have been offset in accordance with IAS 12.74.

The following table shows the deferred taxes recognised in association with items in other comprehensive income:

in € m

	Before tax		Taxes		After tax	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Items that will not be reclassified to the consolidated income statement:	-868	-631	251	187	-617	-444
Remeasurement of net defined benefit liability	-916	-623	269	183	-647	-440
Change in fair value of equity instruments measured at fair value through other comprehensive income	-8	1	-	1	-8	2
Credit risk-related change in fair value of financial liabilities designated voluntarily at fair value	56	-8	-18	2	38	-6
Items that will be reclassified to the consolidated income statement:	178	118	-49	-34	129	84
Change in fair value of debt instruments measured at fair value through other comprehensive income	204	142	-64	-48	140	94
Gains or losses from hedges of a net investment in a foreign operation	-17	-17	-	-	-17	-17
Gains or losses from currency translation of foreign operations	37	35	-	-	37	35
Gains or losses from fair value hedges of currency risk	-46	-42	15	14	-31	-28
Total	-690	-513	202	153	-488	-360

The calculation of deferred tax assets for the domestic and foreign reporting units was based on individual tax rates. Given an average municipality trade tax multiplier of 452 %, the combined income tax rate for the Bank in Germany in 2019 was 31.7 %, which was unchanged compared with the prior year.

In the case of deferred tax assets, the recovery of which depends on future taxable profits that extend beyond the impact on earnings from the reversal of taxable temporary differences in existence on the reporting date, the Helaba Group only recognises such deferred tax assets to the extent that it is reasonably certain they could be utilised. If the deferred tax assets are to be utilised, there must be sufficient taxable profits in the foreseeable future against which the associated tax loss carryforwards can be offset. In this regard, the Helaba Group generally uses a planning horizon of five years.

On the basis of the multi-year planning, the Bank has concluded that the deferred tax assets are recoverable and can be justified for the period covered by the multi-year planning because sufficient taxable income will be available.

As at 31 December 2019, the Helaba Group had recognised deferred tax assets of € 5 m (31 December 2018: € 10 m) in respect of corporate income tax loss carryforwards of € 27 m (31 December 2018: € 65 m) and deferred tax assets of € 14 m (31 December 2018: € 12 m) in respect of trade tax loss carryforwards of € 104 m (31 December 2018: € 74 m).

Overall, no deferred tax assets had been recognised in respect of corporate income tax loss carryforwards of € 23 m (31 December 2018: € 18 m) and in respect of trade tax loss carryforwards of € 68 m (31 December 2018: € 130 m) because Helaba did not believe there was sufficient probability of taxable profits in the

foreseeable future against which these tax loss carryforwards could be used. There is no time limit for the utilisation of loss carryforwards.

In the reporting period, the Bank recognised impairment losses on € 1 m of deferred tax assets in respect of loss carryforwards.

The current income tax liabilities include provisions for tax risks. These provisions are determined on the basis of the most likely amount required to settle the liability.

The Bank has not reported any contingent liabilities in respect of tax risks.

(32) Non-Current Assets and Disposal Groups Classified as Held for Sale, and Associated Liabilities

Non-current assets held for sale, subsidiaries already acquired with a view to onward disposal, disposal groups as defined by IFRS 5 and the liabilities associated with these assets are reported in a separate item on the face of the statement of financial position. In the case of subsidiaries already acquired with a view to onward disposal, the income and expenses associated with this item (including changes in deferred taxes) are recognised in profit or loss under net profit after tax from discontinued operations. If non-current assets and disposal groups are to be recognised in this way in accordance with IFRS 5, it must be highly probable that the assets and disposal groups concerned will actually be sold within twelve months. Until the relevant criteria are satisfied, the assets are measured in accordance with the general recognition and measurement provisions. As soon as the criteria under IFRS 5 are satisfied, the assets are measured from then on at the lower of the carrying amount and fair value less costs to sell.

The assets held for sale in an amount of € 81 m (31 December 2018: € 42 m) are two commercial properties. These assets are recognised at a carrying amount based on capitalisable construction costs. As at the reporting date, the carrying amount was below the fair value less the costs of disposal.

Sale and purchase agreements have already been signed for both properties and the sales are expected to be completed in the first half of 2020. In the case of the property that was already reported under this item as at 31 December 2018, the fulfilment of the sale and purchase agreement will be completed on completion of the property. The completion of the property, and therefore the fulfilment of the sale and purchase agreement, had originally been expected for the second half of 2019.

(33) Other Assets and Liabilities

Other assets mainly consist of property held for sale as part of ordinary business activities. These assets comprise properties, both completed and under construction, that Helaba is itself developing and marketing. The properties are measured at the lower of cost and fair value less cost to sell, i.e. the estimated recoverable sales proceeds less anticipated remaining costs for completion and sale.

Other assets and other liabilities are used for reporting any other assets or liabilities that, viewed in isolation, are of minor significance and that cannot be allocated to any other item in the statement of financial position.

in € m

	31.12.2019	31.12.2018
Inventories	576	458
Property held for sale	573	456
Other inventories/work in progress	3	2
Advance payments and payments on account	306	149
Other taxes receivable	3	7
Other assets	531	260
Other assets	1,416	874

in € m

	31.12.2019	31.12.2018
Advance payments/payments on account	187	211
Tax liabilities, other taxes	33	28
Employee benefits due in short term	80	75
Sundry liabilities	98	202
Other liabilities	398	516

(34) Provisions

in € m

	31.12.2019	31.12.2018
Provisions for employee benefits	2,110	1,806
Pensions and similar defined benefit obligations	2,041	1,732
Other employee benefits due in the long term	69	74
Other provisions	355	281
Provisions for off-balance sheet liabilities	47	39
Provisions for loan commitments and financial guarantees	47	39
Restructuring provisions	94	18
Provisions for litigation risks	20	24
Sundry provisions	194	200
Total	2,465	2,087

Provisions for Pensions and Similar Obligations

Company pension arrangements in the Helaba Group comprise various types of benefit plans. There are both defined contribution plans and defined benefit plans.

In the case of defined contribution plans, fixed contributions are paid to external pension providers. No provisions are generally recognised in connection with these defined contribution plans because the Group is not subject to any further payment obligations. The ongoing contributions for defined contribution plans are recognised in general and administrative expenses.

As regards defined benefit plans, Helaba operates a number of schemes involving total benefit commitments, final salary schemes and pension module schemes. Some of the pension obligations are covered by assets that represent plan assets as defined by IAS 19. These plan assets are offset against the pension obligations. If this gives rise to an asset surplus, the carrying amount of the net defined benefit asset (net DBA) is limited to the present value of the associated economic benefits available to the Group during the term of the pension plan or following settlement of the obligations (asset ceiling). Economic benefits may be available, for example, in the form of refunds from the plan or reductions in future contributions to the plan.

The defined benefit obligations (DBO) are determined annually by external actuaries. The obligations are measured using the projected unit credit method based on biometric assumptions, salary and pension increases expected in the future, and a current market discount rate. This discount rate is based on the coupon for investment-grade corporate bonds in the same currency with a maturity matched to the weighted average maturity for the payment obligations. In Germany, a reference discount rate is applied that takes into account a large number of AA-rated bonds and has been adjusted for statistical outliers. The Helaba Group determines this discount rate largely on the basis of Mercer's discount rate recommendation. The actual discount rate used is in a range covered by 0.5 percentage points, within which three expected scenarios are calculated. Based on Mercer's rate recommendation, Helaba uses the discount rate from the scenario deemed to be the best estimate taking into account the duration and discount rate recommendations from other actuaries. This procedure is intended to avoid positive or negative outliers.

In accordance with IAS 19, the defined benefit expense to be recognised in profit or loss is largely determined right at the start of a financial year on the basis of the actuarial assumptions applicable at that point. The pension expense to be recognised in the income statement includes mainly the net interest component and the current service cost.

The net interest component comprises both the expense arising from unwinding the discount on the present value of the pension obligation and the imputed interest income on the plan assets. The net interest is determined by multiplying the net defined benefit liability (present value of the defined benefit obligation less plan assets) at the start of the period by the applicable discount rate, taking into account any changes in the net defined benefit liability during the period as a result of contribution and benefit payments. If a surplus of plan assets arises, the net interest component also includes the net interest on the effect of the asset ceiling. The net interest expense is included as part of the net interest income figure reported in the income statement.

The current service cost represents the increase in pension obligations attributable to the service provided by employees in the financial year; it is reported under general and administrative expenses.

If the present value of a defined benefit obligation changes as a result of the amendment or curtailment of a plan, the resulting effects are recognised in profit or loss under general and administrative expenses as a past service cost. The amount concerned is recognised on the date the amendment or curtailment occurs. Any gain or loss arising from the settlement of defined benefit obligations is treated in the same way. Following a plan amendment, curtailment or settlement, the current service cost and the net interest for the period after the remeasurement must be determined using the actuarial assumptions at the time of the change.

Any variances between the actuarial assumptions at the start of the period and actual trends during the financial year, together with any updates made to the measurement parameters at the end of the financial year, result in remeasurement effects, which are then reported in other comprehensive income.

The changes in provisions for pensions and similar obligations reported in the statement of financial position were as follows:

in € m

	DBO		Plan assets		Net amount of the pension obligations	
	2019	2018	2019	2018	2019	2018
As at 1.1.	2,105	2,098	-373	-380	1,732	1,718
Total pension cost	90	88	-7	-7	83	81
Interest expense (+)/interest income (-)	42	41	-7	-7	35	34
Current service cost	45	47	-	-	45	47
Past service cost	3	-	-	-	3	-
Total gains or losses on remeasurement	302	-21	-9	11	293	-10
Actuarial gains (-)/losses (+) on financial assumptions	307	-22	-	-	307	-22
Actuarial gains (-)/losses (+) on demographic assumptions	14	16	-	-	14	16
Experience adjustment gains (-)/losses (+)	-19	-15	-	-	-19	-15
Gains or losses on remeasurement of plan assets	-	-	-9	11	-9	11
Employee contributions	3	3	-3	-3	-	-
Employer contributions	-	-	-16	-8	-16	-8
Benefits paid	-65	-65	13	16	-52	-49
Payments in connection with plan settlements	-16	-	16	-	-	-
Changes due to currency translation	5	2	-4	-2	1	-
As at 31.12.	2,424	2,105	-383	-373	2,041	1,732

The main defined benefit plans (in the form of direct commitments) at Landesbank Hessen-Thüringen are as follows:

In the case of employees who joined the Bank on or before 31 December 1985 and who are eligible for pension benefits, there is a fully dynamic comprehensive defined benefit plan, in which the annual benefits payable under the plan are up to a maximum of 75 % of the pensionable remuneration on retirement date, subject to deduction of third-party pension entitlements. During the period in which a pension is drawn, pension benefits are increased in line with any pay-scale increases. The existing beneficiaries are primarily retirees and surviving dependants. However, there is also a small proportion of beneficiaries who are still active or who have left the Bank but have retained vested entitlements.

The retirement benefit system in place between 1986 and 1998 is a scheme based on final salary with a split pension benefits formula. The annual pension benefits are linked to a certain percentage of pensionable remuneration earned for each year of service depending on the contribution assessment ceiling in the statutory pension insurance scheme (salary components above the ceiling being weighted differently from those below the ceiling). The plan is based on a maximum of 35 years of service and pension benefits rise in line with pay-scale increases during the period in which the benefits are drawn. The existing beneficiaries are predominantly current employees and individuals who have left the Bank but have vested rights.

For the defined benefit plan in force since 1999, the retirement pension is calculated by adding all the pension credits accrued during the pensionable period of service. The pension credits are determined by multiplying the pensionable remuneration for the respective calendar year by an age-dependent factor. During the period in which the pension is drawn, the benefits are subject to an annual increase of 1 %. The plan is open to new members. The current members of the scheme are almost exclusively active employees and individuals who have left the Bank but have vested rights.

In addition, the Helaba Group has individual commitments to pay annual pension benefits. These commitments for the most part involve comprehensive defined benefit plans similar to those used by the civil service in Germany in which the benefits represent the difference between a target pension and the statutory pension entitlement and in which the pension benefits are increased in line with pay-scale increases during the period in which pensions are drawn. The existing beneficiaries under these plans are mainly retirees, surviving dependants and individuals who have left the Bank but still have vested rights. However, the plans remain open to new members.

As a result of the takeover of the S-Group Bank business, the transfer of the business unit in accordance with section 613a BGB meant that the pension obligations of Portigon AG to the new employees were also transferred to Helaba.

Employees who, as a result of the break-up of Westdeutsche Landesbank Girozentrale into the public-law Landesbank NRW (currently NRW.Bank) and the private-law WestLB AG (currently Portigon AG) in 2002, were assigned to NRW.Bank were put on special leave so that they could enter into a second employment relationship with Portigon AG (VBB dual contract holders). The pension commitments are maintained by NRW.Bank without change. Economically, however, the costs are charged to Helaba because NRW.Bank has to be reimbursed for the pension payments it has to make.

For the vested pension rights of the other employees, the accrued entitlement was determined at the time of transfer of the business unit and the corresponding obligation was transferred to Helaba. The externally funded vested pension rights vis-à-vis BVV Versorgungskasse des Bankgewerbes e. V., Berlin, were exempted from contributions as from the date of the transfer of the business unit. As from the date of transfer of the business unit, the employees were registered with Helaba's company pension scheme under the service agreement in force since 1999.

There is also an employee-funded pension plan in the form of a deferred compensation scheme in which the benefits comprise lump-sum capital payments. In this case, investment fund units are purchased for each amount of deferred compensation and an age-dependent capital component is calculated for the employee concerned using an arm's length guaranteed rate of return. Upon retirement, the employee is paid the higher of the total capital components or the fund assets. The deferred compensation options available to employees are being extended under the German Act to Strengthen Occupational Retirement Pensions (Betriebsrentenstärkungsgesetz, BRSg) to include insurance-based schemes, which are being offered to employees primarily as a gross deferred compensation option.

At Frankfurter Sparkasse, employees who joined the bank before 31 December 2014 are entitled to a pension from the Frankfurter Sparkasse pension fund. This is a regulated pension fund, and the pension fund's obligation to regularly adjust the lifetime benefits is implemented in the form of a direct commitment by Frankfurter Sparkasse. Under the subsequent arrangements, there is a defined contribution plan funded by both the employer and employees; the pension is provided through BVV Versicherungsverein des Bankgewerbes a.G. Employees of the former Stadtsparkasse Frankfurt are entitled to a pension from Zusatzversorgungskasse der Stadt Frankfurt (ZVK Frankfurt), which Helaba identified as an obligation during the course of its acquisition of Frankfurter Sparkasse and recognises in its statement of financial position. There are also individual commitments, largely in the form of comprehensive defined benefit plans (in which the benefits represent the difference between a target pension and third-party pension entitlements) and an employee-funded pension plan.

Employees at the London branch are members of a defined benefit plan, although the plan is now closed to new entrants. This plan is a pension fund that follows local measurement arrangements. It is reviewed at regular intervals to ensure that it meets the requirements for external financing. In 2018, the vested rights were determined for the members of the pension scheme and future services are being funded through a matching plan in the form of a defined contribution plan via an external pension provider.

At the subsidiary Frankfurter Bankgesellschaft (Schweiz) AG, the statutory requirements related to occupational pensions are satisfied by a separate pension scheme linked to a collective arrangement under the auspices of a third-party provider.

The following table shows the funding status of the defined benefit plans:

in € m

	DBO		Plan assets		Net amount of the pension obligations	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Domestic defined benefit plans	2,296	1,980	-296	-281	2,000	1,699
Landesbank Hessen-Thüringen	1,618	1,382	-40	-36	1,578	1,346
Comprehensive defined benefit plans	830	774	-	-	830	774
Defined benefit plan up to 1985	691	651	-	-	691	651
Individual commitments	90	82	-	-	90	82
VBB dual contract holders	49	41	-	-	49	41
Final salary plans (Retirement pension scheme 1986 – 1998)	272	219	-	-	272	219
Pension credit system (Retirement pension scheme from 1999)	368	270	-	-	368	270
Other plans	148	119	-40	-36	108	83
Frankfurter Sparkasse	603	531	-245	-236	358	295
Frankfurter Sparkasse pension fund	297	262	-243	-234	54	28
Pension fund adjustment obligation	113	93	-	-	113	93
ZVK Frankfurt	105	96	-	-	105	96
Individual commitments	78	70	-	-	78	70
Other plans	10	10	-2	-2	8	8
Other Group companies	75	67	-11	-9	64	58
Foreign defined benefit plans	128	125	-87	-92	41	33
Total	2,424	2,105	-383	-373	2,041	1,732

The following table shows the breakdown of plan assets:

	31.12.2019	31.12.2018
Plan assets quoted in active markets	344	316
Cash on hand, demand deposits and overnight money balances with central banks and banks	3	5
Loans and receivables	11	–
Bonds and other fixed-income securities	217	202
Equity shares and other variable-income securities	113	110
Plan assets not quoted in active markets	39	57
Loans and receivables	–	7
Qualifying insurance contracts	39	51
Fair values of plan assets	383	373

As was the case at 31 December 2018, the plan assets did not include any of the Group's own assets at the end of the reporting year.

For the next financial year, Helaba expects to make contributions to plan assets of € 10 m (2018: € 7 m).

Pension obligations for which there are no plan assets in accordance with IAS 19 are funded for the most part by long-term special funds with an investment focus on bonds.

The Helaba Group's pension obligations are exposed to various risks. This exposure is attributable to general market volatility and also specific risks. However, there are no extraordinary risks arising in connection with pension obligations.

Risks from general market volatility mostly involve risks arising from changes in the inflation rate and market interest rates. Other risks include the risk of longevity.

- **General market volatility**

The main impact from general market volatility on the level of the defined benefit obligations is through changes in the discount rate. Over the last few years there has already been a noticeable increase in pension provisions as a result of the general fall in discount rates. The principal reason why discount rates have such a significant impact on defined benefit obligations is the length of the maturities involved in these obligations.

- **Inflation risk – pension adjustment**

The Helaba Group applies the principles in the German Occupational Pensions Act (Betriebsrentengesetz, BetrAVG) when determining adjustments as part of benefit reviews for its defined benefit plans. The more recent schemes, which are structured as pension credit systems, are subject to fixed adjustment rates and thus are largely independent of the inflation rate and future pay-scale increases.

- **Inflation risk – salary increases, pay scale increases, increases in civil servant remuneration**

In most of the older pension arrangements (comprehensive defined benefit plan up to 1985 and final salary plan), Helaba increases pensions in line with pay-scale trends in both private and public-sector banks. Increases in pay scales covering pensionable salaries therefore have an effect on the level of current pension benefits. Individual defined benefit plans provide for the adjustment of pensions on the basis of civil service pay in accordance with the regulations in the federal state concerned (Hesse, Thuringia, North Rhine-Westphalia).

- Risk of longevity

Given that by far the most common form of benefit is an annuity, Helaba bears the risk that the beneficiaries will live longer than the period estimated in the actuarial calculations. Normally, this risk balances out across all the beneficiaries as a whole and only becomes material if general life expectancy turns out to be higher than forecast.

As far as specific risks are concerned, it is worth mentioning that defined benefit obligations are to a certain extent dependent on external factors. In addition to the factors already referred to

(adjustments related to pay-scale increases or increases in civil servant pay), there are other influences subject to variation beyond the control of Helaba. This is particularly true in the case of changes to statutory pensions and other externally funded pensions, which are offset as part of the comprehensive defined benefit plans. Helaba must bear the risk in this regard.

The principal actuarial assumptions on which the measurement of the defined benefit obligations is based are shown in the following table (weighted average rates):

in € m

	31.12.2019	31.12.2018
Discount rate	1.3	2.0
Salary trend	2.1	2.1
Pension trend	1.5	1.5

In both the year under review and the previous year, the probability of invalidity and death in Germany was based on the 2018 generation mortality tables published by Professor Dr. Heubeck. The application of the new generation mortality tables resulted in actuarial losses of € 19 m in the previous year.

Changes in the main actuarial assumptions would have the following effects on the present value of all the defined benefit obligations:

in € m

	31.12.2019	31.12.2018
Discount rate (decreased by 50 basis points)	254	206
Salary trend (increased by 25 basis points)	80	65
Pension trend (increased by 25 basis points)	77	78
Life expectancy (improved by 10 %)	121	76

The sensitivity analysis shown above reflects the change in one assumption, all the other assumptions remaining as in the original calculation. In other words, the analysis does not factor in any possible correlation effects between the individual assumptions. This analysis only takes into account changes in assumptions that lead to an increase in the liability. The relevant present value of the obligations arising from changes to key actuarial

assumptions that lead to a reduction in the liability can be extrapolated approximately from the calculated values by looking at the figures symmetrically.

The impact on the obligations from a change to an actuarial assumption is calculated precisely on the basis of the projected unit credit method. Approximation methods have not been

used. The absolute change in assumptions in terms of basis points in each case is based on the average long-term changes that have occurred in the recent past and on potential future changes, and is therefore estimated as a mean change.

As at 31 December 2019, the weighted average maturity of the defined benefit obligations was 20.6 years (31 December 2018: 19.2 years). The following table shows the maturity structure of the forecast pension payments:

in € m

	31.12.2019	31.12.2018
Forecast pension payments with maturities of up to one year	67	64
Forecast pension payments with maturities of one year to five years	272	281
Forecast pension payments with maturities of five years to ten years	386	430

The Helaba Group is involved in joint defined benefit plans with a number of other employers (multi-employer plans) and these defined benefit plans cannot be recognised as such because there is insufficient reliable information available. The plans are therefore treated as defined contribution plans in accordance with IAS 19. They involve membership of pay-as-you-go pension schemes in the form of regulated pension funds that switched to an “as funded” basis on 1 January 2002. The funds concerned are the regional supplementary pension funds and Versorgungsanstalt des Bundes und der Länder, all of which have similar statutes in terms of content. With the switch to the “as funded” basis, the existing defined benefit obligations were converted to a defined contribution system. The statutes authorise the collection of additional contributions if necessary in order to fund agreed benefits; alternatively, benefits can be reduced if there is insufficient cover in the fund (recovery money, recovery clause). There is no allocation of assets and liabilities according to originator. The pension fund publishes information on its business performance and risk trends solely in an annual report. It does not disclose any further information. As in the previous year, expenses amounting to € 1 m were incurred in connection with these plans.

There are also defined contribution plans arising from Helaba’s membership of BVV Versicherungsverein des Bankgewerbes a. G. Curtailment of the benefits under the pension terms will be offset by additional contributions on the part of the employer. Further defined contribution plans are externally funded through direct insurance with insurers subject to public law. As far as possible, these arrangements are through SV Sparkassen-Versicherung and Provinzial Lebensversicherung AG. The foreign branches in London and New York also have their own

defined contribution plans funded through external pension providers. The total expenses in the reporting period for defined contribution plans were € 4 m (2018: € 3 m).

The employer subsidy for pension insurance in 2019 amounted to € 37 m (2018: € 35 m).

Other employee benefits due in the long term

Provisions for other employee benefits due in the long term are recognised for employee benefits that are not entirely payable within twelve months after the reporting period. These items mainly comprise provisions for long-service awards, early retirement agreements, partial retirement agreements and deferred bonuses. Such items are measured in line with IAS 19, although using a simplified method, according to which remeasurements of the net obligation are recognised through profit or loss.

Other provisions

Other provisions are recognised in accordance with IAS 37 if the Helaba Group has incurred a present obligation (legal or constructive) as a result of a past event, it is probable that settlement will result in an outflow of resources and the amount can be reliably estimated. The timing or amount of the obligation is uncertain. The amount recognised as a provision is the best possible estimate as at the reporting date of the expense that

will be necessary to settle the obligation. Non-current provisions are recognised at present value if the time value of money is material. Provisions are discounted using a standard market discount rate commensurate with the risk involved.

The following table shows the changes in other provisions and provisions for other long-term employee benefits:

in € m

	Provisions for other long-term employee benefits	Provisions for other off-balance sheet commitments	Re- structuring provisions	Provisions for litigation risks	Provisions for tax proceedings	Sundry provisions
As at 31.12.2018	74	–	18	24	–	200
Adjustments due to first-time application of new financial reporting requirements (IFRS 16)	–	–	–	–	–	–5
As at 1.1.2019	74	–	18	24	–	195
Changes in basis of consolidation	–	–	–	3	–	–
Use	–27	–	–3	–7	–	–112
Reversals	–1	–	–	–4	–	–34
Reclassifications	7	–	–7	–	–	–
Interest cost	1	–	–	–	–	–
Additions	15	–	86	4	–	145
As at 31.12.2019	69	–	94	20	–	194

The following table shows the changes during the prior-year period:

in € m

	Provisions for other long-term employee benefits	Provisions for other off-balance sheet commit- ments	Re- structuring provisions	Provisions for litigation risks	Provisions for tax proceedings	Sundry provisions
As at 1.1.2018	81	1	17	32	–	212
Use	–30	–	–1	–8	–	–112
Reversals	–1	–1	–	–1	–	–19
Reclassifications	10	–	–7	–	–	–
Interest cost	–	–	–	–	–	1
Additions	14	–	9	1	–	118
As at 31.12.2018	74	–	18	24	–	200

Provisions for other off-balance sheet liabilities result from liabilities outside the scope of application of the IFRS 9 impairment model that are subject to the recognition and measurement regulations of IAS 37. Please refer to Note (37) for further information on provisions for loan commitments and financial guarantees within the scope of application of the IFRS 9 impairment model.

The restructuring provisions largely relate to the “Scope” efficiency programme launched in the Helaba Group in the reporting year, for which a provision of € 71 m was recognised.

Claims are pursued against the Helaba Group before the courts and in arbitration proceedings. Provisions for litigation risks have been recognised if it is estimated that the probability of a successful claim is greater than 50 %. The amount of the provision is the amount that the Bank is likely to have to pay in the event of a successful claim. The provisions for litigation risks recognised by the Helaba Group also take into account amounts to cover litigation costs (court costs and other expenses in connection with litigation, such as legal and other fees).

Helaba has recognised provisions for litigation risks mainly to cover lawsuits brought by investors in closed funds. Investors who believe that their expectations with regard to a particular investment have not been met base their claims on non-compliance with consumer protection regulations. Depending on

the circumstances in each individual case, the Bank will examine the possibility of settling a claim in terms of the nature and scope of a potential settlement. Helaba will not provide a detailed description here of individual cases or proceedings, nor a breakdown of the overall amount for the provision for litigation risks. Claimants could otherwise draw conclusions about the Bank’s litigation and settlement strategy.

The provisions for litigation risks are reviewed quarterly to ensure they are appropriate. The provisions may be increased or reversed on the basis of management assessments taking into account the legal situation. The final costs incurred in connection with litigation risks could differ from the recognised provisions because an assessment of probability and the determination of figures for uncertain liabilities arising from litigation to a large degree requires measurements and estimates that could prove to be inaccurate as litigation proceedings progress.

Cases that do not meet the criteria for the recognition of provisions are reviewed to establish whether they need to be disclosed under contingent liabilities and, where appropriate, are included in the information disclosed in Note (47).

The sundry provisions mainly relate to obligations in connection with share transactions, flat-rate employment taxes, interest on retrospective tax payments as well as risks related to the reimbursement of loan processing fees.

Additions to and reversals of provisions for other long-term employee benefits are normally recognised under personnel expenses; those relating to other off-balance sheet liabilities, to restructuring provisions and to provisions for litigation expenses are reported under other net operating income. Additions to sundry provisions are normally included in general and administrative expenses or other net operating income, depending on the underlying circumstances, but reversals of these provisions are recognised under other net operating income. The interest cost (from unwinding of discount) is reported under net interest income.

Of the total for other provisions, current provisions accounted for € 209 m (31 December 2018: € 145 m).

(35) Equity

The subscribed capital of € 2,509 m comprises the share capital of € 589 m paid in by the owners in accordance with the Charter and the capital contributions of € 1,920 m paid by the Federal State of Hesse.

As at 31 December 2019, the share capital was attributable to the owners as follows:

	in € m	Share in %
Sparkassen- und Giroverband Hessen-Thüringen	405	68.85
State of Hesse	48	8.10
Rheinischer Sparkassen- und Giroverband	28	4.75
Sparkassenverband Westfalen-Lippe	28	4.75
Fides Beta GmbH	28	4.75
Fides Alpha GmbH	28	4.75
Free State of Thuringia	24	4.05
Total	589	100.00

The capital reserves comprise the premiums from issuing share capital to the owners.

In 2018, the Helaba Group issued Additional Tier 1 (AT1) capital through registered bonds in the amount of € 354 m. All AT1 bonds are unsecured subordinated Helaba bonds. The servicing of these bonds is based on an interest rate applied to the respective nominal amount. These bonds provide fixed interest rates for the period between the issue date and the first possible early repayment date. Afterwards, interest rates will be established for another period of ten years. According to the bond terms, Helaba may be obliged, but also has extensive rights, to take the sole decision to suspend interest payments at any time. Interest payments are not cumulative, which means that suspended interest payments will not be paid out in subsequent periods. These bonds have no maturity date, and may be terminated by Helaba at specific dates. If Helaba does not terminate a bond, it has additional termination options every ten years.

Early terminations may be permissible provided that all tax-related and regulatory conditions are met. Every termination is subject to approval from the competent supervisory authority. The repayment as well as the nominal amount of the bonds may be reduced if a triggering event occurs. The decline of Helaba Group's Tier 1 capital ratio to under 5.125 % on a consolidated basis would be a triggering event. After the occurrence of a triggering event, any reduced bond amounts may be increased again under specific conditions. According to the applicable resolution stipulations, the competent supervisory authority may exercise a series of rights; for instance, the supervisory authority may decide to wholly or partially mark down entitlements to repayment of capital and/or to convert such entitlements into CET1 instruments. As at 30 June 2019, the bond amounts recognised in the consolidated statement of financial position stood at € 354 m (31 December 2018: € 354 m).

The retained earnings amounting to € 4,788 m (31 December 2018: € 4,414 m) comprise the profits retained by the parent company and the consolidated subsidiaries as well as amounts from the amortised results of acquisition accounting and from other consolidation adjustments. Retained earnings comprised reserves provided for by the articles of association of € 294 m.

If these reserves are used to cover losses, the net profit generated in subsequent years is used in full to restore the reserves required by the Charter to the required level.

The following table shows the changes in the individual components of accumulated other comprehensive income (OCI) in the reporting period:

in € m

	Items that will not be reclassified to the consolidated income statement, after taxes			Items that will be reclassified to the consolidated income statement, after taxes				Accumulated other comprehensive income
	Remeasurement of net defined benefit liability	Change in fair value of equity instruments measured at fair value through other comprehensive income	Credit risk-related change in fair value of financial liabilities designated voluntarily at fair value	Change in fair value of debt instruments measured at fair value through other comprehensive income	Gains or losses from hedges of a net investment in a foreign operation	Gains or losses from currency translation of foreign operations	Gains or losses from fair value hedges of currency risk	
As at 31.12.2017	-450	-	-	197	-17	27	-	-243
Adjustments due to first-time application of new financial reporting requirements	-	-1	2	-40	-	-	-	-39
As at 1.1.2018	-450	-1	2	157	-17	27	-	-282
Other comprehensive income for the reporting period	10	3	-8	-63	-	8	-28	-78
As at 31.12.2018	-440	2	-6	94	-17	35	-28	-360
Other comprehensive income for the reporting period	-207	-10	44	46	-	2	-3	-128
As at 31.12.2019	-647	-8	38	140	-17	37	-31	-488

Capital Management

The Helaba Group defines capital management as all processes directly or indirectly involved in ensuring that it upholds its risk-bearing capacity (both from a regulatory perspective in Pillar I and from an economic perspective in Pillar II) and that it is in a position to monitor its capital adequacy in a timely manner. The main components of capital management in the Helaba Group are planning regulatory own funds and own funds ratios as part of the planning process, allocating own funds, monitoring changes in risk exposures and complying with regulatory and economic capital limits, monitoring the remaining capital buffer as well as recognising a projected cost of capital as part of contribution margin accounting. The aim of capital management is to allocate capital over the various divisions of the Group, with due consideration being given to risk and return aspects, and also in line with the need to comply with regulatory requirements concerning capital adequacy.

Capital management focuses on both regulatory own funds and internal capital from a complementary economic management perspective.

The minimum regulatory requirements that need to be taken into account include Regulation (EU) No. 575/2013 (Capital Requirements Regulation, CRR), the additional provisions in the German Banking Act (Kreditwesengesetz, KWG) and also the requirements specified under the European Single Supervisory Mechanism (SSM). Article 92 of the CRR specifies that institutions must at all times have adequate own funds in relation to their risk-weighted assets (RWAs). It makes a distinction between the following minimum ratios:

- Common Equity Tier 1 (CET1) capital ratio: 4.5 %
- Tier 1 capital ratio (where Tier 1 capital is the total of CET1 and Additional Tier 1 capital): 6.0 %
- Total capital ratio (based on the total of Tier 1 and Tier 2 capital): 8.0 %.

In addition, KWG requirements specify general and bank-specific capital buffers such as the capital conservation buffer, the countercyclical capital buffer and the buffers for global and other systemically important banks, which in each case relate to CET1 capital and ultimately increase the minimum CET1 capital ratio for each bank by at least 2.5 %. In 2019, both the capital conservation buffer and the buffer for other systemically important banks (the buffer for systemic importance relevant to Helaba) reached their final levels.

To add to these generally applicable requirements, the ECB lays down further institution-specific requirements for institutions subject to the SSM. The minimum CET1 capital ratio required to be maintained by the Helaba Group in 2019 under the Supervisory Review and Evaluation Process (SREP) decision taken by the ECB was 9.85 % (2018: 8.89 %).

Within the risk appetite framework, the Board of Managing Directors of Helaba sets internal targets for the minimum ratios that include a sufficient buffer in respect of the regulatory minimum requirements so that Helaba is able to operate at all times without any restrictions on its business activities.

The regulatory own funds of the Helaba banking group are determined in accordance with Regulation (EU) No. 575/2013 (CRR) and the complementary provisions in sections 10 and 10a of the KWG. In accordance with the classification specified in the CRR, own funds comprise Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital.

The regulatory own funds requirements and the capital ratios are also determined in accordance with the provisions of the CRR.

As at 31 December 2019, the breakdown of the own funds of the Helaba banking group was as follows (each amount shown after regulatory adjustments):

in € m

	31.12.2019	31.12.2018
Tier 1 capital	9,153	8,883
Common Equity Tier 1 capital (CET1)	8,483	8,108
Additional Tier 1 capital	670	775
Tier 2 capital	2,229	2,288
Own funds, total	11,382	11,171

The following capital requirements and ratios were applicable as at 31 December 2019:

in € m

	31.12.2019	31.12.2018
Default risk (including equity investments and securitisations)	4,213	3,719
Market risk (including CVA risk)	297	338
Operational risk	272	285
Total own funds requirement	4,782	4,342
CET1 capital ratio	14.2 %	14.9 %
Tier 1 capital ratio	15.3 %	16.4 %
Total capital ratio	19.0 %	20.6 %

The Tier 1 and total capital ratios comply with the target ratios specified by Helaba in its capital planning. The Helaba Group is complying with the regulatory requirements, including the requirements of the European SSM, regarding capital adequacy.

The leverage ratio measures the ratio between regulatory capital and the unweighted total of all on-balance sheet and off-balance sheet asset items including derivatives. Currently, banks must disclose the leverage ratio and report it to the supervisory authorities as an indicator for monitoring purposes. However, based on a new EU Regulation amending the CRR published at

the beginning of June 2019, a binding minimum leverage ratio of 3.0 % will apply from mid-2021. Helaba is already taking the leverage ratio into account in its management systems.

More detailed information on the structure and adequacy of Helaba's regulatory own funds, together with a reconciliation to the own funds in the IFRS consolidated statement of financial position, has been published in the Helaba Group's disclosure report in accordance with section 26a KWG (offenlegung.helaba.de).

Disclosures on Financial Instruments and Off-Balance Sheet Transactions

(36) Risk Management

The Group's risk strategy focuses on the assumption of risks with a view to making profits and takes account of the company's economic and regulatory capital. The identified risks are continuously measured and monitored for risk management purposes. The methods used are subject to constant improvement. With regard to the organisation of risk management, the individual risk types as well as risk concentrations, please refer to the risk report, which forms an integral part of the management report.

(37) Credit Risks Attributable to Financial Instruments

The Helaba Group applies the three-stage IFRS 9 impairment model to the following financial instruments and measurement categories:

- Financial assets in the AC measurement category
- Debt instruments in the FVTOCI (recycling) measurement category
- Lease receivables
- Receivables in accordance with IFRS 15 (including contract assets)
- Loan commitments within the scope of IFRS 9 and financial guarantees not measured at fair value through profit or loss.

In accordance with the expected credit loss model, a loss allowance is recognised in the amount of the expected credit loss for all financial instruments falling within this scope, depending on the model stage to which the financial instrument concerned is allocated.

Cumulative loss allowances on financial assets in the AC measurement category are deducted from the gross carrying amounts on the assets side of the statement of financial position. In the case of financial assets in the FVTOCI (recycling) measurement category, they are reported within accumulated OCI. The cumulative provisions for losses on loan commitments and financial guarantees are reported separately as a provision for off-balance sheet liabilities under provisions on the liabilities

side of the statement of financial position. Impairment losses and reversals of impairment losses are recognised as additions to, and reversals of, this provision.

Loss allowances at stage 1

When a financial instrument is first recognised, it is normally allocated to stage 1 regardless of its initial credit risk. Exceptions are financial instruments that need to be classified as POCI assets (because there is already objective evidence of impairment at the time of initial recognition), lease receivables and IFRS 15 contract assets, which are always allocated to stage 2 in application of the simplified approach under IFRS 9.

The loss allowance at stage 1 is recognised in an amount equal to the twelve-month expected credit loss (12M ECL). This amount is derived from the lifetime expected credit losses and comprises the portion of the losses resulting from default events anticipated in the twelve months following the reporting date.

Loss allowances at stage 2

Financial instruments for which the credit risk has increased significantly compared with the credit risk expected on initial recognition are allocated to stage 2. Lease receivables, together with contract assets as specified in IFRS 15, are also allocated to stage 2. IFRS 9 offers an option whereby financial instruments with a very low absolute credit risk can be left in stage 1 regardless of any relative deterioration since initial recognition. The Helaba Group only exercises this option for bonds and other fixed-income investment-grade securities. The investment-grade range covers all rating classes up to, and including, rating class 11 of the internal credit rating scale.

To assess whether there has been a significant increase in credit risk since initial recognition, Helaba uses a relative quantitative transfer criterion based on the established internal rating process. In this approach, the latest probability of default over the residual maturity of the financial instrument is compared with the probability of default anticipated for this period at the time of initial recognition. The predicted default risk will be determined using rating-module-specific migration matrices and a distribution assumption (quantile), such that a rating threshold value can be established as a quantitative transfer criterion for each financial instrument. The probability of default is adjusted using macroeconomic factors if significant economic changes are expected that are not sufficiently reflected in the probability of default. The transfer of an instrument to loan workout will also be used as a qualitative criterion for assessing whether the instrument needs to be moved to stage 2. This is required, for example, if payments are more than 30 days past due. If a pay-

ment is more than 30 days past due, this is considered a major credit event affecting creditworthiness, which means that the corresponding item is automatically transferred to stage 2.

The definition of default event used to determine probabilities of default is the same as the regulatory definition in article 178 of the CRR.

The criteria for a transfer from stage 1 to stage 2 apply in the same way for a transfer back to stage 1: a financial instrument can be transferred back to stage 1 if the credit risk associated with the financial instrument has reduced again to the extent that the criterion of a significant increase in credit risk is no longer satisfied.

At stage 2, a loss allowance is recognised in an amount equal to the lifetime expected credit losses (lifetime ECLs) for the financial instrument concerned.

The lifetime ECL is generally determined for each individual financial instrument. A portfolio approach is only carried out to take into consideration information not previously reflected in the ECL calculation models and that should be factored into the recognition of loss allowances. This approach has taken into account not only the expected impact from the recalibration of the Domestic Real Estate rating module, which will only gradually be reflected in the re-rating process from 2020 onwards, but also the existing uncertainty in the regulatory and economic environments by adjusting the historically observed migration pattern for transactions at risk of transfer. The adjustment of loss allowances recognised in this regard amounted to € 60 m as at 31 December 2019 (31 December 2018: € 32 m).

The following main parameters, assumptions and estimation methods are used to establish lifetime ECLs:

- Probability of default (PD): the lifetime PD represents the borrower's probability of default for the entire remaining term of the transaction concerned. The calculation of the lifetime PD is based on migration matrices available for every rating module. The migration matrices describe the probability that a borrower will migrate from one rating class into another within the next twelve months. They can be used to determine both the one-year PD and – based on matrix multiplication – the lifetime PD. The migration probabilities are mainly derived from past experience, but also take information on the current situation as well as forward-looking information into account.
- Exposure at default (EAD): the EAD is mainly based on the expected present value of the projected and extraordinary cash flows during the remaining term of the transaction. This includes both expected unscheduled repayments as well as cancellation probabilities for transactions where the cancellation before the end of the contract term is considered possible. Both parameters are calculated as average values of historical data.
- Credit conversion factor (CCF): the CCF is taken into account as part of the EAD calculation in the context of loan commitments. The CCF represents the projected drawdown of the provided credit line if a default occurs within the next year. Based on historical and economic customer behaviour, the CCF is calculated as the ratio between the loan amount to be drawn until the default event, and the provided credit line as at the respective reporting date. In order to be able to determine the provided credit line for more than one period in the event of a default, a life CCF (LCCF) must be taken into consideration. The LCCF represents the expected drawdown of a provided credit line over time provided that no counterparty default occurs. The LCCF is calculated from historical data: it is the percentage of drawdowns of the overall credit line in the respective period.
- Loss given default (LGD): the LGD is calculated for the secured and unsecured portions of the EAD. The calculation of the secured EAD portion includes estimated changes in the fair value of collateral; these estimates might be adjusted if pronounced macroeconomic fluctuations are anticipated. Initially, the LGD is calculated for twelve months. In order to calculate LGDs covering more than one year, both the EAD and the collateral value are extrapolated over future periods. IFRS 9 requires reporting entities to make estimates reflecting their expectations; to fulfil this requirement, the Helaba Group does not take into account any downturn components or collateral margins considered inappropriately high for economic purposes. Moreover, the consideration of collateral is also based on economic criteria. For instance, all recoverable collateral is taken into account irrespective of its eligibility for regulatory purposes.
- When determining the remaining term of financial instruments, the Helaba Group bases its calculations on the maximum contractual term, taking into account borrowers' renewal options. In the case of combined financial instruments, i.e. financial instruments consisting of a combination of loan and revolving credit (such as current account overdrafts), the contractual term is generally an inadequate reflection of the actual term – therefore, an estimated term is used for these scenarios.

Forward-looking information is taken into account in the calculation of the lifetime ECL by generally including such information in the PD and LGD input parameters and by reviewing specific scenarios. Specific scenarios are circumstances in which an adjustment of the risk parameters is required, for example because of exceptional macroeconomic circumstances. Regular reviews are carried out on the basis of economic forecasts made by the Helaba Group to establish whether there is a need to analyse specific scenarios. If a specific scenario is identified for one or more risk parameters and it is decided to adjust the parameter(s), the decision is made on the basis of three individual macroeconomic scenarios (negative, positive and base).

All parameters used to determine the ECL are subject to estimation uncertainty, meaning that the actual losses incurred at Helaba may deviate from the expected losses recognised in loss allowances. The wider the time frame used for ECL projection purposes, the higher the estimation uncertainty. The list of factors that influence loss allowances and that are subject to uncertainty includes, for instance, the expected change in the credit quality of the borrower, economic conditions and changes in the fair value of the collateral held by the Helaba Group. All factors used to determine the ECL are subject to regular validation processes.

Loss allowances at stage 3

A financial instrument is allocated to stage 3 if there is objective evidence of impairment, as follows:

- significant financial difficulty on the part of the issuer or the borrower
- failure of the issuer or borrower to make interest payments or repayments of principal in accordance with contract
- concessions by the lender that have only been granted because of the financial difficulties of the issuer or borrower (forbearance)
- significant probability that the issuer or borrower will become insolvent or have to undergo financial restructuring
- disappearance of an active market for the asset because of the issuer's or borrower's financial difficulties
- observable data indicating a measurable decline in estimated future cash flows from a group of financial assets even though a decline cannot yet be identified for the individual asset concerned.

In this context, the Helaba Group has harmonised its definition of indicators constituting objective evidence with the regulatory definition of a default event in accordance with article 178 CRR. A financial asset is therefore deemed to be in default and is allocated to stage 3 if one or more of the following criteria are satisfied:

- Repayment by the borrower in full, without recourse by the lender to recovery of collateral, is unlikely.
- A significant liability of the borrower to the Helaba Group is more than 90 days past due.

However, in individual cases, the connection between stage 3 and the regulatory definition of a default event may no longer apply where Helaba has granted substantial modifications or originated new primary business with defaulted borrowers who are already in a cure period. New business is allocated to stage 1 unless it has to be classified as a POCI asset.

If the objective evidence of impairment no longer applies, the instrument is transferred back from stage 3 into stage 2 or stage 1. The objective evidence of impairment no longer applies as soon as the default event is over. Simultaneously, an internally established cure period applies, taking regulatory requirements into account. During the cure period, all items remain in stage 3.

The amount of the loss allowance to be recognised for financial instruments in stage 3 is also equivalent to the lifetime ECL. The loss allowance is then calculated on the basis of individual cash flow estimates, taking into account various scenarios and the probability of such scenarios materialising. For global limits, the lifetime ECL as determined at stage 2 is used, but with the given default probability of 100 %.

Uncollectible loans and receivables in which it is virtually certain that there will be no further receipt of payments after recovery of all collateral and receipt of other proceeds are derecognised taking into account recognised loss allowances, or through profit or loss (direct write-offs).

POCI assets

Financial instruments for which there is already objective evidence of impairment on initial recognition are subject to a separate measurement approach known as the purchased or originated credit-impaired (POCI) approach. With reference to newly issued financial instruments and financial instruments after substantial modifications, the Helaba Group verifies upon initial recognition whether all contractually agreed payments can be expected to be received without the potential recovery of collateral. If a financial instrument is classified as a POCI asset on initial recognition, this classification must be maintained until the financial instrument is derecognised, regardless of any change in the associated credit risk. POCI financial assets are therefore not subject to the transfer criteria in the general three-stage model.

Modifications

According to IFRS 9, contract modifications of financial instruments comprise both the adjustment of contractual cash flows as well as changes in the legal situation with an effect on the cash flows associated with the financial instrument. However, unlike forbearance measures, the exercise of a provision or option stipulated in the original contract is not considered a contract modification within the meaning of IFRS 9. In addition, modifications in line with IFRS 9 are considered independently from any financial difficulties of the borrower.

The modification rules apply to financial instruments measured at amortised cost, financial assets measured at fair value through other comprehensive income (FVTOCI (recycling) measurement category) as well as loan commitments and financial guarantees within the scope of the impairment rules. A distinction must be made between substantial and non-substantial modifications. Within the Helaba Group, financial instruments in the AC measurement category as well as financial assets in the FVTOCI category are considered modified substantially if specific qualitative criteria are fulfilled in the context of contract adjustments; these criteria include change of borrower, currency changes, and the subsequent stipulation of contractual components not in line with the SPPI criteria. In the case of financial assets in stages 1 and 2, a quantitative test is also carried out: if the present value of the cash flows after modification (determined by discounting using the original effective interest rate) varies by more than 10 % from the present value of the originally

agreed cash flows, then the financial instrument concerned is also deemed to have been substantially modified. Substantial modifications of stage 1 and stage 2 financial assets mean that the asset in question is derecognised through profit or loss and that another financial asset – with amended contract conditions – is initially recognised. Non-substantial modifications do not lead to the derecognition of the assets concerned; instead, the gross carrying amount of the asset is adjusted through profit or loss to the present value of the modified cash flows in a calculation using the original effective interest rate. Gains or losses resulting from substantial modifications are reported under gains or losses on derecognition of financial instruments not measured at fair value through profit or loss (see Note (13)), whereas gains or losses from non-substantial modifications are recognised in a separate line item in the income statement (see Note (6)). In the case of stage 3 financial assets and POCI assets, modification effects are recognised by utilising loss allowances. If loss allowances first need to be adjusted in line with the effect from a modification, this may have an impact on the net loss allowances reported in the income statement.

If a stage 2 or stage 3 financial instrument is not substantially modified, it is transferred back to stage 1 in line with the general stipulations. The quantitative transfer criterion is still based on the expected default probability at initial recognition (i.e. not at the modification date).

The amortised cost before modification in respect of financial assets that were not substantially modified in the reporting period and for which the cumulative loss allowances on the date of contractual modification were measured in the amount of the lifetime ECL (stages 2 and 3) and, in cases where the simplified approach was used, in respect of financial assets that were more than 30 days past due amounted to € 47 m (31 December 2018: € 36 m). The corresponding modification gains or losses amounted to € 0 m (31 December 2018: € 0 m). The portfolio contains modified assets of € 1 m (31 December 2018: € 0 m) that were assigned to stages 2 or 3 at the date of modification, but transferred to stage 1 in the reporting year.

The following section comprises the quantitative disclosures in accordance with IFRS 7 required for financial instruments that fall within the scope of IFRS 9.

The following table shows the loss allowances recognised as at the reporting date in respect of financial instruments subject to the rules in IFRS 9:

	31.12.2019	31.12.2018
Cumulative loss allowances	-289	-302
In respect of demand deposits and overnight money balances with central banks and banks	-	-
In respect of financial assets measured at amortised cost	-286	-299
Bonds and other fixed-income securities	-	-
Loans and receivables	-286	-299
In respect of financial assets measured at fair value through other comprehensive income	-3	-3
Bonds and other fixed-income securities	-2	-3
Loans and receivables	-1	-
Provisions for loan commitments	21	22
Provisions for financial guarantees	26	17

in € m

Disclosures for financial assets measured at amortised cost

The following table shows a breakdown of the financial assets measured at amortised cost and the cumulative loss allowances recognised in respect of these assets by IFRS 9 impairment model stage as at 31 December 2019:

in € m

	Gross carrying amount					Cumulative loss allowances				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Demand deposits and overnight money balances at central banks and banks	14,136	–	–	–	14,136	–	–	–	–	–
Demand deposits at central banks	12,932	–	–	–	12,932	–	–	–	–	–
Demand deposits and overnight money balances at banks	1,204	–	–	–	1,204	–	–	–	–	–
Financial assets measured at amortised cost	126,270	3,849	483	10	130,612	–39	–121	–126	–	–286
Loans and receivables	126,270	3,849	483	10	130,612	–39	–121	–126	–	–286
Total	140,406	3,849	483	10	144,748	–39	–121	–126	–	–286

The following table shows the figures as at 31 December 2018:

in € m

	Gross carrying amount					Cumulative loss allowances				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Demand deposits and overnight money balances at central banks and banks	6,959	–	–	–	6,959	–	–	–	–	–
Demand deposits at central banks	6,613	–	–	–	6,613	–	–	–	–	–
Demand deposits and overnight money balances at banks	346	–	–	–	346	–	–	–	–	–
Financial assets measured at amortised cost	103,056	3,398	586	14	107,054	–46	–66	–185	–2	–299
Bonds and other fixed-income securities	4	–	–	–	4	–	–	–	–	–
Loans and receivables	103,052	3,398	586	14	107,050	–46	–66	–185	–2	–299
Total	110,015	3,398	586	14	114,013	–46	–66	–185	–2	–299

Cumulative loss allowances of € 1 m (31 December 2018: € 1 m) were attributable to financial assets in stage 2 under the simplified approach with a gross carrying amount of € 32 m (31 December 2018: € 20 m). There is no separate presentation below for reasons of materiality.

The following table shows the changes (broken down by stage) in the period under review in the loss allowances recognised in respect of financial assets measured at amortised cost:

in € m

	Stage 1	Stage 2	Stage 3	POCI	Total
Financial assets measured at amortised cost					
Loans and receivables					
As at 1.1.2019	-46	-66	-185	-2	-299
Total change in loss allowances due to transfers between stages	-9	13	-4	-	-
Transfer to stage 1	-14	14	-	-	-
Transfer to stage 2	5	-5	-	-	-
Transfer to stage 3	-	4	-4	-	-
Additions	-79	-157	-109	-	-345
Newly originated/acquired financial assets	-31	-4	-1	-	-36
Other additions	-48	-153	-108	-	-309
Time-value-of-money effect in stage 3 from gross carrying amount adjustment	-	-	-6	-	-6
Reversals	95	89	74	2	260
Reversals from redemptions (derecognition)	6	2	1	-	9
Other reversals	89	87	73	2	251
Utilisations	-	-	105	-	105
Changes due to currency translation and other adjustments	-	-	-1	-	-1
As at 31.12.2019	-39	-121	-126	-	-286

The changes in loss allowances in the prior-year period were as follows:

	in € m				
	Stage 1	Stage 2	Stage 3	POCI	Total
Financial assets measured at amortised cost					
Bonds and other fixed-income securities					
As at 1.1.2018	–	–1	–	–	–1
Utilisations	–	1	–	–	1
As at 31.12.2018	–	–	–	–	–
Loans and receivables					
As at 1.1.2018	–33	–133	–245	–18	–429
Total change in loss allowances due to transfers between stages	–9	16	–7	–	–
Transfer to stage 1	–11	11	–	–	–
Transfer to stage 2	2	–2	–	–	–
Transfer to stage 3	–	7	–7	–	–
Additions	–63	–71	–75	–11	–220
Newly originated/acquired financial assets	–32	–3	–2	–	–37
Other additions	–31	–68	–73	–11	–183
Time-value-of-money effect in stage 3 from gross carrying amount adjustment	–	–	3	–	3
Reversals	57	124	76	5	262
Reversals from redemptions (derecognition)	5	13	6	–	24
Other reversals	52	111	70	5	238
Utilisations	–	–	59	22	81
Changes due to currency translation and other adjustments	2	–2	4	–	4
As at 31.12.2018	–46	–66	–185	–2	–299

The gross carrying amounts of the financial assets measured at amortised cost include loans and receivables, together with demand deposits and overnight money balances with central banks and banks. The changes in the gross carrying amounts in the reporting period were as follows:

in € m

	Stage 1	Stage 2	Stage 3	POCI	Total
Demand deposits and overnight money balances with central banks and banks					
As at 1.1.2019	6,959	-	-	-	6,959
Changes in basis of consolidation	6	-	-	-	6
Newly originated/acquired financial assets	17,699	-	-	-	17,699
Change in current account balance	6,203	-	-	-	6,203
Derecognitions including redemptions	-16,757	-	-	-	-16,757
Changes due to currency translation and other adjustments	26	-	-	-	26
As at 31.12.2019	14,136	-	-	-	14,136
Financial assets measured at amortised cost					
Bonds and other fixed-income securities					
As at 1.1.2019	4	-	-	-	4
Derecognitions including redemptions	-4	-	-	-	-4
As at 31.12.2019	-	-	-	-	-
Loans and receivables					
As at 1.1.2019	103,052	3,398	586	14	107,050
Changes in basis of consolidation	15,482	-	-	-	15,482
Newly originated/acquired financial assets	65,629	228	44	-	65,901
Change in current account balance	2,647	73	-11	-	2,709
Stage transfers	-2,932	2,819	113	-	-
Transfer to stage 1	3,564	-3,444	-120	-	-
Transfer to stage 2	-6,457	6,503	-46	-	-
Transfer to stage 3	-39	-240	279	-	-
Derecognitions including redemptions	-58,233	-1,744	-196	-1	-60,174
Write-offs	-	-1	-67	-	-68
Changes due to currency translation and other adjustments	625	-924	14	-3	-288
As at 31.12.2019	126,270	3,849	483	10	130,612

The changes in gross carrying amounts in the prior-year period were as follows:

	in € m				
	Stage 1	Stage 2	Stage 3	POCI	Total
Demand deposits and overnight money balances with central banks and banks					
As at 1.1.2018	10,198	–	–	–	10,198
Changes in basis of consolidation	–5	–	–	–	–5
Newly originated /acquired financial assets	8,804	–	–	–	8,804
Change in current account balance	–2,985	–	–	–	–2,985
Derecognitions including redemptions	–9,962	–	–	–	–9,962
Changes due to currency translation and other adjustments	909	–	–	–	909
As at 31.12.2018	6,959	–	–	–	6,959
Financial assets measured at amortised cost					
Bonds and other fixed-income securities					
As at 1.1.2018	15	17	–	–	32
Derecognitions including redemptions	–10	–17	–	–	–27
Changes due to currency translation and other adjustments	–1	–	–	–	–1
As at 31.12.2018	4	–	–	–	4
Loans and receivables					
As at 1.1.2018	96,581	2,666	627	24	99,898
Newly originated /acquired financial assets	63,323	82	5	15	63,425
Change in current account balance	274	5	–7	–	272
Stage transfers	–1,979	1,808	171	–	–
Transfer to stage 1	970	–849	–121	–	–
Transfer to stage 2	–2,853	2,866	–13	–	–
Transfer to stage 3	–96	–209	305	–	–
Derecognitions including redemptions	–60,238	–1,256	–204	–2	–61,700
Write-offs	–	–	–80	–6	–86
Changes due to currency translation and other adjustments	5,091	93	74	–17	5,241
As at 31.12.2018	103,052	3,398	586	14	107,050

The following table shows the gross carrying amounts and cumulative loss allowances in respect of financial assets measured at amortised cost, broken down by counterparty sector and industry.

in € m

	Gross carrying amount		Cumulative loss allowances	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Demand deposits and overnight money balances with central banks and banks	14,136	6,959	-	-
Central banks	12,932	6,613	-	-
Central giro institutions	1	17	-	-
Sparkassen	984	120	-	-
Other banks	219	209	-	-
Financial assets measured at amortised cost	130,612	107,054	-286	-299
Bonds and other fixed-income securities	-	4	-	-
Other financial corporations	-	4	-	-

Table continued on next page.

in € m

	Gross carrying amount		Cumulative loss allowances	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Loans and receivables	130,612	107,050	-286	-299
Central banks	65	-	-	-
Central giro institutions	371	455	-	-
Sparkassen	5,737	6,411	-	-
Other banks	10,477	4,357	-1	-
Other financial corporations	10,043	10,011	-9	-36
Non-financial corporations	64,288	56,656	-239	-225
Agriculture, forestry and fishing	1	3	-	-
Mining and quarrying	75	56	-	-
Manufacturing	4,654	4,052	-56	-21
Electricity, gas, steam and air-conditioning supply	5,257	4,956	-19	-10
Water supply, sewerage, waste management and remediation activities	3,240	2,345	-1	-1
Construction	592	528	-7	-3
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,209	1,046	-4	-3
Transportation and storage	5,685	5,631	-10	-45
Accommodation and food service activities	86	87	-	-
Information and communication	4,311	2,851	-3	-4
Real estate activities	30,846	29,235	-118	-87
Professional, scientific and technical activities	1,514	1,347	-5	-5
Administrative and support service activities	2,305	1,536	-4	-4
Public administration, defence, social insurance	1,633	239	-	-
Education	426	396	-	-
Human health and social work activities	1,317	989	-4	-2
Arts, entertainment and recreation	411	378	-1	-1
Other service activities	726	981	-7	-39
Government	31,909	21,686	-	-
Households	7,722	7,474	-37	-38
Total	144,748	114,013	-286	-299

The following table shows the carrying amounts of financial assets measured at amortised cost broken down by allocation to internal rating class:

in € m

	31.12.2019					31.12.2018 ¹⁾				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Demand deposits and overnight money balances at central banks and banks										
Gross carrying amount	14,136	-	-	-	14,136	6,959	-	-	-	6,959
Internal classes 0–3	13,837	-	-	-	13,837	6,827	-	-	-	6,827
Internal classes 4–7	21	-	-	-	21	46	-	-	-	46
Internal classes 8–11	18	-	-	-	18	16	-	-	-	16
No allocation to an internal rating class	260	-	-	-	260	70	-	-	-	70
Net carrying amount	14,136	-	-	-	14,136	6,959	-	-	-	6,959
Financial assets measured at amortised cost										
Bonds and other fixed-income securities										
Gross carrying amount	-	-	-	-	-	4	-	-	-	4
Internal classes 8–11	-	-	-	-	-	4	-	-	-	4
Net carrying amount	-	-	-	-	-	4	-	-	-	4
Loans and receivables										
Gross carrying amount	126,270	3,849	483	10	130,612	103,052	3,398	586	14	107,050
Internal classes 0–3	49,130	4	-	-	49,134	40,902	7	-	-	40,909
Internal classes 4–7	31,470	328	-	-	31,798	22,886	106	-	-	22,992
Internal classes 8–11	32,089	492	-	-	32,581	27,903	744	-	2	28,649
Internal classes 12–15	10,739	1,550	-	-	12,289	8,616	1,358	-	5	9,979
Internal classes 16–20	630	907	-	-	1,537	513	766	-	4	1,283
Internal class 21	889	533	-	-	1,422	1,457	382	-	-	1,839
Internal classes 22–24 (defaulted)	-	-	482	10	492	5	-	583	3	591
No allocation to an internal rating class	1,323	35	1	-	1,359	770	35	3	-	808
Cumulative loss allowances	-39	-121	-126	-	-286	-46	-66	-185	-2	-299
Net carrying amount	126,231	3,728	357	10	130,326	103,006	3,332	401	12	106,751

¹⁾ Prior-year figures restated: In the previous year, assets in the simplified approach had not been included in the breakdown by internal rating.

The Helaba Group determines the credit rating using a 25-point rating scale. The following table shows the reconciliation from the rating classes to the ratings of S&P, Moody's and Fitch, together with the internal average probabilities of default:

	Average probability of default	Mapping to external ratings		
	in %	S&P	Moody's	Fitch
Internal classes 0–3	0.00–0.03	AAA to AA–	Aaa to A1	AAA to AA–
Internal classes 4–7	0.04–0.09	A+ to A–	A1 to A3	A+ to A–
Internal classes 8–11	0.12–0.39	BBB+ to BBB–	Baa1 to Baa3	A– to BBB–
Internal classes 12–15	0.59–1.98	BB+ to BB–	Ba1 to Ba3	BBB– to BB–
Internal classes 16–20	2.96–15.00	B+ to B–	B1 to B3	BB– to B–
Internal class 21	20	CCC to C	Caa to C	CCC to C
Internal classes 22–24 (defaulted)	100	Default	Default	Default

The internal rating classes 0 to 11 are designated “investment grade”, while all other classes are designated “non-investment grade”.

Disclosures for financial assets measured at fair value through other comprehensive income

The following table shows the carrying amounts of financial assets measured at fair value through other comprehensive income and the cumulative loss allowances recognised in respect of these assets as at 31 December 2019:

in € m

	Carrying amount (fair value)					Cumulative loss allowances (recognised in OCI)				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Bonds and other fixed-income securities	23,122	–	–	–	23,122	–2	–	–	–	–2
Loans and receivables	649	–	–	–	649	–1	–	–	–	–1
Total	23,771	–	–	–	23,771	–3	–	–	–	–3

The following table shows the carrying amounts of financial assets measured at fair value through other comprehensive income and the cumulative loss allowances recognised in respect of these assets as at 31 December 2018:

in € m

	Carrying amount (fair value)					Cumulative loss allowances (recognised in OCI)				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Bonds and other fixed-income securities	21,965	–	–	–	21,965	–3	–	–	–	–3
Loans and receivables	488	–	–	–	488	–	–	–	–	–
Total	22,453	–	–	–	22,453	–3	–	–	–	–3

Cumulative loss allowances on financial assets measured at fair value through other comprehensive income remained largely unchanged compared with the position as at 31 December 2018.

The following table shows the changes in the gross carrying amounts of financial assets measured at fair value through other comprehensive income in the reporting year:

in € m

	Stage 1	Stage 2	Stage 3	POCI	Total
Bonds and other fixed-income securities					
As at 1.1.2019	21,831	-	-	-	21,831
Changes in basis of consolidation	2,758	-	-	-	2,758
Newly originated/acquired financial assets	6,003	-	-	-	6,003
Stage transfers	-104	104	-	-	-
Transfer to stage 1	66	-66	-	-	-
Transfer to stage 2	-170	170	-	-	-
Derecognitions including redemptions	-7,514	-50	-	-	-7,564
Changes due to currency translation and other adjustments	-43	-54	-	-	-97
As at 31.12.2019	22,931	-	-	-	22,931
Fair value changes recognised in OCI	191	-	-	-	191
Fair value as at 31.12.2019	23,122	-	-	-	23,122
Loans and receivables					
As at 1.1.2019	483	-	-	-	483
Newly originated/acquired financial assets	201	-	-	-	201
Derecognitions including redemptions	-46	-	-	-	-46
Changes due to currency translation and other adjustments	1	-	-	-	1
As at 31.12.2019	639	-	-	-	639
Fair value changes recognised in OCI	10	-	-	-	10
Fair value as at 31.12.2019	649	-	-	-	649

In the prior year, the changes in the gross carrying amounts of assets measured at fair value through the other comprehensive income were as follows:

	in € m				
	Stage 1	Stage 2	Stage 3	POCI	Total
Bonds and other fixed-income securities					
As at 1.1.2018	21,700	5	-	-	21,705
Changes in basis of consolidation	-1	-	-	-	-1
Newly originated/acquired financial assets	3,495	-	-	-	3,495
Derecognitions including redemptions	-4,404	-5	-	-	-4,409
Changes due to currency translation and other adjustments	1,041	-	-	-	1,041
As at 31.12.2018	21,831	-	-	-	21,831
Fair value changes recognised in OCI	134	-	-	-	134
Fair value as at 31.12.2018	21,965	-	-	-	21,965
Loans and receivables					
As at 1.1.2018	420	-	-	-	420
Newly originated/acquired financial assets	122	-	-	-	122
Stage transfers	-2	2	-	-	-
Transfer to stage 2	-2	2	-	-	-
Derecognitions including redemptions	-57	-2	-	-	-59
As at 31.12.2018	483	-	-	-	483
Fair value changes recognised in OCI	5	-	-	-	5
Fair value as at 31.12.2018	488	-	-	-	488

The following table shows the carrying amounts and loss allowances recognised in OCI by counterparty sector and industry:

in € m

	Carrying amount (fair value)		Cumulative loss allowances (recognised in OCI)	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Bonds and other fixed-income securities	23,122	21,965	-2	-3
Central giro institutions	511	401	-	-
Other banks	15,153	15,074	-2	-3
Other financial corporations	539	546	-	-
Non-financial corporations	96	198	-	-
Government	6,823	5,746	-	-
Loans and receivables	649	488	-1	-
Other financial corporations	107	99	-	-
Non-financial corporations	540	384	-1	-
Agriculture, forestry and fishing	14	2	-	-
Mining and quarrying	5	5	-	-
Manufacturing	247	185	-1	-
Electricity, gas, steam and air-conditioning supply	40	39	-	-
Wholesale and retail trade; repair of motor vehicles and motorcycles	25	15	-	-
Transportation and storage	77	37	-	-
Information and communication	18	18	-	-
Real estate activities	70	47	-	-
Professional, scientific and technical activities	41	33	-	-
Other service activities	3	3	-	-
Government	2	5	-	-
Total	23,771	22,453	-3	-3

The following table shows the gross carrying amounts of financial assets measured at fair value through other comprehensive income broken down by allocation to internal rating class:

in € m

	31.12.2019					31.12.2018				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Bonds and other fixed-income securities										
Gross carrying amount	22,931	-	-	-	22,931	21,831	-	-	-	21,831
Internal classes 0–3	13,222	-	-	-	13,222	13,239	-	-	-	13,239
Internal classes 4–7	8,343	-	-	-	8,343	7,661	-	-	-	7,661
Internal classes 8–11	1,358	-	-	-	1,358	931	-	-	-	931
Internal classes 12–15	8	-	-	-	8	-	-	-	-	-
Cumulative loss allowances	-2	-	-	-	-2	-3	-	-	-	-3
Net carrying amount	22,929	-	-	-	22,929	21,828	-	-	-	21,828
Total fair value	23,122	-	-	-	23,122	21,965	-	-	-	21,965
Loans and receivables										
Gross carrying amount	639	-	-	-	639	483	-	-	-	483
Internal classes 0–3	53	-	-	-	53	15	-	-	-	15
Internal classes 4–7	235	-	-	-	235	208	-	-	-	208
Internal classes 8–11	337	-	-	-	337	255	-	-	-	255
Internal classes 12–15	14	-	-	-	14	5	-	-	-	5
Cumulative loss allowances	-1	-	-	-	-1	-	-	-	-	-
Net carrying amount	638	-	-	-	638	483	-	-	-	483
Total fair value	649	-	-	-	649	488	-	-	-	488

Disclosures for off-balance sheet commitments

The following table shows the nominal amounts of loan commitments and the maximum guarantee amounts of financial guarantees (subsequently referred to as nominal amount) as well as the related provisions as at 31 December 2019:

in € m

	Nominal amount					Provisions				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Loan commitments	27,329	662	20	1	28,012	10	8	3	–	21
Financial guarantees	7,058	464	39	7	7,568	3	11	9	3	26
Total	34,387	1,126	59	8	35,580	13	19	12	3	47

The following table shows the amounts as at 31 December 2018:

in € m

	Nominal amount ¹⁾					Provisions				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Loan commitments	27,154	410	45	1	27,610	8	6	8	–	22
Financial guarantees	6,426	305	28	12	6,771	3	5	6	3	17
Total	33,580	715	73	13	34,381	11	11	14	3	39

¹⁾ Prior-year figures restated: Financial guarantees have been increased by € 51 m.

The following table shows the change in provisions for loan commitments and financial guarantees during the reporting period:

in € m

	Stage 1	Stage 2	Stage 3	POCI	Total
Loan commitments					
As at 1.1.2019	8	6	8	-	22
Total change in provision due to transfers between stages	2	-2	-	-	-
Transfer to stage 1	3	-3	-	-	-
Transfer to stage 2	-1	1	-	-	-
Additions	27	19	52	-	98
New loan commitments originated	14	-	-	-	14
Other additions	13	19	52	-	84
Reversals	-27	-15	-57	-	-99
Utilisations (drawdown under loan commitment)	-8	-8	-10	-	-26
Other reversals	-19	-7	-47	-	-73
As at 31.12.2019	10	8	3	-	21
Financial guarantees					
As at 1.1.2019	3	5	6	3	17
Total change in provision due to transfers between stages	-1	-1	2	-	-
Transfer to stage 2	-1	1	-	-	-
Transfer to stage 3	-	-2	2	-	-
Additions	3	16	15	-	34
New financial guarantees originated	1	-	-	-	1
Other additions	2	16	15	-	33
Reversals	-2	-9	-14	-	-25
As at 31.12.2019	3	11	9	3	26

The changes in provisions for loan commitments and financial guarantees in the prior year are shown in the following table:

	in € m				
	Stage 1	Stage 2	Stage 3	POCI	Total
Loan commitments					
As at 1.1.2018	9	6	7	-	22
Total change in provision due to transfers between stages	1	-1	-	-	-
Transfer to stage 1	1	-1	-	-	-
Additions	8	12	16	-	36
New loan commitments originated	5	-	-	-	5
Other additions	3	12	16	-	31
Reversals	-10	-11	-15	-	-36
Utilisations (drawdown under loan commitment)	-4	-1	-2	-	-7
Other reversals	-6	-10	-13	-	-29
As at 31.12.2018	8	6	8	-	22
Financial guarantees					
As at 1.1.2018	3	3	12	-	18
Total change in provision due to transfers between stages	2	-3	1	-	-
Transfer to stage 1	2	-2	-	-	-
Transfer to stage 3	-	-1	1	-	-
Additions	1	7	8	3	19
New financial guarantees originated	-	-	-	3	3
Other additions	1	7	8	-	16
Reversals	-4	-2	-15	-	-21
Changes due to currency translation and other adjustments	1	-	-	-	1
As at 31.12.2018	3	5	6	3	17

The following table shows the changes in the nominal amounts of loan commitments and financial guarantees in the reporting period:

in € m

	Stage 1	Stage 2	Stage 3	POCI	Total
Loan commitments					
As at 1.1.2019	27,154	410	45	1	27,610
New loan commitments originated	13,643	–	–	1	13,644
Change in current account balance	171	–84	–7	–	80
Stage transfers	–523	512	11	–	–
Transfer to stage 1	452	–452	–	–	–
Transfer to stage 2	–968	973	–5	–	–
Transfer to stage 3	–7	–9	16	–	–
Drawdowns under loan commitments	–12,913	–375	–32	–	–13,320
Changes due to currency translation and other adjustments	–203	199	3	–1	–2
As at 31.12.2019	27,329	662	20	1	28,012
Financial guarantees					
As at 1.1.2019	6,426	305	28	12	6,771
Changes in basis of consolidation	11	–	–	–	11
New financial guarantees originated	1,477	–	–	–	1,477
Stage transfers	–122	112	10	–	–
Transfer to stage 2	–121	121	–	–	–
Transfer to stage 3	–1	–9	10	–	–
Changes due to currency translation and other adjustments	–734	47	1	–5	–691
As at 31.12.2019	7,058	464	39	7	7,568

The following table shows the changes in nominal amounts in the prior-year period:

in € m

	Stage 1 ¹⁾	Stage 2	Stage 3	POCI	Total ¹⁾
Loan commitments					
As at 1.1.2018	26,304	310	28	1	26,643
New loan commitments originated	18,139	–	–	–	18,139
Change in current account balance	–175	7	13	–	–155
Stage transfers	–58	53	5	–	–
Transfer to stage 1	6	–4	–2	–	–
Transfer to stage 2	–61	61	–	–	–
Transfer to stage 3	–3	–4	7	–	–
Drawdowns under loan commitments	–15,088	–122	–14	–	–15,224
Changes due to currency translation and other adjustments	–1,968	162	13	–	–1,793
As at 31.12.2018	27,154	410	45	1	27,610
Financial guarantees					
As at 1.1.2018	5,782	184	28	–	5,994
New financial guarantees originated	1,137	–	–	12	1,149
Stage transfers	–102	89	13	–	–
Transfer to stage 1	27	–26	–1	–	–
Transfer to stage 2	–113	115	–2	–	–
Transfer to stage 3	–16	–	16	–	–
Changes due to currency translation and other adjustments	–391	32	–13	–	–372
As at 31.12.2018	6,426	305	28	12	6,771

¹⁾ Prior-year figures restated: Financial guarantees have been increased by €51 m.

Helaba entered into loan commitments and financial guarantees with customers in the following counterparty sectors and industries:

in € m

	Nominal amount		Provisions	
	31.12.2019	31.12.2018 ¹⁾	31.12.2019	31.12.2018
Loan commitments	28,012	27,610	21	22
Central giro institutions	6	15	–	–
Sparkassen	319	426	–	–
Other banks	503	507	–	–
Other financial corporations	3,811	3,511	1	1
Non-financial corporations	18,319	17,390	18	18
Government	3,579	4,358	–	–
Households	1,475	1,403	2	3
Financial guarantees	7,568	6,771	26	17
Central giro institutions	1	3	–	–
Sparkassen	75	61	–	–
Other banks	151	182	–	–
Other financial corporations	3,180	2,741	1	–
Non-financial corporations	4,083	3,710	25	17
Government	70	66	–	–
Households	8	8	–	–
Total	35,580	34,381	47	39

¹⁾ Prior-year figures restated: Financial guarantees have been increased by € 51 m.

The following table shows the nominal amounts of loan commitments and financial guarantees by allocation to internal rating class:

in € m

	31.12.2019					31.12.2018 ¹⁾				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Loan commitments										
Nominal amount	27,329	662	20	1	28,012	27,154	410	45	1	27,610
Internal classes 0–3	6,648	–	–	–	6,648	6,566	–	–	–	6,566
Internal classes 4–7	7,325	4	–	–	7,329	3,882	7	–	–	3,889
Internal classes 8–11	9,609	106	–	–	9,715	3,763	46	–	–	3,809
Internal classes 12–15	2,729	358	–	–	3,087	2,299	178	–	–	2,477
Internal classes 16–20	281	162	–	–	443	35	48	–	–	83
Internal class 21	77	31	–	–	108	117	2	–	–	119
Internal classes 22–24 (defaulted)	–	–	17	1	18	2	–	45	1	48
No allocation to an internal rating class	660	1	3	–	664	10,490	129	–	–	10,619
Provisions	10	8	3	–	21	8	6	8	–	22
Financial guarantees										
Nominal amount	7,058	464	39	7	7,568	6,426	305	28	12	6,771
Internal classes 0–3	331	–	–	–	331	335	–	–	–	335
Internal classes 4–7	4,058	–	–	–	4,058	3,943	8	–	–	3,951
Internal classes 8–11	2,104	89	–	–	2,193	1,536	13	–	–	1,549
Internal classes 12–15	538	127	–	–	665	571	160	–	–	731
Internal classes 16–20	14	195	–	–	209	29	85	–	–	114
Internal class 21	11	53	–	–	64	10	39	–	–	49
Internal classes 22–24 (defaulted)	–	–	39	7	46	–	–	28	12	40
No allocation to an internal rating class	2	–	–	–	2	2	–	–	–	2
Provisions	3	11	9	3	26	3	5	6	3	17

¹⁾ Prior-year figures restated: Financial guarantees have been increased by € 51 m.

Non-performing exposures and forbearance

In addition to the mandatory disclosures in accordance with IFRS 9, the Helaba Group provides information on non-performing exposures and forborne exposures (in accordance with EBA definitions) to provide a comprehensive picture of the credit risks. Items are designated non-performing exposures if one of the following criteria is met:

- A material exposure is more than 90 days past due.
- An exposure is unlikely to be repaid in full without the need for recovery of collateral.

Regardless of these criteria, exposures deemed to be defaulted in accordance with article 178 of the CRR are always classified as non-performing exposures. The same materiality threshold relating to the 90 day past due criterion is applied equally both to default events in accordance with the CRR and to non-performing exposures. An exposure is deemed to be material if it exceeds either an absolute threshold of € 100 or 2.5 % of total exposure in respect of the debtor concerned (as defined in section 16 of the German Solvency Regulation (Solvabilitätsverordnung – SolvV)). A financial asset is classified as past due if the party to the agreement fails to make the contractually agreed (partial) payments in respect of the financial instrument on time. The past due period begins on the day after the due date of the contractually agreed partial payment. Besides the indicators listed in article 178 of the CRR, the following indicators are used to identify exposures that will probably not be fully redeemed: ban on business operations issued by a supervisory authority, rating-related terminations, or the borrower's loss of regular sources of income.

The Helaba Group has harmonised the internal application of the terms “non-performing exposures” and “default event” in line with article 178 of the CRR. The harmonisation of the objective evidence with the regulatory definition of a default event also ensures that the requirements match the criteria for the allocation of an exposure to stage 3. However, in individual cases, this standardised approach may no longer apply where Helaba grants substantial modifications or issues new financial instruments to defaulted borrowers who are already in a cure period. New business is allocated to stage 1 unless it has to be classified as a POCI asset. Furthermore, if a POCI asset recovers, this may lead to differences between non-performing exposures and financial instruments in default. POCI assets are always reported as non-performing exposures in accordance with regulatory requirements.

Deferred or renegotiated loans and advances are determined in accordance with the definition of forborne exposures issued by the European Banking Authority (EBA). A forborne exposure refers to debt instruments in connection with which forbearance action has been applied. Such action includes concessions or restructuring as a result of existing or anticipated financial difficulties on the part of the debtor. Forbearance action includes any rights agreed upon at contract inception enabling the debtor to amend the credit terms if such amendments are due to (pending) financial difficulties of the debtor. Before a contract may be classified as forborne, concessions to the debtor must have been made.

For every forbearance action, the Helaba Group verifies whether this triggers a default event regarding the debt instrument concerned. If the forbearance action leads to a default event, the instrument concerned is designated as “non-performing forborne” and transferred to stage 3. If the objective evidence of impairment no longer applies, the instrument is transferred from stage 3. The objective evidence of impairment no longer applies as soon as the default event is over. Simultaneously, an internally established cure period applies, taking regulatory requirements into account. During the cure period, all items remain in stage 3. If the forbearance action does not lead to a default event, the instrument concerned is designated as “performing forborne” and transferred to stage 2 based on the qualitative transfer criteria. If the debt instrument recovers during the cure period to the extent that it is no longer deemed an exposure subject to workout and the ‘significant increase in credit risk’ condition is no longer satisfied on the basis of the quantitative transfer criterion, it is transferred from stage 2 to stage 1.

The following table shows the financial assets measured at amortised cost broken down into performing and non-performing exposures, together with the value of the debt instruments within these exposures that are in default or subject to forbearance action:

in € m

	Gross carrying amount				Cumulative loss allowances			
	Performing exposures		Non-performing exposures		Performing exposures		Non-performing exposures	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Demand deposits and overnight money balances at central banks and banks	14,136	6,959	-	-	-	-	-	-
Financial assets measured at amortised cost	130,119	106,454	493	600	-160	-112	-126	-187
Bonds and other fixed-income securities	-	4	-	-	-	-	-	-
Loans and receivables	130,119	106,450	493	600	-160	-112	-126	-187
thereof: Forborne exposures	488	704	309	354	-24	-13	-78	-127
thereof: Defaulted	-	-	493	594	-	-	-126	-187
Total	144,255	113,413	493	600	-160	-112	-126	-187

The following table shows the financial assets measured at fair value through other comprehensive income by classification as performing / non-performing, defaulted or forborne:

in € m

	Carrying amount (fair value)				Cumulative loss allowances (recognised in OCI)			
	Performing exposures		Non-performing exposures		Performing exposures		Non-performing exposures	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Bonds and other fixed-income securities	23,122	21,965	-	-	-2	-3	-	-
Loans and receivables	649	488	-	-	-1	-	-	-
Total	23,771	22,453	-	-	-3	-3	-	-

The following table shows the performing status as well as the occurrence of default events for off-balance sheet liabilities within the scope of application of the IFRS 9 impairment model.

In accordance with the FINREP requirements of the EBA, the Helaba Group classifies off-balance sheet liabilities by forbearance status only for loan commitments:

in € m

	Nominal amount				Provisions			
	Performing exposures		Non-performing exposures		Performing exposures		Non-performing exposures	
	31.12.2019	31.12.2018 ¹⁾	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Loan commitments	27,991	27,562	21	48	18	14	3	8
thereof: Forborne exposures	22	2	6	17	–	–	1	3
thereof: Defaulted	–	–	21	48	–	–	3	9
Financial guarantees	7,522	6,731	46	40	14	8	12	9
thereof: Defaulted	–	–	46	40	–	–	12	9
Total	35,513	34,293	67	88	32	22	15	17

¹⁾ Prior-year figures restated: Financial guarantees have been increased by € 51 m.

Collateral

In order to secure its loans, the Helaba Group holds, in particular, charges over real estate, as well as guarantees and warranties. Financial collateral arrangements that are customary in the industry are also used. Regular remeasurements and reviews to assess whether collateral can be recovered, used or applied to other purposes are carried out to ensure the quality of collateral held. The bulk of guarantees are provided by public-sector institutions, but guarantees are also received from the banking sector.

The estimated fair value of the collateral is based on a valuation of that collateral. Depending on the type and volume of the loans in question, the collateral is constantly monitored and updated in accordance with the credit guidelines. The maximum amount of the collateral held that can be taken into account in a transaction is the fair value of the collateral, reduced to the carrying amount of the secured financial asset. The maximum amount of loan commitments and financial guarantees is derived by reduc-

ing the collateral value to the nominal amount or the maximum guarantee amount. If a financial instrument is covered by more than one item of collateral, the value reduction is applied to the collateral with the worst quality. Collateral in the form of a charge over real estate is considered to be the highest quality collateral available and is therefore always preferred; this is followed by cash collateral, Helaba's own debt instruments and financial guarantees.

The following values are used to determine the maximum exposure to credit risk within the meaning of IFRS 7.35K (a) as at the reporting date: for financial assets measured at amortised cost, the carrying amounts as presented in Note (21); and for financial assets measured at fair value through other comprehensive income, the fair value as presented in the statement of financial position. The maximum credit risk from loan commitments within the scope of application of the impairment regulations corresponds to the nominal amount. The same applies to the maximum guarantee amounts of financial guarantees.

The following table shows the maximum amounts of the collateral held by the Helaba Group as at 31 December 2019 for financial instruments within the scope of application of the IFRS 9 impairment model:

in € m

	Maximum amount of collateral or financial guarantees to be taken into account							Total
	Gross carrying amount / nominal amount / maximum guarantee amount	Cumulative loss allowances / provisions	Residential real estate	Commercial real estate	Cash collateral and own debt instruments	Other debt instruments and other assets	Financial guarantees received	
Demand deposits and overnight money balances at central banks and banks	14,136	–	–	–	–	–	–	–
Financial assets measured at amortised cost	130,612	–286	7,890	20,795	712	3,481	5,460	38,338
Loans and receivables	130,612	–286	7,890	20,795	712	3,481	5,460	38,338
thereof: Stage 3 and POCI assets	493	–126	50	88	3	8	22	171
Financial assets measured at fair value through other comprehensive income	23,570	–3	–	–	–	–	–	–
Bonds and other fixed-income securities	22,931	–2	–	–	–	–	–	–
Loans and receivables	639	–1	–	–	–	–	–	–
Loan commitments	28,012	–21	226	198	–	49	400	873
thereof: Stage 3 and POCI assets	21	–2	1	–	–	–	–	1
Financial guarantees	7,568	–26	3	23	9	3	8	46
thereof: Stage 3 and POCI assets	46	–12	–	–	–	–	–	–
Total	203,898	–336	8,119	21,016	721	3,533	5,868	39,257

The following table shows the amounts as at 31 December 2018:

in € m

	Gross carrying amount/nominal amount/maximum guarantee amount	Cumulative loss allowances/provisions	Maximum amount of collateral or financial guarantees to be taken into account					Total
			Residential real estate	Commercial real estate	Cash collateral and own debt instruments	Other debt instruments and other assets	Financial guarantees received	
Demand deposits and overnight money balances at central banks and banks	6,959	-	-	-	-	-	-	-
Financial assets measured at amortised cost	107,054	-299	8,803	21,273	808	3,063	4,565	38,512
Bonds and other fixed-income securities	4	-	-	-	-	-	-	-
Loans and receivables	107,050	-299	8,803	21,273	808	3,063	4,565	38,512
thereof: Stage 3 and POCI assets	600	-187	43	101	3	29	21	197
Financial assets measured at fair value through other comprehensive income	22,314	-2	-	-	-	-	-	-
Bonds and other fixed-income securities	21,831	-2	-	-	-	-	-	-
Loans and receivables	483	-	-	-	-	-	-	-
Loan commitments	27,610	-22	155	210	8	104	415	892
thereof: Stage 3 and POCI assets	46	-8	-	-	-	-	-	-
Financial guarantees	6,771	-17	-	29	16	6	10	61
thereof: Stage 3 and POCI assets	40	-9	-	-	-	-	-	-
Total	170,708	-340	8,958	21,512	832	3,173	4,990	39,465

The following table shows the financial instruments within the scope of application of impairment regulations, for which no loss allowance was recognised due to sufficient collateralisation:

	31.12.2019	31.12.2018
Gross carrying amount of financial assets measured at amortised cost	21,654	18,168
Loans and receivables	21,654	18,168
Nominal amount of loan commitments	774	869
Maximum guarantee amount of financial guarantees	66	24
Total	22,494	19,061

The amount contractually outstanding for financial assets that were wholly or partially derecognised (written-off directly) in the reporting period due to uncollectibility, but in respect of which the Helaba Group is still pursuing collection (through legal enforcement), was € 98 m as at 31 December 2019 (31 December 2018: € 42 m). Legal enforcement measures are carried out until the Helaba Group's legal claims against the debtor have been extinguished, for instance by way of final settlement or external debt waivers.

Credit risks and collateral in respect of financial instruments outside the scope of application of IFRS 9 impairment requirements

As at the reporting date, the maximum exposure to credit risk within the meaning of IFRS 7.36 (a) corresponded to the carrying amount of the financial assets as disclosed in the statement of financial position, plus the other obligations as disclosed in Note (47). These amounts do not factor in any deduction of collateral or other credit enhancements.

The following table shows the financial assets measured at fair value through profit or loss as well as other off-balance sheet commitments (fair values or nominal amounts) and the corresponding collateral including the maximum amounts to be taken into account as at 31 December 2019:

in € m

Maximum amount of collateral or financial guarantees to be taken into account

	Fair value / nominal amount	Residential real estate	Com- mercial real estate	Cash collateral and own debt in- struments	Other debt instru- ments and other assets	Financial guarantees received	Total
Demand deposits and overnight money balances at central banks and banks	334	–	–	–	–	–	–
Loans and receivables HfT	334	–	–	–	–	–	–
Trading assets	6,930	–	9	–	–	1	10
Bonds and other fixed-income securities	5,951	–	–	–	–	–	–
Loans and receivables	979	–	9	–	–	1	10
Financial assets mandatorily measured at fair value through profit or loss	2,335	–	–	–	15	–	15
Bonds and other fixed-income securities	1,945	–	–	–	–	–	–
Loans and receivables	319	–	–	–	15	–	15
Receivables from the purchase of endowment insurance policies	71	–	–	–	–	–	–
Financial assets designated voluntarily at fair value	3,978	–	–	–	–	20	20
Bonds and other fixed-income securities	136	–	–	–	–	–	–
Loans and receivables	3,842	–	–	–	–	20	20
Total financial assets	13,577	–	9	–	15	21	45
Other obligations	3,310	1	772	3	1	–	777

The following table shows the amounts as at 31 December 2018:

in € m

	Fair value / nominal amount	Maximum amount of collateral or financial guarantees to be taken into account					Total
		Residen- tial real estate	Commer- cial real estate	Cash collateral and own debt in- struments	Other debt in- struments and other assets	Financial guarantees received	
Demand deposits and overnight money balances at central banks and banks	290	-	-	-	-	-	-
Loans and receivables HfT	290	-	-	-	-	-	-
Trading assets	7,965	-	99	-	9	1	109
Bonds and other fixed-income securities	6,570	-	-	-	-	-	-
Loans and receivables	1,395	-	99	-	9	1	109
Financial assets mandatorily measured at fair value through profit or loss	1,684	-	-	-	-	-	-
Bonds and other fixed-income securities	1,525	-	-	-	-	-	-
Loans and receivables	64	-	-	-	-	-	-
Receivables from the purchase of endowment insurance policies	95	-	-	-	-	-	-
Financial assets designated voluntarily at fair value	377	-	-	-	-	-	-
Bonds and other fixed-income securities	124	-	-	-	-	-	-
Loans and receivables	253	-	-	-	-	-	-
Total financial assets	10,316	-	99	-	9	1	109
Other obligations	3,435	1	884	4	1	-	890

Collateral for derivatives (cash collateral), master netting agreements and the maximum exposure to credit risk for derivatives, which equates to fair value, are presented in Note (42).

In the case of OTC derivative transactions, the Helaba Group applies a credit valuation adjustment (CVA) for default risk in order to cover any expected losses in the lending business. This CVA is determined by assessing the potential credit risk for a given counterparty. This assessment takes into account any collateral held, any offsetting effects under master agreements, the

expected loss in the event of a default and the credit risk based on market data, including CDS spreads. As at 31 December 2019, the CVAs for both trading book and banking book derivatives with positive fair values amounted to € 136 m (31 December 2018: € 121 m).

For further information on credit risks, please refer to the risk report, which forms an integral part of the management report.

(38) Provision of Collateral

Assets pledged as security

The collateral is provided on terms which are customary for the relevant repo, securities and financing transactions.

Securities are pledged as collateral in connection with repos and securities lending transactions (with cash collateral) and may be re-sold or pledged as collateral to others by the recipient even if the Helaba Group (as the original provider of the collateral) is not in default. The disposal or pledge of such collateral is subject to standard contractual conditions. Please refer to Note (39) for further information on the definition and structure of repos and securities lending transactions. As a result of these transactions, as in the previous year, no financial assets were furnished as collateral in which the recipient of the collateral had a contractual right to re-sell the assets or pledge them to other parties as collateral even if the Helaba Group were not in default.

In addition, the Bank holds loans and advances backed by property charges and municipal authority loans and advances as well as other cover assets in its collateral pool in accordance with sections 12 and 30 of the German Pfandbrief Act (Pfandbriefgesetz, PfandBG). As at 31 December 2019, cover assets amounted to € 50,019 m (31 December 2018: € 33,986 m) with mortgage and public Pfandbriefe of € 38,407 m in circulation (31 December 2018: € 26,710 m). These also included registered securities, which are reported under liabilities due to banks and liabilities due to customers.

As at the reporting date, the following assets (carrying amounts after loss allowances) had been pledged or transferred as collateral for the Helaba Group's own liabilities (for details on the transfer of financial assets without derecognition, please refer to Note (39)):

in € m

	31.12.2019	31.12.2018
Financial assets	14,933	9,218
Financial assets measured at amortised cost	9,081	3,379
Loans and receivables	9,081	3,379
Trading assets	1,485	1,489
Bonds and other fixed-income securities	1,483	1,489
Loans and receivables	2	–
Financial assets measured at fair value through other comprehensive income	4,367	4,350
Bonds and other fixed-income securities	4,367	4,350
Non-financial assets	1,529	1,399
Investment property	1,349	1,188
Property and equipment	161	168
Property held for sale	19	43
Total	16,462	10,617

Financial assets (securities and cash collateral) were provided as collateral in connection with the following business transactions:

	31.12.2019	31.12.2018
Collateral for funding transactions with central banks	3,661	3,618
Securities collateral for transactions via exchanges and clearing houses	1,708	1,572
Cash collateral for exchange-traded derivative transactions	36	57
Cash collateral for OTC derivative transactions incl. central counterparties	9,047	3,322
Securities provided as collateral for funding transactions with the European Investment Bank (EIB)	319	492
Collateral provided for other purposes	162	157
Total	14,933	9,218

in € m

The collateral provided for other purposes was mainly related to securities collateral furnished in accordance with section 202b of the New York Banking Law, which was a precondition for the operation of banking business by the US branch.

Assets received as security

Collateral is received on terms that are customary for the relevant repo, securities and financing transactions.

The fair value of collateral received in connection with repurchase agreements (repos) that permit the Helaba Group to sell on or pledge such collateral even if the party providing the collateral does not default amounted to € 16 m (31 December 2018: € 133 m). Such collateral with a fair value of € 10 m (31 December 2018: € 102 m) has been sold on, or has been the subject of onward pledging.

Please refer to (37) for disclosures on collateral received in connection with lending operations. Please refer to Note (42) for disclosures on collateral and offsetting agreements.

In connection with Helaba's Pfandbrief business, there are arrangements in which loans and advances eligible for the collateral pool, including the rights to the corresponding collateral, are also legally transferred to Helaba but the beneficial ownership of the loans and advances remains with the transferring bank in accordance with the terms and conditions of the transfer agreement. The transferring bank continues to account for these loans and advances to the customers concerned, which are entered in the cover register. As at 31 December 2019, Helaba's collateral pool included such legal transfers with a nominal value of € 1,433 m (31 December 2018: € 866 m).

(39) Transfer of Financial Instruments

Financial assets are derecognised when the contractual rights associated with an asset expire or are transferred such that substantially all the risks and rewards incidental to ownership are passed to another party or when the control or power over the asset is transferred to another party. If substantially all the risks and rewards incidental to ownership are not transferred or control or power over the asset is not passed to another party, the remaining economic involvement in the financial instrument (“continuing involvement”) is recognised in accordance with IFRS 9. In addition, financial assets in the AC and FVOCI categories are derecognised if they have been substantially modified, i.e. if the contractual cash flows have been modified or the legal position affecting the cash flows has changed such that, de facto, there is a new transaction in place.

Financial liabilities are derecognised when the liabilities are settled. The same applies to financial liabilities measured at amortised cost in the case of substantial modifications leading to new liabilities. Please refer to Note (37) for further disclosures on modifications.

Transfer without derecognition

In connection with “genuine” repo and securities lending transactions, Helaba Group transfers bonds and other fixed-income securities, but retains the main credit, interest rate and currency risks as well as the opportunities for capital appreciation associated with the ownership of these financial assets. Thus, the requirements for derecognition in accordance with IFRS 9 are not fulfilled, and the financial assets continue to be recognised in the consolidated statement of financial position and measured in accordance with the corresponding measurement category, provided the items are bonds and other fixed-income securities owned by the Helaba Group. In the context of securities repurchase and lending transactions, securities accepted from third parties as part of reverse repos or borrowed bonds and other fixed-income securities, which may not be recognised in the consolidated statement of financial position, may also be transferred.

The transferee or borrower, as the case may be, may sell on or pledge the transferred securities at any time. Nevertheless, the Helaba Group generally continues to receive the contractually agreed cash flows from these securities.

The Helaba Group enters into securities repurchase agreements in the form of standardised repo or reverse repo deals in which the Helaba Group is either the seller/borrower (repo) or buyer/lender (reverse repo). Such arrangements are a contractual agreement to transfer securities accompanied by a simultaneous agreement to repurchase the transferred (or equivalent) securities on a specified date in the future in return for the payment of an amount agreed in advance. The transactions are settled using standard framework contracts, and do not contain any limitations.

The financial assets reported as reverse repos in the loans and receivables class are in effect the Helaba Group’s entitlement to repayment of the cash it paid out as the buyer in return for the transfer of securities. This class is also used to report cash collateral furnished by the Helaba Group, as borrower, in connection with securities lending transactions.

The liabilities from securities repurchase transactions result from the amount paid by the transferee for the transferred bonds and other fixed-income securities. This amount corresponds to the fair value of the transferred securities less a safety margin on the date on which the transaction is entered into. When the bonds and other fixed-income securities are transferred back at the end of the term of the securities repurchase agreement, this amount, plus agreed interest, must be repaid to the transferee. The corresponding liabilities in connection with securities lending transactions arise out of the obligation to repay the cash collateral received. The main counterparties in the Helaba Group’s securities lending transactions comprise affiliated and non-affiliated Sparkassen. Cash collateral for lent bonds and other fixed-income securities is generally only required from counterparties outside the Sparkassen-Finanzgruppe. The liabilities from securities repurchase transactions and from cash collateral received in connection with securities lending are recognised under trading liabilities or under financial liabilities measured at amortised cost.

Because transferred bonds and other fixed-income securities are assigned to the FVTPL or FVTOCI measurement categories, the carrying amounts of the transferred items represent their fair values.

As at 31 December 2019, no bonds or other fixed-income securities were transferred as part of securities repurchase transactions (31 December 2018: € 10 m). The corresponding liabilities under securities repurchase transactions as at 31 December 2018 amounted to € 10 m. As at 31 December 2019, bonds and other fixed-income securities with a fair value of € 93 m had been transferred as part of securities lending transactions (31 December 2018: € 0 m). Securities lending transactions in the Helaba Group as at 31 December 2019 only involved unsecured transactions.

Transfer with derecognition

Contracts for the sale and acquisition of shares in companies (equity investments and affiliates) include the warranties customary with such transactions, in particular in respect of the tax and legal position. Provisions of € 14 m (31 December 2018: € 16 m) have been recognised for such warranties.

In the case of financial instruments for which no quoted prices are available in active markets on the reporting date, the fair value is determined using generally accepted valuation techniques. The financial instruments are measured on the basis of the cash flow structure, taking into account estimated future cash flows, discount rates and volatility. These approaches use modelling techniques such as the discounted cash flow method or established option pricing models. Models with greater differentiation that use more detailed inputs such as correlations are used for more complex financial instruments.

The inputs for the models are usually observable in the market. If no market information is available for the required model inputs, these are derived from other relevant information sources, such as prices for similar transactions or historical data.

(40) Fair Values

Fair value is defined as the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's-length transaction (except in the case of emergency settlement).

Fair values of financial instruments

Measurement methods

When selecting the measurement method for financial instruments, the Helaba Group distinguishes between those financial instruments that can be measured directly using prices quoted in an active market and those measured using standard valuation techniques. In this process, of all the markets to which the Helaba Group has access, the market with the highest level of activity is generally assumed to be the relevant market (primary market). If no primary market can be determined for individual financial instruments, the most favourable market is selected.

The fair value of financial instruments listed in active markets is determined on the basis of quoted prices. A market is deemed to be active if, for relevant or similar financial instruments, there are market prices that satisfy minimum requirements, particularly in relation to price spread and trading volume. The minimum requirements are specified by the Helaba Group and subject to a regular review.

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

Financial instruments	Measurement models	Key inputs
Interest-rate swaps and interest-rate options	Discounted cash flow method, Black/Normal Black model, Markov functional model, SABR model, replication model, bivariate copula model, Hull-White/hybrid Hull-White model	Yield curves, interest-rate volatility, correlations
Interest-rate futures	Discounted cash flow method	Yield curves
Currency futures	Discounted cash flow method	Exchange rates, yield curves
Equity/index options	Black model, local volatility model	Equity prices, yield curves, equity volatilities, dividends
Currency options	Black model, skew barrier model	Exchange rates, yield curves, FX volatilities
Commodity options	Black model, Turnbull/Wakeman	Commodity prices, yield curves, commodity volatilities/correlations
Credit derivatives	Black model	Yield curves, credit spreads, credit volatility
Loans	Discounted cash flow method	Yield curves, credit spreads
Money market instruments	Discounted cash flow method	Yield curves
Securities repurchase transactions	Discounted cash flow method	Yield curves
Promissory note loans	Discounted cash flow method	Yield curves, credit spreads
Securities, forward securities transactions	Discounted cash flow method	Yield curves, credit spreads, securities prices
Fund units/shares	Fund valuation	Net asset values of the funds
Shareholdings	Dividend discount method, net asset value method	Discount rate, expected cash flows

Fund units/shares in the equity shares and other variable-income securities measurement category are measured on the basis of net asset values, which are mainly determined by the fund management companies and made available to the unitholders/shareholders. These values can be considered as representative of the fair value. If the latest fair value was determined as at a date other than the reporting date, such value is extrapolated to the reporting date, factoring in current information from the fund management company that has an impact on fair value.

In the case of purchased rights under endowment insurance policies, the fair value is measured on the basis of the surrender value notified by the insurance company. This value is then adjusted for contributions and other changes in value up to the reporting date.

Adjustments

Adjustments may be required in some cases, and these adjustments form an additional part of the measurement process. Depending on the complexity of the financial instrument involved, the use of a model to measure a financial instrument could involve some uncertainty in the selection of a suitable model, for example regarding the numeric implementation or the parametrisation/calibration of the model. When measuring a financial instrument using fair value principles, this uncertainty is taken into account by applying model adjustments, which can be subdivided into deficiency adjustments and complexity adjustments.

The purpose of a deficiency adjustment is to reflect model-related measurement uncertainty. Such model uncertainty arises if a financial instrument is measured using a model that is uncommon (or no longer common) or if there is a lack of clarity caused by an inadequate calibration process or by the technical implementation. Complexity adjustments are taken into account if there is no market consensus regarding the model to be used or the parametrisation for the model cannot be clearly derived from the market data. The problems in such cases are referred to as model risk. The measurement markdowns resulting from the various adjustments are taken into account in the form of a model reserve.

Generally speaking, derivatives are currently measured in front-office systems on a risk-free basis. In other words, it is specifically assumed that the counterparties involved will remain in place until the contractual maturity of the outstanding transactions. Credit risk is taken into account in the form of a measurement adjustment. The measurement adjustment is calculated on the basis of the net exposure and the exposure over time is estimated using a Monte Carlo simulation. The credit value adjustment (CVA) reflects the imputed loss risk to which the Helaba Group believes it is exposed in respect of its counterparty, based on a positive fair value from the Helaba Group's perspective. If the counterparty were to default, it would only be possible to recover a fraction of the fair value of the outstanding transactions in any insolvency or liquidation process (recovery rate). A debit value adjustment (DVA) mirrors the CVA and is defined as that imputed part of a negative fair value (from the perspective of the Group) that would be lost if the counterparty were to default. The CVA and DVA amounts are taken into account in the form of a measurement adjustment.

A funding valuation adjustment (FVA) is necessary to ensure that the measurement of derivative financial instruments takes into account the funding costs implied by the market. Funding costs are incurred in connection with the replicated hedging of unsecured customer derivatives with secured hedging derivatives in the interbank market. Whereas the volume to be funded is derived from an exposure simulation, the funding rates are set in line with the Euro Interbank Offered Rate (Euribor). Similar to a CVA/DVA, there are two types of FVA. A funding benefit adjustment (FBA) is applied in the case of a negative exposure, and a funding cost adjustment (FCA) for a positive exposure.

Validation and control

The measurement process is subject to continuous validation and control. In the trading business, part of the process of measuring exposures independently of the trading activity is to ensure that the methods, techniques and models used for the measurement are appropriate.

New measurement models are generally subject to comprehensive initial validation before they are used for the first time. The models are then regularly reviewed depending on materiality, the extent to which they are established in the market and on the complexity of the model in question. Ad hoc reviews are also carried out if, for example, significant changes are made to the model.

A process of independent price verification is also carried out to ensure that the inputs used for measuring the financial instruments are in line with the market.

Level 1

The market price is the best indicator of the fair value of financial instruments. If an active market exists, observable market prices are used to measure the financial instruments recognised at fair value. These are normally prices quoted on a stock exchange or market prices quoted on the interbank market. These fair values are reported as Level 1.

Level 2

If an observable market price does not exist for a financial instrument, recognised and customary valuation techniques are used for measurement purposes, with all input data being based on observable market data and taken from external sources. These valuation techniques are normally used for OTC derivatives (including credit derivatives) and for financial instruments that are recognised at fair value and not traded on an active market. In such cases, the fair values are reported as Level 2.

Level 3

In those cases in which not all input parameters are directly observable on the market, the fair values are calculated using realistic assumptions based on market conditions. This approach is required in particular for complex structured (derivative) basket products where correlations not directly observable in the market are significant to the measurement. If no market prices are available for non-derivative financial instruments, sector rating credit curves are used to determine the credit spreads; alternatively, if this is not possible, arranger prices are used. Inputs that cannot be observed, particularly the surpluses derived from corporate planning, are also used to measure unlisted shareholdings recognised at fair value and to test goodwill for impairment. In the case of investment property, fair values are determined on the basis of expected income and expenses, with the result that these fair values are also classified as Level 3.

At Helaba, transactions are generally allocated to Level 3 if no inputs observable in the market are used in the measurement. If the sole non-observable input is the internal credit rating for the customer and this has only an immaterial effect on fair value, the transaction is allocated to Level 2.

If an input material to the measurement of a financial instrument can no longer be classified under the same level used in the previous measurement, the instrument is reallocated to the relevant level.

The breakdown of financial instruments on the assets side measured at fair value according to the hierarchy of the inputs used was as follows:

in € m

	31.12.2019				31.12.2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash on hand, demand deposits and overnight money balances with central banks and banks	-	334	-	334	-	290	-	290
Demand deposits and overnight money balances with banks	-	334	-	334	-	290	-	290
Trading assets	5,883	12,938	483	19,304	6,375	10,193	421	16,989
Positive fair values of derivatives	6	12,175	167	12,348	10	8,697	287	8,994
Bonds and other fixed-income securities	5,851	40	60	5,951	6,335	213	22	6,570
Loans and receivables	-	723	256	979	-	1,283	112	1,395
Equity shares and other variable-income securities	26	-	-	26	30	-	-	30
Other financial assets mandatorily measured at fair value through profit or loss	1,850	5,965	618	8,433	1,455	2,215	241	3,911
Positive fair values of derivatives	-	5,714	162	5,876	-	2,031	15	2,046
Bonds and other fixed-income securities	1,849	96	-	1,945	1,447	73	5	1,525
Loans and receivables	-	52	267	319	-	43	21	64
Equity shares and other variable-income securities	1	103	53	157	8	68	34	110
Shareholdings	-	-	65	65	-	-	71	71
Receivables from the purchase of endowment insurance policies	-	-	71	71	-	-	95	95
Financial assets designated voluntarily at fair value	3	3,557	418	3,978	3	301	73	377
Bonds and other fixed-income securities	3	133	-	136	3	121	-	124
Loans and receivables	-	3,424	418	3,842	-	180	73	253
Positive fair values of hedging derivatives under hedge accounting	-	1,102	-	1,102	-	608	-	608
Financial assets measured at fair value through other comprehensive income	21,307	1,983	513	23,803	21,221	875	398	22,494
Bonds and other fixed-income securities	21,307	1,815	-	23,122	21,221	737	7	21,965
Loans and receivables	-	168	481	649	-	138	350	488
Shareholdings	-	-	32	32	-	-	41	41
Financial assets	29,043	25,879	2,032	56,954	29,054	14,482	1,133	44,669

On the liabilities side, the breakdown of financial liabilities measured at fair value was as follows:

in € m

	31.12.2019				31.12.2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Trading liabilities	60	18,244	169	18,473	134	12,341	288	12,763
Negative fair values of derivatives	14	9,997	169	10,180	51	7,166	288	7,505
Securitised liabilities	35	1,102	–	1,137	31	822	–	853
Deposits and loans	–	7,145	–	7,145	–	4,353	–	4,353
Liabilities arising from short-selling	11	–	–	11	52	–	–	52
Negative fair values of non-trading derivatives	–	6,714	45	6,759	1	1,778	12	1,791
Financial liabilities designated voluntarily at fair value	–	11,193	1,606	12,799	–	10,759	721	11,480
Securitised liabilities	–	4,974	1,050	6,024	–	6,379	683	7,062
Deposits and loans	–	6,219	556	6,775	–	4,380	38	4,418
Negative fair values of hedging derivatives under hedge accounting	–	1,907	–	1,907	–	490	–	490
Financial liabilities	60	38,058	1,820	39,938	135	25,368	1,021	26,524

The following tables show transfers from Level 1 and Level 2 to other levels as a result of a change in fair value quality. Other changes are attributable to additions, derecognition or measurement changes.

in € m

	31.12.2019				31.12.2018			
	From Level 1 to		From Level 2 to		From Level 1 to		From Level 2 to	
	Level 2	Level 3	Level 1	Level 3	Level 2	Level 3	Level 1	Level 3
Trading assets	22	-	3	-	9	-	25	-
Bonds and other fixed-income securities	22	-	3	-	9	-	25	-
Other financial assets mandatorily measured at fair value through profit or loss	24	-	2	-	-	-	-	-
Bonds and other fixed-income securities	24	-	2	-	-	-	-	-
Financial assets measured at fair value through other comprehensive income	17	-	-	4	61	-	112	15
Bonds and other fixed-income securities	17	-	-	-	61	-	112	-
Loans and receivables	-	-	-	4	-	-	-	15
Financial assets	63	-	5	4	70	-	137	15

As in the prior-year period, there were no transfers of financial liabilities from Levels 1 or 2 to another level in the reporting period.

The following tables show the changes in the portfolio of financial instruments measured at fair value and allocated to Level 3, on the basis of class of financial instrument regardless of measurement category. Transfers to or from Level 3 from/to other levels in the measurement hierarchy were made at the carrying amount on the date on which the transfer was carried out.

The allocations to the various levels are reviewed quarterly. The tables show the gains and losses as well as the cash flows that have occurred since the beginning of the year or since the allocation to Level 3. The tables also show the net gains or losses on remeasurement of the financial instruments still held in the portfolio as at the reporting date:

in € m

	Positive fair values of derivatives	Bonds and other fixed-income securities	Loans and receivables	Equity shares and other variable-income securities	Share-holdings	Receivables from endowment insurance policies
As at 1.1.2019	302	34	556	34	112	95
Gains or losses recognised in the consolidated income statement	-8	3	15	-	-8	4
Net trading income	-37	-	-2	-	-	-
Gains or losses on other financial assets mandatorily measured at fair value through profit or loss	29	3	17	-	-8	4
Gains or losses recognised in other comprehensive income	-	-	4	-	-8	-
Additions	11	93	1,336	23	4	-
Disposals/liquidations	-30	-95	-611	-4	-1	-28
Changes in basis of consolidation	131	25	126	-	-2	-
Changes in accrued interest	3	-	3	-	-	-
Amortisation of premiums/discounts	-9	-	-4	-	-	-
Transfers from Level 2	4	-	7	-	-	-
Transfers to Level 2	-75	-	-9	-	-	-
Other changes in the portfolio	-	-	-1	-	-	-
As at 31.12.2019	329	60	1,422	53	97	71
Gains or losses on financial assets in the portfolio recognised in the consolidated income statement	64	-	4	-	-8	3

The following table show the changes in the assets at Level 3 in the prior-year period:

in € m

	Positive fair values of derivatives	Bonds and other fixed-income securities	Loans and receivables	Equity shares and other variable-income securities	Share-holdings	Receivables from endowment insurance policies
As at 1.1.2018	152	20	402	45	109	112
Gains or losses recognised in the consolidated income statement	223	–	–5	–8	–2	6
Net trading income	221	–	1	–	–	–
Gains or losses on other financial assets mandatorily measured at fair value through profit or loss	2	–	–6	–8	–2	6
Gains or losses recognised in other comprehensive income	–	–	9	–	2	–
Additions	7	52	419	13	1	–
Disposals/liquidations	–28	–30	–285	–9	–2	–23
Changes in basis of consolidation	–	–	–	–	4	–
Changes due to currency translation	–	–	1	–	–	–
Transfers from Level 2	–	–	15	–	–	–
Transfers to Level 2	–50	–7	–	–7	–	–
Other changes in the portfolio	–2	–	–	–	–	–
As at 31.12.2018	302	35	556	34	112	95
Gains or losses on financial assets in the portfolio recognised in the consolidated income statement	208	–	–3	–5	–3	4

The following table shows the changes in the liabilities at Level 3 in the reporting period:

in € m

	Negative fair values of derivatives	Securitised liabilities	Deposits and loans
As at 1.1.2019	300	683	38
Gains or losses recognised in the consolidated income statement	-38	29	2
Net trading income	-36	-	-
Gains or losses on other financial assets mandatorily measured at fair value through profit or loss	-2	29	2
Gains or losses recognised in other comprehensive income	-	-2	-
Additions	17	260	169
Disposals/liquidations	-32	-39	-10
Changes in basis of consolidation	35	119	399
Changes in accrued interest	-	-1	1
Amortisation of premiums / discounts	-2	1	-7
Transfers to Level 2	-66	-	-37
Other changes in the portfolio	-	-	1
As at 31.12.2019	214	1,050	556
Gains or losses on financial assets in the portfolio recognised in the consolidated income statement	-35	-24	-3

The following table show the changes in the liabilities at Level 3 in the prior-year period:

in € m

	Negative fair values of derivatives	Securitised liabilities	Deposits and loans
As at 1.1.2018	152	465	39
Gains or losses recognised in the consolidated income statement	218	-2	-1
Net trading income	220	-	-
Gains or losses on other financial assets mandatorily measured at fair value through profit or loss	-2	-2	-1
Gains or losses recognised in other comprehensive income	-	1	-
Additions	12	243	-
Disposals/liquidations	-29	-24	-
Changes in accrued interest	-2	-	-
Amortisation of premiums/discounts	-	2	-
Transfers to Level 2	-49	-2	-
Other changes in the portfolio	-2	-	-
As at 31.12.2018	300	683	38
Gains or losses on financial assets in the portfolio recognised in the consolidated income statement	-204	2	1

As in the previous year, there were no major transfers in the reporting year to or from Level 3. The transfers that were carried out were attributable to changes in the quality of the individual inputs used.

Helaba's model for measuring the Level 3 instruments used inputs producing a price that knowledgeable market participants would apply. In its model considerations, Helaba uses inputs that are preferably observable in a market. In the case of inputs that are not observable in a market, Helaba uses the same assumptions that would be used by market participants for pricing purposes.

The following table provides an overview of the main inputs not observable in a market that were used in the relevant valuation techniques:

in € m

	Assets at Level 3	Liabilities at Level 3	Valuation technique	Key inputs not observable in a market	Range in %
Derivatives	329	214			
Equity- /index-related derivatives					
	101	104	Option pricing model	Dividend estimate with remaining term > 3 years	0.0 – 126.6
	57	57	Option pricing model	Equity shares correlation	– 34.3 % – 94.4 %
Interest-rate derivatives	171	53	Option pricing model	Interest correlation	– 52.0 % – 100.0 %
Equity shares and other variable-income securities	53				
Private equity funds	53		Fund valuation	Net asset values	n.a.
Bonds and other fixed-income securities	60				
			DCF approach	Credit spread	0.0 % – 2.5 %
Securitised liabilities		1,050			
Interest certificates		1,050	Option pricing model	Interest correlation	– 52.0 % – 100.0 %
Loans and receivables	1,422				
Promissory note loans	810		DCF approach	Credit spread	0.0 % – 2.5 %
	465		Option pricing model	Credit spread	0.0 % – 0.5 %
	110		Option pricing model	Interest correlation	– 52.0 % – 100.0 %
				Credit spread	0.0 % – 0.5 %
Mezzanine receivables	4		Fund valuation	Fair value	n.a.
Other	33		Various	n.a.	n.a.
Deposits and loans		556			
			Option pricing model	Interest correlation	– 52.0 % – 100.0 %
Shareholdings	97				
	49		Income capitalisation approach	Discount rate	6.1 % – 7.1 %
				Expected cash flows	n.a.
	48		Net asset value method	Fair value	n.a.
Receivables from the purchase of endowment insurance policies	71				
			Insurance valuation model	Surrender values	n.a.
Total	2,032	1,820			

The following table shows the figures as at 31 December 2018:

in € m

	Assets at Level 3	Liabilities at Level 3	Valuation technique	Key inputs not observable in a market	Range in %
Derivatives	302	300			
Equity-/index-related derivatives				Dividend estimate with remaining term > 3 years	0.04 – 121.0
	212	213	Option pricing model		
	66	65	Option pricing model	Equity shares correlation	–35.5 % – 100.0 %
Equity shares and other variable-income securities	24	22	Option pricing model	Interest correlation	–32.0 % – 100.0 %
Fixed-income securities	34				
Private equity funds	34		Fund valuation	Net asset values	n.a.
Bonds and other fixed-income securities	34		DCF approach	Credit spread	0.3 % – 3.3 %
Verbriefte Verbindlichkeiten		683			
Securitised liabilities		683	Option pricing model	Interest correlation	–32.0 % – 100.0 %
Interest certificates	556				
Loans and receivables	535		DCF approach	Credit spread	0.3 % – 3.3 %
Promissory note loans	9		Fund valuation	Fair value	n.a.
Mezzanine receivables	12		Various	n.a.	n.a.
Other		38	Option pricing model	Interest correlation	–32.0 % – 100.0 %
Shareholdings	112				
	45		Income capitalisation approach	Discount rate	6.4 % – 7.5 %
				Expected cash flows	n.a.
	67		Net asset value method	Fair value	n.a.
Receivables from the purchase of endowment insurance policies	95		Insurance valuation model	Surrender values	n.a.
Total	1,133	1,021			

In the case of those market inputs used that are not directly observable in a market, it is possible to use alternative inputs that knowledgeable market participants could apply to identify more advantageous or more disadvantageous prices. The fol-

lowing section describes how fluctuations in unobservable inputs may impact fair values of financial instruments. The calculations are based on either sensitivity analyses or recalculations of fair values.

The Helaba Group uses correlations to measure derivatives, issued certificates, deposits, and loans. Correlations are unobservable market parameters used in model calculations of fair value for financial instruments with more than one reference value. Correlations describe the relationship between these reference values. A high degree of correlation means that there is a strong relationship between the performance of the respective reference values. Structured interest rate derivatives are typically entered into exclusively to hedge structured interest rate issues in the banking book, or to hedge structured customer transactions in the trading book. The takeover of KOFIBA included the acquisition of a portfolio of structured transactions that are hedged on a back-to-back basis. Furthermore, structured equity derivatives – where correlations must be taken into account as market parameters – are usually entered into exclusively in connection with the corresponding retail issues; such items are closed with back-to-back hedges. The changes in the fair values of the hedging instrument and the hedged item that are attributable to the relevant parameter (interest, equity share or commodity correlation) offset each other.

In the case of equity derivatives with underlyings involving dividend distributions, future dividends are taken into account in the valuation. However, no dividend estimates are directly observable on the market for securities with a remaining term of more than three years. To determine the impact on fair values of dividend projections for items with a remaining term of more than three years, a premium or discount of 50 % was applied to the dividend estimates used. If the dividend estimate is increased, the fair value rises by € 1 m (31 December 2018: € 1 m); if it is reduced, the fair value falls by € 1 m (31 December 2018: € 1 m).

The credit spread is a key input in a model-based measurement of the fair value of bonds and other fixed-income securities and of the promissory note loans reported under loans and receivables. Interest-bearing securities are allocated to Level 3 if it is not (or not with reasonable assurance) possible to derive the credit spread as an input parameter from market data. For this reason, the sensitivity analysis applied to interest-bearing securities includes an examination of the potential impact from credit spread changes. Helaba determines credit spread standard deviations for all required sector-rating-combinations based on one-year history files of sector curves from the CDS or bond market. The determined standard deviations are allocated to Level 3 securities – based on sector and rating – and then

multiplied with credit spread sensitivity of the respective security. The result is the value adjustment for the respective security item if the valuation spread increases or declines by the 1-year standard deviation. This results in an increase or decline in the fair values of the items concerned by approximately € 6 m (31 December 2018: € 1 m).

In the case of fund units/shares and mezzanine loans, fair values are predominantly determined by the fund management companies on the basis of the fund assets and made available to the unitholders/shareholders. The latest available fair values are adjusted up to the reporting date. If the input factors used are increased or decreased by 10 %, the fair values determined using these input factors change by up to € 5 m (31 December 2018: € 4 m).

In the case of investments in unlisted companies for which fair values are determined using the discounted earnings model, a premium, or discount, of 10 % is applied to all discountable cash flows. This results in an increase, or decline, in fair values of € 5 m (31 December 2018: € 4 m). If the discount rate were to be increased by one percentage point, the calculated fair values would fall by € 8 m (31 December 2018: € 6 m); if the discount rate were lowered by one percentage point, the fair values would rise by € 11 m (31 December 2018: € 9 m). Furthermore, the fair value for some investments in unlisted companies is determined using the net asset value method. The input factors used are subject to a premium, or discount, of 10 %. This results in alternative values that are up to € 5 m (31 December 2018: € 5 m) above, or up to € 5 m (31 December 2018: € 6 m) below the disclosed amounts.

The receivables from the purchase of endowment insurance policies are not deemed to be subject to any material sensitivity because they are measured on the basis of the surrender values supplied by the life insurance companies.

There were no significant sensitivities evident in the other Level 3 instruments.

The following overview compares the fair values of financial assets and liabilities measured at amortised cost with their corresponding carrying amounts.

in € m

	Fair Value				Carrying amount	Difference
	Level 1	Level 2	Level 3	Total		
Cash on hand, demand deposits and overnight money balances with central banks and banks	–	14,137	–1	14,136	14,136	–
Demand deposit balances with central banks	–	12,933	–1	12,932	12,932	–
Demand deposits and overnight money balances with banks	–	1,204	–	1,204	1,204	–
Financial assets measured at amortised cost	–	90,005	44,343	134,348	130,326	4,022
Loans and receivables	–	90,005	44,343	134,348	130,326	4,022
Financial assets	–	104,142	44,342	148,484	144,462	4,022
Financial liabilities measured at amortised cost	4,506	126,719	25,762	156,987	155,364	1,623
Securitised liabilities	4,506	55,674	–	60,180	59,715	465
Deposits and loans	–	70,929	25,618	96,547	95,390	1,157
Other financial liabilities	–	116	144	260	259	1
Financial liabilities	4,506	126,719	25,762	156,987	155,364	1,623

The following table shows the values as at 31 December 2018:

	Fair value ¹⁾				Carrying amount	Difference
	Level 1	Level 2	Level 3	Total		
Cash on hand, demand deposits and overnight money balances with central banks and banks	–	6,959	–	6,959	6,959	–
Demand deposit balances with central banks	–	6,613	–	6,613	6,613	–
Demand deposits and overnight money balances with banks	–	346	–	346	346	–
Financial assets measured at amortised cost	4	73,748	37,175	110,927	106,755	4,172
Bonds and other fixed-income securities	4	–	–	4	4	–
Loans and receivables	–	73,748	37,175	110,923	106,751	4,172
Financial assets	4	80,707	37,175	117,886	113,714	4,172
Financial liabilities measured at amortised cost	3,955	112,042	11,021	127,018	125,222	1,796
Securitised liabilities	3,955	41,731	–	45,686	45,455	231
Deposits and loans	–	70,232	10,889	81,121	79,558	1,563
Other financial liabilities	–	79	132	211	209	2
Financial liabilities	3,955	112,042	11,021	127,018	125,222	1,796

¹⁾ Prior-year figures restated: In the previous year, lease liabilities of € 18 m were reported under other financial liabilities and are now shown under deposits and loans.

The portfolios reported under Level 3 mainly consist of development and retail business as well as loans to and receivables from customers who do not have an impeccable credit standing.

Fair values of investment property

The fair values for property disclosed in Note (28) have been determined using internationally recognised valuation techniques. The vast majority of the residential buildings, commercial properties, parking facilities and undeveloped land areas in the Group's portfolio are valued by independent experts on the basis of market values, mainly by using the discounted cash flow method. In this method, the fair value is calculated by determining the present value of the rental income achievable over the long term, taking into account management costs and forecast property vacancy rates.

For the purposes of the calculation, the properties are structured according to a location and property appraisal and subdivided into clusters. This is based on the following parameters: market (macro location), site (micro location), property and cash flow quality. Properties are thus grouped, each of the properties within a particular group sharing similar characteristics. The groups differ in terms of position, quality of management unit and therefore also in terms of their respective risk.

The following details were determined and applied on the basis of the resulting clusters:

- annual rates of increase for rent
- non-allocatable operating costs
- effective vacancy rates
- discount rates.

The following details were determined and applied on the basis of the properties:

- market rent as at the valuation date
- maintenance, management and other expenses
- trends in the rent per square metre of rentable area based on an extrapolation of market rents and current rents
- trends in vacant property levels based on cluster-specific assumptions regarding target vacancy level
- trends in expenses for maintenance, management, non-allocatable operating costs, other costs and any ground rent.

The cash flow is determined in two stages. The first stage comprises a detailed forecast period of ten years in which the cash inflows from the current target rent based on full occupancy are reduced by the effect of the current vacancy level in the first year and then the assumed structural vacancy levels in years two to ten. The resulting amount reduced by management costs, non-allocatable operating costs, maintenance and repair costs and ground rent produces the available cash flow (before taxes and debt servicing) which can then be discounted. In the eleventh year, the methodology assumes a hypothetical disposal of the property and the sale price is used as a residual value in the calculation. The total of the present values from the cash flows in the detailed forecast period and from the hypothetical resale of the property represent the fair value of the property concerned.

The discount rate comprises a risk-free interest rate together with mark-ups and discounts for existing property, location and market risks.

(41) Derivatives

The Helaba Group uses derivative financial instruments for both trading and hedging purposes.

Derivatives can be entered into in the form of standard contracts on an exchange or individually negotiated as OTC derivatives.

The notional amounts reflect the gross volume of all purchases and sales. These figures are used as a reference for determining mutually agreed compensation payments; however, they are not receivables or liabilities that can be shown in the statement of financial position.

The notional and fair values of derivatives as at 31 December 2019 were as follows:

in € m

	Notional amounts		Positive fair values		Negative fair values	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Equity- /index-related transactions	5,273	5,413	272	427	271	418
OTC products	4,860	4,764	266	417	257	367
Equity options	4,860	4,764	266	417	257	367
Purchases	2,542	2,562	266	417	–	–
Sales	2,318	2,202	–	–	257	367
Exchange-traded products	413	649	6	10	14	51
Equity/index futures	86	76	–	–	–	–
Equity/index options	327	573	6	10	14	51
Interest-rate-related transactions	487,029	439,790	17,848	10,076	16,656	8,026
OTC products	473,053	428,017	17,848	10,076	16,656	8,026
Interest rate swaps	413,962	373,288	16,215	9,193	12,043	5,583
Interest rate options	58,516	54,229	1,633	883	4,613	2,441
Purchases	24,295	20,591	1,476	785	59	46
Sales	34,221	33,638	157	97	4,554	2,395
Other interest rate contracts	575	500	–	–	–	2
Exchange-traded products	13,976	11,773	–	–	–	–
Interest rate futures	13,716	11,591	–	–	–	–
Interest rate options	260	182	–	–	–	–
Currency-related transactions	76,488	62,526	1,189	1,114	1,901	1,314
OTC products	76,488	62,526	1,189	1,114	1,901	1,314
Currency spot and futures contracts	50,002	38,012	513	411	595	499
Cross-currency swaps	25,736	24,041	667	698	1,297	809
Currency options	750	473	9	5	9	6
Purchases	378	234	9	5	–	–
Sales	372	239	–	–	9	6
Credit derivatives	3,197	6,808	17	31	17	27
OTC products	3,197	6,808	17	31	17	27
Commodity-related transactions	43	58	–	–	1	1
OTC products	43	58	–	–	1	1
Commodity swaps	–	2	–	–	–	–
Commodity options	43	56	–	–	1	1
Total	572,030	514,595	19,326	11,648	18,846	9,786

Derivatives have been entered into with the following counter-parties:

in € m

	Notional amounts		Positive fair values		Negative fair values	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Central banks and banks in Germany	108,354	77,002	6,026	2,995	4,950	2,228
Central banks and banks in the EU (excluding Germany)	126,031	107,983	4,659	3,044	11,419	5,453
Central banks and banks in the rest of the world (excluding EU)	3,701	2,381	37	36	206	150
Governments, Germany	25,154	26,891	5,909	3,514	1,089	1,008
Other counterparties in Germany	33,989	32,146	1,568	1,339	487	443
Other counterparties in the EU (excluding Germany)	259,168	254,457	973	653	659	394
Other counterparties (rest of world, excluding EU)	1,244	1,313	148	57	22	59
Exchange-traded derivatives	14,389	12,422	6	10	14	51
Total	572,030	514,595	19,326	11,648	18,846	9,786

Notional amounts broken down by term to maturity as at 31 December 2019:

in € m

	Less than three months	Three months to one year	One year to five years	More than five years	Total
Equity-/index-related transactions	319	558	4,066	330	5,273
Interest-rate-related transactions	43,114	55,325	190,289	198,301	487,029
Currency-related transactions	35,235	16,782	18,591	5,880	76,488
Credit derivatives	32	391	2,618	156	3,197
Commodity-related transactions	43	–	–	–	43
Total	78,743	73,056	215,564	204,667	572,030

The following table shows the notional amounts broken down by term to maturity as at 31 December 2018:

in € m

	Less than three months	Three months to one year	One year to five years	More than five years	Total
Equity-/index-related transactions	295	762	4,015	341	5,413
Interest-rate-related transactions	40,050	41,290	193,313	165,137	439,790
Currency-related transactions	26,903	15,145	15,910	4,568	62,526
Credit derivatives	50	844	5,777	137	6,808
Commodity-related transactions	33	25	–	–	58
Total	67,330	58,066	219,015	170,184	514,595

(42) Offsetting Financial Instruments

The Helaba Group offsets financial assets and financial liabilities in accordance with IAS 32. It recognises netted amounts if, in respect of the financial assets and financial liabilities concerned, there is a legally enforceable right of set-off at all times in the normal course of business and it intends to settle the instruments on a net basis or to realise the financial asset and settle the financial liability simultaneously.

In accordance with the disclosure requirements in IFRS 7 relating to offsetting financial instruments, the tables below show a reconciliation from the gross to the net risk exposure for financial instruments. The disclosures relate both to financial instruments that have been offset and also to those that are subject to a master netting agreement.

Offsetting in derivatives transactions involves the positive and negative values of derivatives as well as the associated cash collateral, which is reported under loans and advances to customers or liabilities due to customers.

The Helaba Group has also entered into master netting agreements with counterparties in the derivatives and securities repurchase business. These agreements include conditional netting rights. If the conditions are met – for example if a counterparty defaults for reasons related to its credit rating – the transactions are settled on a net basis.

Cash collateral items do not include any other conditional offsetting options under property charges or in connection with other loan collateral not covered by master netting agreements.

in € m

	Actual netting			Conditional netting rights on basis of master netting agreements		
	Gross amount before netting	Gross amount of financial instruments netted in SoFP	Carrying amount	Collateral in form of financial instruments	Cash collateral	Net amount after taking into account conditional netting rights
Financial assets						
Positive fair values of derivatives	24,517	-5,191	19,326	-9,289	-3,915	6,122
Securities repurchase transactions	16	-	16	-16	-	-
Current account receivables	19,620	-8,592	11,028	-	-	11,028
Total	44,153	-13,783	30,370	-9,305	-3,915	17,150
Financial liabilities						
Negative fair values of derivatives	24,408	-5,562	18,846	-9,289	-8,632	925
Securities repurchase transactions	58	-	58	-56	-	2
Current account liabilities	9,012	-8,221	791	-	-	791
Total	33,478	-13,783	19,695	-9,345	-8,632	1,718

The following table shows the figures as at 31 December 2018:

in € m

	Actual netting			Conditional netting rights on basis of master netting agreements		
	Gross amount before netting	Gross amount of financial instruments netted in SoFP	Carrying amount	Collateral in form of financial instruments	Cash collateral	Net amount after taking into account conditional netting rights
Financial assets						
Negative fair values of derivatives	14,206	-2,558	11,648	-5,607	-1,681	4,360
Securities repurchase transactions	134	-	134	-105	-	29
Current account receivables	9,380	-3,669	5,711	-	-	5,711
Total	23,720	-6,227	17,493	-5,712	-1,681	10,100
Financial liabilities						
Negative fair values of derivatives	12,245	-2,459	9,786	-5,607	-3,249	930
Securities repurchase transactions	63	-	63	-63	-	-
Current account liabilities	4,297	-3,768	529	-	-	529
Total	16,605	-6,227	10,378	-5,670	-3,249	1,459

(43) Foreign Currency Volumes

The provisions in IAS 21 are applied in translating transactions denominated in foreign currency in the financial statements of the companies included in the consolidated financial statements and in translating the financial statements of foreign operations with a functional currency that is different from the reporting currency.

All monetary items denominated in foreign currency and equity instruments (equity shares and other variable-income securities, shareholdings) measured at fair value in foreign currency are translated at the closing rate (the spot rate on the reporting date). Non-monetary items measured at amortised cost (such as property and equipment) are translated using the exchange rate applicable on initial recognition. Currency translation differences, with the exception of differences resulting from equity instruments measured at fair value through other comprehensive income, are recognised in profit or loss.

In order to translate financial statements prepared in foreign currency for operations included in the consolidated financial statements (subsidiaries, branch offices), the temporal method is used initially to translate from the foreign currency into the functional currency where these currencies are different. Figures are then translated into the reporting currency (euros) using the modified closing-rate method. In this method, all monetary and non-monetary assets and liabilities are translated into the reporting currency using the ECB reference rate on the reporting date. Income and expenses for the reporting period are translated using the average rate for the period. All resulting currency translation differences are recognised in a separate equity item (currency translation reserve) until the foreign operation is derecognised or discontinued.

The foreign currency assets and liabilities shown under this item relate to non-derivative financial instruments. The foreign currency exposures are hedged by corresponding derivatives.

in € m

	Foreign currency assets		Foreign currency liabilities	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018
USD	15,958	15,174	11,888	8,200
GBP	6,528	5,594	1,416	1,423
CHF	1,124	1,149	366	274
JPY	1,013	419	132	426
Other currencies	1,515	1,229	442	482
Total	26,138	23,565	14,244	10,805

(44) Breakdown of Maturities

For the breakdown of the remaining terms of financial liabilities, the undiscounted cash flows were allocated to the individual maturity buckets in accordance with the contractually agreed maturity dates. If there was no fixed contractual agreement for the date of repayment, the earliest possible time or termination date was used. This applies in particular to overnight money raised and demand deposits as well as savings deposits with an agreed period of notice.

The non-derivative financial liabilities presented under trading liabilities have been included in the maturities breakdown with their carrying amounts, and the loan commitments have been included at their nominal value. Trading derivatives were allocated with their carrying amounts to the shortest maturity bucket; the loan commitments were allocated to the earliest bucket in which the commitment could be drawn down. Liabilities from warranties and guarantee agreements in accordance with Note (47) can generally become payable at any time up to the maximum guaranteed amount.

The maturity structure of the financial liabilities as at 31 December 2019 was as follows:

in € m

	Payable on demand	Less than three months	Three months to one year	One year to five years	More than five years
Financial liabilities measured at amortised cost	36,154	13,197	27,130	48,247	35,722
Securitised liabilities	–	8,829	13,717	24,789	13,455
Deposits and loans	35,978	4,308	13,391	23,456	22,267
Other financial liabilities	176	60	22	2	–
Trading liabilities	11,042	2,844	4,552	–	35
Negative fair values of trading derivatives	10,180	–	–	–	–
Securitised liabilities	–	161	941	–	35
Deposits and loans	851	2,683	3,611	–	–
Liabilities arising from short-selling	11	–	–	–	–
Negative fair values of non-trading derivatives	–	308	627	2,723	3,012
Negative fair values of hedging derivatives under hedge accounting	–	242	149	975	919
Financial liabilities designated voluntarily at fair value	–	817	1,978	3,328	6,693
Securitised liabilities	–	785	1,386	1,349	2,457
Deposits and loans	–	32	592	1,979	4,236
Loan commitments	24,218	687	1,926	1,181	–
Financial guarantees	7,569	–	–1	–	–
Total	78,983	18,095	36,361	56,454	46,381

The following table shows the figures as at 31 December 2018:

in € m

	Payable on demand	Less than three months	Three months to one year ¹⁾	One year to five years	More than five years
Financial liabilities measured at amortised cost	34,550	11,078	14,731	40,220	30,057
Securitised liabilities	257	5,559	6,070	21,822	13,181
Deposits and loans	34,143	5,475	8,649	18,397	16,876
Other financial liabilities	150	44	12	1	–
Trading liabilities	8,630	1,755	2,347	–	31
Negative fair values of trading derivatives	7,505	–	–	–	–
Securitised liabilities	–	720	102	–	31
Deposits and loans	1,073	1,035	2,245	–	–
Liabilities arising from short-selling	52	–	–	–	–
Negative fair values of trading derivatives	–	148	189	785	646
Negative fair values of hedging derivatives under hedge accounting	–	70	140	745	425
Financial liabilities designated voluntarily at fair value	–	1,170	2,982	3,186	4,591
Securitised liabilities	–	977	2,601	1,498	2,073
Deposits and loans	–	193	381	1,688	2,518
Loan commitments	25,036	517	301	1,408	348
Financial guarantees	6,738	1	15	17	–
Total	74,954	14,739	20,705	46,361	36,098

¹⁾ Prior-year figures restated: In the previous year, lease liabilities of € 18 m were reported under other financial liabilities and are now shown under deposits and loans.

(45) Subordinated Financial Instruments

Assets are reported as subordinated if, in the case of liquidation or insolvency of the debtor, they can be repaid only after the claims of the other creditors have been satisfied.

Subordinated financial liabilities comprise profit participation issues (with and without certificate), silent participations as well as subordinated loans and bonds, which must be classified as debt in accordance with the criteria specified in IAS 32.

As a general rule, subordinated financial liabilities are classified as financial liabilities measured at amortised cost. Micro fair value hedges or the fair value option are used for some subordinated liabilities in order to avoid accounting mismatches.

in € m

	31.12.2019	31.12.2018
Financial assets measured at amortised cost	35	113
Loans and receivables	35	113
Other financial assets mandatorily measured at fair value through profit or loss	3	2
Loans and receivables	3	2
Subordinated financial assets	38	115
Financial liabilities measured at amortised cost	2,823	2,837
Securitised liabilities	1,452	1,452
Profit participation certificates	20	20
Silent participation certificates	528	528
Subordinated bonds	904	904
Deposits and loans	1,371	1,385
Profit participation rights without certificate	61	61
Silent participations without certificate	18	34
Subordinated loans	1,292	1,290
Financial liabilities designated voluntarily at fair value	47	47
Deposits and loans	47	47
Subordinated loans	47	47
Subordinated financial liabilities	2,870	2,884

(46) Issuing Activities

As part of its issuing activities, the Helaba Group places short-term commercial paper, equities and index certificates, medium- and long-term bonds, and subordinated sources of funding on the money and capital markets.

Additions from issues and redemptions also include the placement volume of short-term commercial paper that could be repaid by as early as the end of the reporting period. The

changes in value recognised through profit or loss result from remeasurement gains or losses on financial liabilities held as at 31 December 2019 that were either accounted for as hedged items or to which the fair value option was applied and from the amortisation of premiums and discounts.

The following table provides an overview of changes in the Helaba Group's securitised funding during the reporting period:

in € m

	Measured at amortised cost		Mandatorily measured at fair value through profit or loss		Voluntarily designated at fair value		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
As at 1.1.	45,455	43,514	853	652	7,062	6,168	53,370	50,334
Changes in basis of consolidation	1,899	–	–	–	155	–	2,054	–
Additions from issues	94,203	92,323	3,400	1,215	2,064	1,687	99,667	95,225
Additions from reissue of previously repurchased instruments	1,090	1,046	–	–	82	16	1,172	1,062
Redemptions	–79,319	–90,524	–3,081	–1,013	–3,229	–752	–85,629	–92,289
Repurchases	–4,034	–1,239	–64	–3	–169	–108	–4,267	–1,350
Repurchases	–19	–	–	–	–8	4	–27	4
Changes in accrued interest	336	92	18	–4	66	38	420	126
Credit-risk-related changes in fair value recognised in OCI	–	–	–	–	–	8	–	8
Changes due to currency translation and other adjustments	104	243	11	6	1	1	116	250
As at 31.12.	59,715	45,455	1,137	853	6,024	7,062	66,876	53,370

(47) Contingent Liabilities and Other Off-Balance Sheet Obligations

The Helaba Group's contingent liabilities and other obligations are mainly potential future payment obligations of the Group attributable to credit lines that have been granted but have not yet been drawn down and to financial guarantees that have been provided. The figures shown reflect potential liabilities and assume that the credit lines extended are utilised in full and that the financial guarantees are called upon.

	31.12.2019	31.12.2018 ¹⁾
Loan commitments	28,012	27,610
Financial guarantees	7,568	6,771
Other obligations	3,310	3,435
Liabilities from guarantees and warranty agreements (excluding financial guarantees)	197	156
Placement and underwriting obligations	2,072	2,587
Contribution obligations	150	81
Contractual obligations for the acquisition of property and equipment, intangible assets and other assets	282	144
Contractual obligations in connection with investment property	451	306
Litigation risk obligations	–	1
Sundry obligations	158	160
Total	38,890	37,816

¹⁾ Prior-year figures restated: Liabilities from guarantees and warranty obligations (excluding financial guarantees) have been reduced by € 51 m relating to financial guarantees that are reported as such in the relevant line.

As a result of the acquisition of an entity, Helaba, in its capacity as the legal successor, took over obligations that, on the date of initial recognition, seemed highly unlikely to materialise and that were also subject to rights of recourse under the purchase agreement.

On the reporting date, € 139 m of the contribution obligations was attributable to 23 commercial partnerships, while € 11 m was attributable to four corporations. No contribution obligations existed in respect of affiliated companies.

The Bank is a partner with unlimited liability in GLB GmbH & Co. OHG, Frankfurt am Main.

The Bank is also jointly liable for ensuring that other members belonging to the Deutscher Sparkassen- und Giroverband e.V. (DSGV) meet their obligations to make additional contributions. If a claim were made against a former guarantor of DekaBank under the grandfathering provisions applicable to the guarantor liability in accordance with the Brussels Accord I, Helaba would be obliged to pay pro-rata internal liability compensation. The owners of DekaBank on 18 July 2005 are liable for the fulfilment of all liabilities of DekaBank existing at that date. The liability applies without any time limitation for liabilities that had been agreed up to 18 July 2001.

The Bank is a member of the protection scheme of the Sparkassen-Finanzgruppe through its membership of the reserve fund of the Landesbanken and Girozentralen in Germany. Frankfurter Sparkasse AG is a member of the Sparkassen Support Fund of the Sparkassen- und Giroverband Hessen-Thüringen. The purpose of these protection schemes is to guarantee the institution, i.e. to protect the continued existence of the affiliated institutions as going concerns. With effect from 3 July 2015, the protection scheme operated by the German Sparkassen-Finanzgruppe was adjusted in line with the requirements of the German Deposit Protection Act (Einlagensicherungsgesetz, EinSiG). If the institutional protection should fail in exceptional circumstances, the customer is entitled to reimbursement of his/her deposits up to an amount of €100,000. The relevant EinSiG provisions apply. If a situation should arise in which a scheme has to provide financial support or pay compensation, Helaba could be required to pay additional or special contributions.

In addition, Helaba and Frankfurter Sparkasse are members of the reserve fund of the Sparkassen- und Giroverband Hessen-Thüringen. This fund provides additional protection on top of the existing protection schemes; it provides protection not only to institutions but also to creditors. Landesbank Hessen-Thüringen and the Sparkassen will make gradual contributions to the fund until 0.5 % of the assessment base (the banks' risk assets) has been reached. An institution's obligation to pay contributions is established on the basis of risk, taking into account bonus and penalty factors. Sparkassen- und Giroverband Hessen-Thüringen will be liable to make up any shortfall should a claim be made against the fund before the full amount has been contributed in cash.

Certain banks affiliated with the Group have additional obligations as members of protection schemes in accordance with the provisions applicable to such arrangements.

If Sparkassen-Immobilien-Vermittlungs-GmbH or OFB Projektentwicklung GmbH becomes insolvent, Helaba has agreed to make the compensation payments to the relevant supplementary pension fund.

As in the previous year, contingent liabilities of € 205 m may arise if capital contributions have to be repaid.

The sundry obligations include obligations of €46 m (31 December 2018: €32 m) to the European Single Resolution Fund. The Bank and Frankfurter Sparkasse have elected to fully utilise the option to make some of the annual contribution in the form of an irrevocable payment undertaking backed in full by cash collateral.

The Reserve Fund of the Landesbanken and Girozentralen and the deposit security reserve fund of the Landesbausparkassen also give their member banks an option to pay part of their contributions in the form of irrevocable payment undertakings backed by cash collateral. The Bank and LBS have utilised this option for contributions of €30 m (31 December 2018: €20 m).

(48) Letters of Comfort

Entity	Registered offices
Grundstücksgesellschaft Gateway Gardens GmbH	Frankfurt am Main

(49) Fiduciary Transactions

in € m

	31.12.2019	31.12.2018 ¹⁾
Loans and advances to banks	508	405
Loans and advances to customers	309	313
Equity shares and other variable-income securities	95	95
Shareholdings	67	56
Other assets	13	14
Trust assets	992	883
Deposits and loans from banks	255	255
Deposits and loans from customers	518	421
Other financial liabilities	219	207
Trust liabilities	992	883

¹⁾ Prior-year figures restated: Equity shares and other variable-income securities and other financial liabilities have each been reduced by € 102 m.

The fiduciary transactions mainly involve development funding from the Federal Government, the Federal State of Hesse and from the KfW provided in the form of trustee loans, trust funds invested with other credit institutions as well as shareholdings managed for private investors.

Other Disclosures

(50) Leases

A lease is a contract that conveys the right to use an asset for a period of time in exchange for consideration.

Leases in which the Helaba Group is the lessee

Since 1 January 2019, the Helaba Group has generally accounted for all leases in which it is the lessee by recognising in the statement of financial position right-of-use assets (i.e. assets representing the right to use the leased assets in question) and liabilities for the associated payment obligations at present value. The initial measurement of the lease liabilities includes the following lease payments:

- fixed lease payments
- variable lease payments that depend on an index or a rate
- amounts expected to be payable by the lessee under residual value guarantees
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option
- payments of penalties for terminating the lease if the lease term reflects the lessee exercising an option to terminate the lease.

Lease payments are discounted using the interest rate implicit in the lease if that rate can be readily determined. Otherwise, Helaba's incremental borrowing rate is used for discounting purposes. The incremental borrowing rate comprises a risk-free interest rate component for obtaining liquidity in the relevant maturity band and a risk premium related to the Helaba Group's credit quality. A distinction is made between secured lease assets (real estate) and unsecured financing (other clusters). Adjustments for foreign currencies and different currency zones are taken into account, where appropriate. The lease liabilities are reported under financial liabilities measured at amortised cost. During the term of the lease, the lease liability is reduced in accordance with the principles of financial mathematics. The interest expense component is reported in net interest income.

Right-of-use assets are measured at cost, comprising the following on initial measurement:

- initial measurement of the lease liability
- any lease payments made at or before the commencement date, less any lease incentives received
- any initial direct costs incurred
- estimated costs to be incurred in reinstating the asset at the end of the lease as required by the terms and conditions of the lease.

Right-of-use assets are reported under the relevant category of property and equipment. If a right-of-use asset satisfies the criteria for investment property, it is reported in this asset category. Right-of-use assets are subsequently measured at amortised cost. Generally, depreciation is recognised in respect of right-of-use assets on a straight-line basis over the term of the lease concerned. In those instances in which a purchase option has been factored into the measurement of the right-of-use asset, or the underlying asset will be transferred to Helaba at the end of the lease term, the right-of-use asset is depreciated on a straight-line basis over the normal useful life of the underlying asset concerned. If there is evidence of impairment, the right-of-use asset must also be tested for impairment in accordance with the rules specified in IAS 36. If there are changes to the lease payments after the commencement date, the right-of-use asset must be adjusted by the amount resulting from the remeasurement of the lease liability.

If the underlying asset in a lease is of low value (generally € 5,000 or less when new) and/or the lease is short term (maximum term of twelve months and no purchase option available), Helaba makes use of the available practical expedients and recognises the payments as an expense in the consolidated income statement on a straight-line basis. In addition, the new requirements are not applied to leases for intangible assets. In the case of contracts that include both lease and non-lease components, Helaba makes use of the option not to separate these components.

A range of leases include extension and termination options. When determining a lease term, Helaba takes into account all relevant facts and circumstances that create an economic incentive for Helaba (the lessee) to exercise the option to extend the lease or not to exercise the option to terminate the lease. Changes to a lease term because such options are exercised or not exercised are only included when determining a lease term if it is reasonably certain that Helaba (the lessee) will exercise or not exercise the option concerned.

The new IFRS 16 financial reporting standard requires estimates and judgements to be made with regard to certain matters. In particular, an assessment must be made as to whether options will be exercised with an impact on the term of the lease.

The following table shows the separately presented right-of-use assets that are recognised under non-current assets in connection with leases:

in € m

	Investment property	Owner-occupied land and buildings	Operating and office equipment	Total
Cost				
As at 1.1.	51	185	4	240
Additions	6	15	4	25
Disposals	–	–3	–	–3
As at 31.12.	57	197	8	262
Accumulated depreciation				
As at 1.1.	–	–	–	–
Depreciation	–4	–36	–3	–43
As at 31.12.	–4	–36	–3	–43
Carrying amounts as at 31.12.	53	161	5	219

The right-of-use assets reported under investment property largely relate to heritable building rights in the GWH Group. Heritable building rights are land rights. The buildings constructed on the land are owned by the holder of the heritable building rights. The owner of the land receives an annual rent over the term of the heritable building rights agreement. At the end of the term of the agreement, the buildings constructed on the land may be transferred to the owner of the land in return for an appropriate consideration. As at 31 December 2019, the Helaba Group held 132 agreements with terms between 20 and 81 years. The right-of-use assets reported under owner-occupied land and buildings mostly relate to the leasing of land and buildings used in banking operations. The leases may include extension and/or termination options. In some of the variants, there are price adjustment clauses.

The financial liabilities measured at amortised cost in the statement of financial position include lessee liabilities (including liabilities under short-term leases and liabilities under leases in which the underlying asset is of low value) amounting to € 221 m.

The following table shows the maturity structure of lease liabilities based on undiscounted cash flows:

in € m	
31.12.2019	
Up to three months	8
More than three months and up to one year	22
More than one year and up to five years	111
More than five years	105
Total	246

Further lease disclosures for the Helaba Group as lessee:

in € m	
31.12.2019	
Interest expense from the unwinding of discount on lease liabilities	-3
Expense for short-term leases (term of less than twelve months) included in general and administrative expenses	-1
Income included in other net operating income from the subleasing of right-of-use assets (excluding right-of-use assets reported under investment property)	8
Total amount of cash outflows for leases in the period	38
Potential future lease payments not included in the lease liabilities	62

As at 31 December 2018, the Helaba Group, in its capacity as a lessee, made the following disclosures in accordance with the requirements under IAS 17:

In the previous year, leases were accounted for in accordance with IAS 17. Under IAS 17, a lease was classified as an operating lease if substantially all the risks and rewards incidental to ownership of the leased asset remain with the lessor. On the other hand, leases in which substantially all the risks and rewards incidental to ownership of the leased asset are transferred to the lessee were classified as finance leases. In the case of operating leases, the lessee simply expensed the lease payments; the lease asset and the corresponding lease liability were not recognised separately. In 2018, there were no finance leases in which the Helaba Group was the lessee.

General and administrative expenses included an amount of € 42 m relating to payments for operating leases in which the Helaba Group was the lessee. This amount mainly related to land and buildings as well as operating and business equipment.

The leased properties were predominantly office buildings used for banking operations, unless they were subject to different commercial use as part of subtenancy arrangements. The tenancy agreements had fixed terms with current residual terms of up to twelve years. Price adjustment clauses existed in various forms; no contingent rental payments were agreed.

As at 31 December 2018, the following minimum lease payments for non-cancellable operating leases were expected to be made over the next few years:

	in € m
	31.12.2018
Up to one year	40
More than one year and up to five years	102
More than five years	40
Total	182

As at 31 December 2018, future minimum rental payments of €5 m were expected under non-cancellable subtenancy arrangements. In 2018, income of €4 m was generated from subtenancy agreements. This income was reported under other operating income.

Leases in which the Helaba Group is the lessor

Lessors must classify leases as either finance leases or operating leases. A lease is classified as an operating lease if substantially all the risks and rewards incidental to ownership of the leased asset remain with the lessor. On the other hand, leases in which substantially all the risks and rewards incidental to ownership of the leased asset are transferred to the lessee are classified as finance leases. Where the Helaba Group enters into operating leases, the beneficial ownership in the asset used for leasing remains with the Group company concerned. The assets

used for leasing are recognised in the statement of financial position under property and equipment or under investment property. The assets used for leasing are recognised in accordance with the principles described for the categories concerned. The lease income is recognised in profit or loss under other net operating income on a straight-line basis over the term of the lease unless an alternative distribution of the income is appropriate in individual cases. If a lease is classified as a finance lease, a receivable due from the lessee in an amount equivalent to the value of the net investment in the lease is recognised at the commencement date under financial assets measured at amortised cost. The lease payments received are split into an interest component recognised in profit or loss and a component covering repayment of principal. The interest component is reported in net interest income.

Details of finance leases

	in € m	
	31.12.2019	31.12.2018
Gross investment value	1	2
Total lease payments to be received	1	2
Lease payments to be received (up to one year)	1	1
Lease payments to be received (more than one year and up to two years)	–	1
Net investment value	1	2

The gross investment value is equivalent to the sum of the minimum lease payments from the finance lease and the non-guaranteed residual values to which the lessor is entitled. The minimum lease payments include the guaranteed residual values to be paid by the lessee. The unrealised financial income corresponds to the difference between the gross investment value and the net investment value.

As in the previous year, there were no cumulative loss allowances in connection with finance leases.

The amounts from finance leases recognised in the consolidated income statement were less than € 1 m.

Details of operating leases

The following minimum lease payments are expected in the course of the next few years from non-cancellable operating leases:

	31.12.2019	31.12.2018 ¹⁾
Up to one year	85	82
More than one year and up to two years	18	22
More than two years and up to three years	15	16
More than three years and up to four years	13	13
More than four years and up to five years	11	10
More than five years	89	79
Total	231	222

¹⁾ Prior-year figures restated due to incomplete details for two subsidiaries.

The following table shows the amounts from operating leases recognised in the income statement:

	31.12.2019
Lease income for the period included in other net operating income relating to fixed and in-substance lease payments	373

The operating leases mainly relate to leases for land and buildings.

(51) Report on Business Relationships with Structured Entities

The banking business and other operating activities of the Group companies give rise to various business relationships with structured entities within the meaning of IFRS 12. A structured entity is an entity that has been designed so that the exercise of voting or similar rights under company law is not the dominant factor in deciding who controls the entity as defined by IFRS 10.

The sponsorship of a structured entity as described in IFRS 12.27 may arise as part of the banking functions provided for customers. This affects situations in which the Helaba Group has initiated a special purpose entity or service entity, has been involved in and supported the establishment and initiation of the entity, and in which the Group's current business relationship with this unconsolidated structured entity is still so close that a third party would justifiably assume that the entity was affiliated with the Group.

Disclosures on unconsolidated structured entities

The following table shows the loans and advances as at 31 December 2019 to unconsolidated structured entities within the meaning of IFRS 12:

in € m

	Securitisation special purpose entities	Asset management entities	Other structured entities	Total
Assets	2,721	500	3,191	6,412
Financial assets measured at amortised cost	2,703	340	3,185	6,228
Loans and receivables	2,703	340	3,185	6,228
Trading assets	2	15	4	21
Positive fair values of trading derivatives	2	15	4	21
Other financial assets mandatorily measured at fair value through profit or loss	–	138	2	140
Equity shares and other variable-income securities	–	138	2	140
Financial assets measured at fair value through other comprehensive income	16	–	–	16
Bonds and other fixed-income securities	16	–	–	16
Other assets	–	7	–	7
Off-balance-sheet commitments	1,203	32	441	1,676
Loan commitments	1,178	32	441	1,651
Financial guarantees	25	–	–	25
Size of structured entities	14,099	157,846	103,911	275,856

The following table shows the figures as at 31 December 2018:

in € m

	Securitisation special purpose entities ¹⁾	Asset management entities	Other structured entities	Total
Assets	2,583	398	3,798	6,779
Financial assets measured at amortised cost	2,552	281	3,797	6,630
Loans and receivables	2,552	281	3,797	6,630
Trading assets	2	9	–	11
Positive fair values of trading derivatives	2	9	–	11
Other financial assets mandatorily measured at fair value through profit or loss	5	102	1	108
Positive fair values of non- trading derivatives	–	1	–	1
Bonds and other fixed-income securities	5	–	–	5
Equity shares and other variable- income securities	–	101	1	102
Financial assets measured at fair value through other comprehensive income	24	–	–	24
Bonds and other fixed-income securities	24	–	–	24
Other assets	–	6	–	6
Off-balance-sheet commitments	1,108	13	242	1,363
Loan commitments	1,078	13	242	1,333
Financial guarantees	30	–	–	30
Size of structured entities	19,162	142,287	99,957	261,406

¹⁾ Prior-year figures restated: Size reduced because individual exposures included more than once.

The asset management entities predominantly relate to the investment assets managed by Helaba Invest Kapitalanlage-gesellschaft mbH, the breakdown of which was as follows:

in € m

	31.12.2019	31.12.2018
Retail funds 36 (31 December 2018: 33)	5,328	4,337
Institutional funds 323 (31 December 2018: 295)	117,080	101,658
Total	122,408	105,995

Some of the securitisation entities business comprises service functions for securitisation entities in the OPUSALPHA Group. The lines of liquidity provided for the entities in the OPUSALPHA Group, including flat-rate premiums of 2%, amounted to € 2,657 m (31 December 2018: € 2,115 m), of which € 1,797 m had been drawn down as at 31 December 2019 (31 December 2018: € 1,594 m). The liquidity provision commitments relate to the maximum planned purchase commitments; Helaba is exposed to subordinated liabilities should the discounts on purchases and risks borne by third parties be insufficient. The table above shows the Group's default risk from asset exposures plus any current interest and fees due to the Group as at 31 December 2019 after taking into account issues of € 702 m (31 December 2018: € 742 m). From the current perspective, there are no plans to provide support for the structured entities beyond the normal banking financing functions and corresponding services. As at 31 December 2019, there were no drawn liquidity lines for third-party securitisation platforms (31 December 2018: € 55 m).

There were also irrevocable loan commitments for customer factoring entities (operating mainly in the area of aircraft financing) amounting to € 111 m (31 December 2018: € 226 m).

The recognised loans and advances to other structured entities related to a number of financing transactions for property and special purpose entities. These structured entities predominantly act as property entities for leasing or real estate transactions.

Disclosures on consolidated structured entities

If a structured entity is included in the basis of consolidation in accordance with IFRS 10, the business relationships with other consolidated entities are subject to the normal consolidation requirements. The structured entities consolidated as at 31 December 2019 included investment funds in which Helaba or a subsidiary held a majority or all of the shares/units. Other entities consolidated in accordance with IFRS 10 were a property entity related to real estate partly used by Helaba itself (Helicon Verwaltungsgesellschaft mbH & Co. Immobilien KG) and a funding entity for purchasing entities in the OPUSALPHA securitisation structure (OPUSALPHA Funding LTD). The consolidation in accordance with IFRS 10 additionally required the inclusion of four entities (HANNOVER LEASING Life Invest Deutschland I GmbH & Co. KG, HANNOVER LEASING Life Invest Deutschland II GmbH & Co. KG, EGERIA Verwaltungsgesellschaft mbH and CORDELIA Verwaltungsgesellschaft mbH) that formed part of the structures of closed-end funds with investments in acquired rights under life insurance policies.

(52) Significant Restrictions on Assets or on the Transfer of Funds

In addition to the information in the disclosures on legal restrictions affecting control over financial instruments (see Notes (38) and (39)), there were restrictions for the following entities as at the reporting date on current dividend distributions because of contractual arrangements or rules in the articles of association:

- Bürgschaftsbank Thüringen GmbH, Erfurt
- Bürgschaftsbank Hessen GmbH, Wiesbaden
- Hessische Landgesellschaft mbH Staatliche Treuhandstelle für ländliche Bodenordnung, Kassel
- Hessenkapital I GmbH, Frankfurt am Main
- Hessenkapital II GmbH, Frankfurt am Main
- MBG H Mittelständische Beteiligungsgesellschaft Hessen mbH, Frankfurt am Main
- Mittelständische Beteiligungsgesellschaft Thüringen mbH, Erfurt.

At Frankfurter Sparkasse, a statutory requirement in the German Act Establishing Frankfurter Sparkasse as a Public-Law Institution (Gesetz zur Errichtung der Frankfurter Sparkasse als Anstalt des öffentlichen Rechts, Fraspa-Gesetz) specifies an obligation to appropriate 33% of the net income reported in the annual financial statements of Frankfurter Sparkasse to reserves.

In the case of nine consolidated subsidiaries, there is a block on dividends amounting to a total of € 29 m (31 December 2018: € 32 m) based on the stipulations in section 253 (6) sentence 2 HGB. This results from the measurement of provisions for pension obligations in the separate financial statements, which have had to be discounted since 2016 with average discount rates for the last ten years.

The consolidation of special purpose entities in accordance with IFRS 10 is frequently not based on holding the majority of voting rights. Accordingly, in the case of these consolidated special purpose entities, there is no basis in law requiring unconditional, immediate appropriation of profits or transfer of assets for the benefit of Helaba. The total volume of assets in consolidated special purpose entities in accordance with IFRS prior to consolidation amounted to € 1,711 m (31 December 2018: € 1,727 m). This total figure included an amount of € 1,381 m (31 December 2018: € 1,370 m) related to the consolidated funding entity in the OPUSALPHA securitisation structure.

The business activities of Landesbausparkasse Hessen-Thüringen and WIBank, and the activities in the Pfandbrief business operated by the Bank, are subject to special legal frameworks, namely the German Building and Loan Associations Act (Bausparkassengesetz, BSpKG), the Act Governing WIBank (Gesetz über die Wirtschafts- und Infrastrukturbank Hessen) and the German Pfandbrief Act (Pfandbriefgesetz, PfandBG). Most of the assets and liabilities in these business operations are therefore subject to restrictions because the operations are focused on the object of the entity in each case and the appropriation of funds is tied to statutory requirements. In some cases, the way funding is used is also restricted. For example, in the case of certain development programmes, such as those related to the construction of social housing or the development of infrastructure, the provider of the development funding (such as national or international development banks, federal or state governments) limits the purpose for which the funds may be used to ensure that the funding is properly targeted to achieve the desired development impact. In the case of the “Wohnungswesen und Zukunftsinvestition” and “Hessischer Investitionsfonds” special funds, two funds focusing on housing/investing for the future and capital investment in the State of Hesse respectively, there are also restrictions on the use of the return inflows derived from the application of the funding. In their respective financial statements as at 31 December 2019, WIBank reported total assets of € 24,905 m (31 December 2018: € 24,105 m) and LBS total assets of € 6,166 m (31 December 2018: € 6,027 m).

Regulatory requirements relating to the recognition of own funds specified certain contractual details for issues of subordinated liabilities and silent participations. Under these requirements, the Helaba Group’s right of termination is limited if certain conditions are met and the consent of the regulator must be obtained. The contractual rules for some issues require a replenishment following any loss before any actual repayment is made. Currently, there are no such replenishment obligations.

(53) Related Party Disclosures

In the course of the ordinary activities of Helaba, transactions with parties deemed to be related in accordance with IAS 24 are conducted on an arm’s-length basis. The following disclosures relate to transactions with unconsolidated affiliated companies, with associates and with joint ventures of the Helaba Group as well as their subordinated subsidiaries.

With regard to the Sparkassen- und Giroverband Hessen-Thüringen, the Federal State of Hesse and the Free State of Thuringia in their capacity as shareholders and owners, the criteria for exemption from reporting on related parties that are public-sector entities are satisfied; this option is always utilised if the business volumes involved are insignificant. The business relations with our shareholders and their subordinated subsidiaries in accordance with IAS 24 comprise normal banking services. The extent of business relations with the shareholders and main subordinated companies in the period under review is detailed in the balances at the end of the year shown in the following table. The disclosures relating to persons in key positions of the Helaba Group as defined in IAS 24, including their close family relations and companies controlled by those persons, are also included in the following table.

As at 31 December 2019, Helaba held the following assets in respect of related parties:

in € m

	Un- consolidated subsidiaries	Investments in joint ventures and associates	Helaba shareholders	Other related parties	Total
Financial assets measured at amortised cost	6	164	8,591	1	8,762
Loans and receivables	6	164	8,591	1	8,762
Trading assets	-	-	1,186	-	1,186
Positive fair values of trading derivatives	-	-	1,179	-	1,179
Bonds and other fixed-income securities	-	-	7	-	7
Other financial assets mandatorily measured at fair value through profit or loss	15	9	1	-	25
Shareholdings	15	9	1	-	25
Financial assets designated voluntarily at fair value	-	-	753	-	753
Loans and receivables	-	-	753	-	753
Financial assets measured at fair value through other comprehensive income	5	-	486	-	491
Bonds and other fixed-income securities	-	-	443	-	443
Loans and receivables	-	-	43	-	43
Shareholdings	5	-	-	-	5
Shares in equity-accounted entities	-	8	-	-	8
Other assets	-	-	115	-	115
Total assets	26	181	11,132	1	11,340

The following table shows the figures as at 31 December 2018:

in € m

	Un- consolidated subsidiaries	Investments in joint ventures and associates	Helaba shareholders	Other related parties	Total
Financial assets measured at amortised cost	4	240	8,204	1	8,449
Loans and receivables	4	240	8,204	1	8,449
Trading assets	–	–	855	–	855
Positive fair values of trading derivatives	–	–	702	–	702
Bonds and other fixed-income securities	–	–	153	–	153
Other financial assets mandatorily measured at fair value through profit or loss	18	9	1	–	28
Shareholdings	18	9	1	–	28
Financial assets designated voluntarily at fair value	–	–	29	–	29
Loans and receivables	–	–	29	–	29
Financial assets measured at fair value through other comprehensive income	5	–	385	–	390
Bonds and other fixed-income securities	–	–	355	–	355
Loans and receivables	–	–	30	–	30
Shareholdings	5	–	–	–	5
Shares in equity-accounted entities	–	7	–	–	7
Other assets	–	–	115	–	115
Total assets	27	256	9,589	1	9,873

The liabilities and off-balance sheet commitments to related parties as at 31 December 2019 were as follows:

in € m

	Un- consolidated subsidiaries	Investments in joint ventures and associates	Helaba shareholders	Other related parties	Total
Financial liabilities measured at amortised cost	58	35	3,142	21	3,256
Deposits and loans	58	35	3,141	21	3,255
Other financial liabilities	–	–	1	–	1
Trading liabilities	–	–	60	–	60
Negative fair values of trading derivatives	–	–	60	–	60
Financial liabilities designated voluntarily at fair value	–	–	79	–	79
Deposits and loans	–	–	79	–	79
Provisions	–	–	3	26	29
Total liabilities	58	35	3,284	47	3,424
Loan commitments	6	112	1,828	–	1,947
Financial guarantees	–	–	3	–	3
Total off-balance sheet commitments	6	112	1,831	–	1,950

The following table shows the figures as at 31 December 2018:

in € m

	Un- consolidated subsidiaries	Investments in joint ventures and associates	Helaba shareholders	Other related parties	Total
Financial liabilities measured at amortised cost	68	54	2,253	12	2,387
Deposits and loans	68	54	2,253	12	2,387
Trading liabilities	–	–	55	–	55
Negative fair values of trading derivatives	–	–	55	–	55
Financial liabilities designated voluntarily at fair value	–	–	18	–	18
Deposits and loans	–	–	18	–	18
Provisions	–	2	14	22	38
Total liabilities	68	56	2,340	34	2,498
Loan commitments	3	116	2,259	–	2,378
Financial guarantees	–	2	14	–	16
Total off-balance sheet commitments	3	117	2,274	–	2,394

Standard banking transactions with related parties gave rise to income and expenses in the lending, deposits, investment and derivatives businesses. In the reporting year, the Helaba Group generated net interest income of € 115 m from related parties (2018: € 77 m). Standard banking services produced net fee and commission income of € 40 m (2018: € 42 m). In addition, derivative transactions are entered into with related parties, mainly to hedge interest rate risk. Interest income of € 30 m (2018: € 38 m) was generated from interest rate derivatives. This item was reported under net trading income. In accordance with IFRS, derivatives are measured at fair value through profit or loss; unrealised effects from changes in fair value reported in net trading income are matched by corresponding countervailing transactions with other customers as part of overall bank management.

The remuneration paid to the Board of Managing Directors of Helaba was broken down as follows:

	31.12.2019	31.12.2018
Benefits due in short term	4.6	4.5
Post-employment benefits (defined contribution plans)	–	–
Other benefits due in the long term	1.7	1.9
Benefits payable on termination of employment	–	–
Total	6.3	6.4

Additions of € 1.1 m were also made to the pension provisions for members of the Board of Managing Directors (2018: € 1.4 m). This amount represented the current service cost.

A total of € 0.8 m (2018: € 0.9 m) was paid to the Supervisory Board and, as in the previous year, € 0.1 m was paid to the members of the Advisory Board. In addition, the employee representatives on the Supervisory Board (including deputy members) received a combined amount of € 1.9 m (2018: € 2 m) in salary payments as company employees. This amount was unchanged compared with the previous year. An amount of € 4 m was paid to former members of the Board of Managing Directors and their surviving dependants, the same amount as in the prior year. Provisions of € 71 m have been recognised for pension obligations in accordance with IAS 19 for this group of persons (31 December 2018: € 67 m).

(54) Members of the Supervisory Board

Gerhard Grandke

Executive President
Sparkassen- und Giroverband
Hessen-Thüringen
Frankfurt am Main/Erfurt
– Chairman –

Dr. Werner Henning

Chief Administrative Officer
County District of Eichsfeld
Heiligenstadt
– First Vice-Chairman –

Dr. Thomas Schäfer

Minister of State
Ministry of Finance of the State of Hesse
Wiesbaden
– Second Vice-Chairman –

Dr. Christoph Krämer

Chairman of the Board of
Managing Directors
Sparkasse Iserlohn
Iserlohn
– Third Vice-Chairman
(since 27 September 2019) –

Alexander Wüerst

Chairman of the Board of
Managing Directors
Kreissparkasse Köln
Cologne
– until 31 December 2019 –
– Third Vice-Chairman
(until 26 September 2019)

Dr. Karl-Peter Schackmann-Fallis

Executive Member of the Board
Deutscher Sparkassen- und
Giroverband e.V.
Berlin
– Fifth Vice-Chairman –

Andreas Bausewein

Mayor
City of Erfurt
Erfurt
– until 30 June 2019 –

Dr. Annette Beller

Member of the Management Board
B. Braun Melsungen AG
Melsungen

Christian Blechschmidt

Chairman of the Board of
Managing Directors
Sparkasse Unstrut-Hainich
Mühlhausen

Nancy Faeser

Member of the State Parliament
of Hesse
Wiesbaden
– since 25 September 2019 –

Stefan Hastrich

Chairman of the Board of
Managing Directors
Kreissparkasse Weilburg
Weilburg
– until 30 June 2019 –

Günter Högner

Chairman of the Board of
Managing Directors
Nassauische Sparkasse
Wiesbaden

Oliver Klink

Chairman of the Board of
Managing Directors
Taunussparkasse
Bad Homburg v.d.H.
– since 1 July 2019 –

Frank Lortz

Vice-President of the
State Parliament of Hesse
Wiesbaden
– since 1 July 2019 –

Clemens Reif

Herborn
– until 30 June 2019 –

Thorsten Schäfer-Gümbel

Member of the State Parliament
of Hesse
Wiesbaden
– until 30 June 2019 –

Helmut Schmidt

Chairman of the Board of
Managing Directors
Kreissparkasse Saale-Orla
Schleiz
– until 18 January 2019 –

Uwe Schmidt

Chief Administrative Officer
District of Kassel
Kassel

Dr. Hartmut Schubert

Secretary of State
Ministry of Finance of the
State of Thuringia
Erfurt

Wolfgang Schuster

Chief Administrative Officer
County District of Lahn-Dill
Wetzlar

Dr. Eric Tjarks

Chairman of the Board of
Managing Directors
Sparkasse Bensheim
Bensheim

Dr. Heiko Wingefeld

Mayor
City of Fulda
Fulda

Arnd Zinnhardt

Member of the Group Executive Board
Software AG
Darmstadt

Employee representatives**Thorsten Derlitzki**

Vice-President
Frankfurt am Main
– Fourth Vice-Chairman –

Frank Beck

Vice-President
Frankfurt am Main

Dr. Robert Becker

Senior Vice-President
New York
– until 30 June 2019 –

Anke Glombik-Batschkus

Vice-President
Erfurt
– until 30 June 2019 –

Thorsten Kiwitz

President
Frankfurt am Main

Christiane Kutil-Bleibaum

Vice-President
Düsseldorf

Annette Langner

Vice-President
Frankfurt am Main

Susanne Noll

Bank employee
Frankfurt am Main

Jürgen Pilgenröther

Bank employee
Frankfurt am Main

Birgit Sahliger-Rasper

Bank employee
Frankfurt am Main

Susanne Schmiedebach

Vice-President
Düsseldorf
– until 30 June 2019 –

Thomas Sittner

Bank employee
Frankfurt am Main

(55) Members of the Board of Managing Directors

Herbert Hans Grüntker – Chairman –	Dezernent (Board member) with responsibility for Central Staff and Group Strategy, Internal Audit, Human Resources, Legal Services, Economics/Research, Process Management and Information Technology, WIBank
Thomas Groß – Vice-Chairman –	Dezernent (Board member) with responsibility for Risk Controlling, Credit Risk Management Corporates/Markets, Credit Risk Management Real Estate, Credit Risk Management Restructuring/Workout, Cash Management, Strategy Project Digitalisation, Frankfurter Sparkasse, Frankfurter Bankgesellschaft
Dr. Detlef Hosemann	Dezernent (Board member) with responsibility for Accounting and Taxes, Group Controlling, Information Technology, Compliance, Settlement/Custody Services
Hans-Dieter Kemler	Dezernent (Board member) with responsibility for Capital Markets, Asset/Liability Management, Sales Public Authorities, Institutional CRM, Helaba Invest, Banks and International Business, Sparkasse Lending Business and S-Group Service, Sparkasse Support North, Sparkasse Support South, Landesbausparkasse Hessen-Thüringen (LBS)
Christian Schmid	Dezernent (Board member) with responsibility for Real Estate Lending, Debt Capital Markets and Sales Management RE, Real Estate Management, Administration, GWH, OFB
Dr. Norbert Schraad	Dezernent (Board member) with responsibility for Corporate Finance, CRM Wholesale Business, CRM Midcaps, General Manager Sales NRW/Düsseldorf Branch, CRM Public Authorities/Municipal Corporations, CRM International, Sales Service

(56) Positions on Supervisory Boards and Other Executive Bodies

Positions held by the members of the Board of Managing Directors

Office holder	Corporation	Function
Herbert Hans Grüntker	GWH Immobilien Holding GmbH, Frankfurt am Main	Member
	Helaba Invest Kapitalanlagegesellschaft mbH, Frankfurt am Main	Vice-Chairman
Thomas Groß	Deutscher Sparkassen Verlag GmbH, Stuttgart	Member
	DSGF Deutsche Servicegesellschaft für Finanzdienstleister mbH, Cologne	Member
	Frankfurter Bankgesellschaft (Schweiz) AG, Zurich, Switzerland	President
	Frankfurter Sparkasse, Frankfurt am Main	Chairman
Dr. Detlef Hosemann	Deutsche WertpapierService Bank AG, Frankfurt am Main	Member
	Frankfurter Sparkasse, Frankfurt am Main	Member
	GWH Immobilien Holding GmbH, Frankfurt am Main	Vice-Chairman
Hans-Dieter Kemler	Frankfurter Bankgesellschaft (Schweiz) AG, Zurich, Switzerland	Member
	Frankfurter Sparkasse, Frankfurt am Main	First Vice-Chairman
	Helaba Invest Kapitalanlagegesellschaft mbH, Frankfurt am Main	Chairman
Christian Schmid	GWH Immobilien Holding GmbH, Frankfurt am Main	Chairman

Positions held by other employees

Office holder	Corporation	Function
Stephan Bruhn	Frankfurter Bankgesellschaft (Deutschland) AG, Frankfurt am Main	Member
Dr. Matthias Katholing	GWH Immobilien Holding GmbH, Frankfurt am Main	Member
Klaus Kirchberger	TTL Beteiligungs- und Grundbesitz-AG, Munich	Vice-Chairman
Holger Mai	Frankfurter Bankgesellschaft (Deutschland) AG, Frankfurt am Main	Chairman
Dirk Mewesen	Helaba Asset Services Unlimited Company, Dublin, Ireland	Member
Frank Nickel	Frankfurter Bankgesellschaft (Schweiz) AG, Zurich, Switzerland	Member
	Frankfurter Sparkasse, Frankfurt am Main	Member
	Thüringer Aufbaubank, Erfurt	Member
Dr. Ulrich Pähler	Helaba Asset Services Unlimited Company, Dublin, Ireland	Vice-Chairman
Dr. Michael Reckhard	Bürgschaftsbank Hessen GmbH, Wiesbaden	Member
Klaus Georg Schmidbauer	Bürgschaftsbank Thüringen GmbH, Erfurt	Member
Peter Marc Stober	Deutscher Sparkassen Verlag GmbH, Stuttgart	Member
André Stolz	Nassauische Sparkasse, Wiesbaden	Member
Erich Vettiger	Frankfurter Bankgesellschaft (Deutschland) AG, Frankfurt am Main	Vice-Chairman

(57) Report on Events After the Reporting Date

There were no significant events after 31 December 2019.

**(58) List of Shareholdings of
Landesbank Hessen-Thüringen
Girozentrale in Accordance
with Section 315a in Conjunction
with Section 313 (2) HGB**

Fully consolidated subsidiaries

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency	
		Total	Thereof directly					
1	1822direkt Gesellschaft der Frankfurter Sparkasse mbH, Frankfurt am Main	100.00	0.00		7.1	0	€	¹⁾
2	Airport Office One GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.0	-5	€	²⁾
3	ASTARTE Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Frankfurt am Main	100.00	100.00		-22.1	288	€	²⁾
4	BHT Baugrund Hessen-Thüringen GmbH, Kassel	100.00	0.00		0.0	0	€	^{1), 3)}
5	BHT-Baugrund Hessen-Thüringen Gesellschaft für Baulandbeschaffung, Erschließung und Kommunalbau mbH & Co. Objekt FBM Freizeitbad Mühlhausen KG, Frankfurt am Main	100.00	100.00		4.2	778	€	²⁾
6	CORDELIA Verwaltungsgesellschaft mbH, Pullach	0.00	0.00		0.0	0	€	^{1), 4)}
7	DKB Wohnimmobilien Beteiligungs GmbH & Co. KG, Potsdam	94.89	0.00		36.7	2,395	€	
8	Dritte OFB Friedrichstraße GmbH & Co. KG, Frankfurt am Main	100.00	0.00		-0.1	-65	€	²⁾
9	Dritte OFB PE GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.0	-2	€	²⁾
10	EGERIA Verwaltungsgesellschaft mbH, Pullach	0.00	0.00		0.0	0	€	^{1), 4)}
11	Erste OFB Friedrichstraße GmbH & Co. KG, Frankfurt am Main	100.00	0.00		-0.1	-49	€	²⁾
12	Erste Veritas Frankfurt GmbH & Co. KG, Frankfurt am Main	100.00	94.90		193.5	-177	€	²⁾
13	Family Office der Frankfurter Bankgesellschaft AG, Frankfurt am Main	100.00	0.00		2.1	-1,494	€	
14	FHP Friedenauer Höhe Dritte GmbH & Co. KG, Berlin	100.00	0.00		-0.1	-67	€	²⁾
15	FHP Friedenauer Höhe Erste GmbH & Co. KG, Berlin	100.00	0.00		-0.1	-53	€	²⁾

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency	
		Total	Thereof directly					
16	FHP Friedenauer Höhe Fünfte GmbH & Co. KG, Berlin	100.00	0.00		-0.2	-68	€	²⁾
17	FHP Friedenauer Höhe Projekt GmbH, Berlin	100.00	0.00		0.0	15	€	
18	FHP Friedenauer Höhe Sechste GmbH & Co. KG, Berlin	100.00	0.00		-0.9	-730	€	²⁾
19	FHP Friedenauer Höhe Vierte GmbH & Co. KG, Berlin	100.00	0.00		-0.2	-76	€	²⁾
20	FHP Friedenauer Höhe Zweite GmbH & Co. KG, Berlin	100.00	0.00		-0.1	-65	€	²⁾
21	Frankfurter Bankgesellschaft (Deutschland) AG, Frankfurt am Main	100.00	0.00		12.5	2,038	€	
22	Frankfurter Bankgesellschaft (Schweiz) AG, Zurich, Switzerland	100.00	100.00		124.7	7,947	CHF	
23	Frankfurter Sparkasse, Frankfurt am Main	100.00	100.00		905.7	41,000	€	
24	Galerie Lippe GmbH & Co. KG, Frankfurt am Main	94.90	0.00		-13.3	-6,429	€	²⁾
25	GGM Gesellschaft für Gebäude-Management mbH, Frankfurt am Main	100.00	0.00		0.3	666	€	^{1), 3)}
26	GHT Gesellschaft für Projektmanagement Hessen-Thüringen mbH, Frankfurt am Main	100.00	0.00		0.3	-9,943	€	^{1), 3)}
27	Grundstücksgesellschaft Limes-Haus Schwalbach II GbR, Frankfurt am Main	100.00	0.00		0.2	39	€	
28	Grundstücksverwaltungsgesellschaft Kaiserlei GmbH, Frankfurt am Main	100.00	0.00		0.0	5	€	
29	Grundstücksverwaltungsgesellschaft KAISERLEI GmbH & Co. Projektentwicklung Epinayplatz KG, Frankfurt am Main	100.00	0.00		0.2	-589	€	²⁾
30	G+S Wohnen in Frankfurt am Main GmbH, Frankfurt am Main	100.00	0.00		23.4	0	€	¹⁾
31	GSG Siedlungsgesellschaft für Wohnungs- und Städtebau mbH, Frankfurt am Main	100.00	5.10		62.2	5,568	€	
32	GWH Bauprojekte GmbH, Frankfurt am Main	100.00	0.00		13.6	0	€	¹⁾
33	GWH Immobilien Holding GmbH, Frankfurt am Main	100.00	100.00		949.9	0	€	¹⁾
34	GWH Komplementär I. GmbH, Frankfurt am Main	100.00	0.00		n.a.	n.a.		
35	GWH Projekt Braunschweig I GmbH & Co. KG, Frankfurt am Main	100.00	0.00		n.a.	n.a.		
36	GWH Projekt I. GmbH & Co. KG, Frankfurt am Main	100.00	0.00		n.a.	n.a.		

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
37	GWH WertInvest GmbH, Frankfurt am Main	100.00	0.00		0.3	-113	€
38	GWH Wohnungsgesellschaft mbH Hessen, Frankfurt am Main	100.00	0.00		379.9	63,774	€
39	Hafenbogen GmbH & Co. KG, Frankfurt am Main	100.00	100.00		25.0	-648	€ ²⁾
40	HANNOVER LEASING Life Invest Deutschland I GmbH & Co. KG, Pullach	48.27	0.00		13.0	358	€
41	HANNOVER LEASING Life Invest Deutschland II GmbH & Co. KG, Pullach	63.10	0.00		13.1	323	€
42	Haus am Brüsseler Platz GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.0	-95	€ ²⁾
43	Helaba Asset Services Unlimited Company, Dublin, Ireland	100.00	100.00		52.7	-871	€
44	Helaba Digital GmbH & Co. KG, Frankfurt am Main	100.00	100.00		1.5	-418	€ ²⁾
45	Helaba Invest Kapitalanlagegesellschaft mbH, Frankfurt am Main	100.00	100.00		13.0	0	€ ¹⁾
46	Helicon Verwaltungsgesellschaft mbH & Co. Immobilien KG, Pullach	5.92	0.00		-126.4	6,235	€ ⁴⁾
47	HeWiPPP II GmbH & Co. KG, Frankfurt am Main	100.00	0.00		2.7	60	€ ²⁾
48	Honua'ula Partners LLC, Wailea, USA	0.00	0.00		98.8	1	USD ⁴⁾
49	HP Holdco LLC, Wilmington, USA	100.00	100.00		n.a.	n.a.	
50	HTB Grundstücksverwaltungsgesellschaft mbH, Frankfurt am Main	100.00	100.00		0.1	-1	€
51	Kalypso Projekt GmbH & Co. KG, Frankfurt am Main	100.00	0.00		-0.4	-96	€ ²⁾
52	Main Capital Funding II Limited Partnership, St. Helier, Jersey	0.00	0.00		12.8	54	€ ⁴⁾
53	Main Capital Funding Limited Partnership, St. Helier, Jersey	0.00	0.00		4.9	-1	€ ⁴⁾
54	MAVEST Wohnungsbaugesellschaft mbH, Frankfurt am Main	99.99	0.00		10.4	1,140	€
55	Merian GmbH Wohnungsunternehmen, Frankfurt am Main	94.90	0.00		25.5	1,202	€
56	Montindu S.A./N.V., Brussels, Belgium	100.00	99.97		15.4	225	€
57	Neunte P 1 Projektgesellschaft mbH & Co. KG, Frankfurt am Main	100.00	0.00		-0.1	-95	€ ²⁾
58	OFB Beteiligungen GmbH, Frankfurt am Main	100.00	0.00		6.0	878	€

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency	
		Total	Thereof directly					
59	OFB Bleidenstraße GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.3	7	€	
60	OFB Projektentwicklung GmbH, Frankfurt am Main	100.00	100.00		1.1	10,463	€	^{1), 3)}
61	OFB Schiersteiner Berg GmbH & Co. KG, Frankfurt am Main	100.00	0.00		n.a.	n.a.		²⁾
62	OPUSALPHA FUNDING LTD, Dublin, Ireland	0.00	0.00		n.a.	n.a.		⁴⁾
63	Projekt Erfurt B38 GmbH & Co. KG, Frankfurt am Main	100.00	0.00		-0.7	-158	€	²⁾
64	Projekt Hirschgarten MK8 GmbH & Co. KG, Frankfurt am Main	100.00	0.00		-4.3	-1,035	€	²⁾
65	Projektentwicklung Neuwerkstraße 17 GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.0	3	€	²⁾
66	Projektgesellschaft ILP Erfurter Kreuz mbH & Co. KG, Frankfurt am Main	100.00	0.00		7.0	7,327	€	²⁾
67	PVG GmbH, Frankfurt am Main	100.00	100.00		0.4	0	€	^{1), 3)}
68	Ramiba Verwaltung GmbH, Pullach	0.00	0.00		n.a.	n.a.		⁴⁾
69	SQO Stadt Quartier Offenburg GmbH & Co. KG, Frankfurt am Main	100.00	0.00		-1.1	-454	€	²⁾
70	Systemo GmbH, Frankfurt am Main	100.00	0.00		5.7	268	€	
71	unIQus Projektentwicklung GmbH & Co. KG, Frankfurt am Main	100.00	0.00		11.0	62	€	²⁾
72	Versicherungsservice der Frankfurter Sparkasse GmbH, Frankfurt am Main	100.00	0.00		0.3	0	€	¹⁾
73	Verso Grundstücksentwicklung GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.9	1,013	€	²⁾
74	Verso Projektentwicklung GmbH & Co. KG, Frankfurt am Main	100.00	0.00		2.8	2,307	€	²⁾
75	Vierte OFB Friedrichstraße GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.0	-26	€	²⁾
76	Vierte OFB PE GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.0	-4	€	²⁾
77	Zweite OFB Friedrichstraße GmbH & Co. KG, Frankfurt am Main	100.00	0.00		0.4	289	€	²⁾
78	Zweite OFB PE GmbH & Co. KG, Frankfurt am Main	100.00	0.00		-0.5	-859	€	²⁾

No.	Name and location of the entity	Holding in %		Fund volume in € m	Original currency	
		Total	Thereof directly			
79	GWH WohnWertInvest Deutschland II, Hamburg	100.00		52.5	€	⁴⁾
80	HI-A-FSP-Fonds, Frankfurt am Main	100.00		125.5	€	⁴⁾
81	HI-C-FSP-Fonds, Frankfurt am Main	100.00		116.4	€	⁴⁾
82	HI-FBI-Fonds, Frankfurt am Main	100.00		127.2	€	⁴⁾
83	HI-FBP-Fonds, Frankfurt am Main	100.00		81.9	€	⁴⁾
84	HI-FSP-Fonds, Frankfurt am Main	100.00		161.0	€	⁴⁾
85	HI-H-FSP-Fonds, Frankfurt am Main	100.00		125.6	€	⁴⁾
86	HI-HT-KOMP.-Fonds, Frankfurt am Main	100.00		38.3	€	^{4), 5)}
87	HI-HTNW-Fonds, Frankfurt am Main	100.00	100.00	504.2	€	^{4), 5)}
88	HI-RentPlus-Fonds, Frankfurt am Main	100.00	100.00	485.0	€	^{4), 5)}

The following joint ventures and associates have also been accounted for using the equity method:

Joint ventures accounted for using the equity method

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thousands	Original currency
		Total	Thereof directly				
89	AIRE Eschborn FS2 Verwaltungs GmbH, Frankfurt am Main	50.00	0.00		n.a.	n.a.	
90	CP Campus Projekte GmbH, Frankfurt am Main	50.00	0.00		0.9	-100	€
91	Einkaufszentrum Wittenberg GmbH, Leipzig	50.00	0.00		-1.3	-664	€
92	G & O Alpha Hotelentwicklung GmbH, Frankfurt am Main	50.00	0.00		0.0	-701	€
93	G & O Alpha Projektentwicklungs-GmbH & Co. KG, Frankfurt am Main	50.00	0.00		0.6	346	€
94	G & O Baufeld Alpha 2. BA GmbH & Co. KG, Frankfurt am Main	50.00	0.00		0.1	-3	€
95	G & O Gateway Gardens Dritte GmbH & Co. KG, Frankfurt am Main	50.00	0.00		0.2	352	€
96	G & O Gateway Gardens Erste GmbH & Co. KG, Frankfurt am Main	50.00	0.00		1.8	1,052	€
97	G & O MK 14.3 GmbH & Co. KG, Frankfurt am Main	50.00	0.00		0.0	-1	€
98	G & O MK 17.7 Nord GmbH & Co. KG, Frankfurt am Main	50.00	0.00		0.0	-1	€
99	G & O MK 17.7 Süd GmbH & Co. KG, Frankfurt am Main	50.00	0.00		0.0	-1	€
100	gatelands Projektentwicklung GmbH & Co. KG, Schönefeld	75.00	0.00		0.4	1,366	€
101	GIZS GmbH & Co. KG, Frankfurt am Main	33.33	33.33		22.2	-4,704	€
102	G&O MK 15 Bauherren GmbH & Co. KG, Frankfurt am Main	50.00	0.00		0.4	4,714	€
103	GOB Dritte E & A Grundbesitz GmbH, Frankfurt am Main	50.00	0.00		0.1	9,777	€
104	GOB Projektentwicklung Fünfte GmbH & Co. KG, Frankfurt am Main	8.84	0.00		-0.1	-39	€
105	Grundstücksgesellschaft Gateway Gardens GmbH, Frankfurt am Main	33.33	0.00		2.9	-4,063	€
106	Horus AWG GmbH, Pöcking	50.00	0.00		-0.2	-139	€
107	Multi Park Mönchhof Main GmbH & Co. KG, Neu-Isenburg	50.00	0.00		0.7	427	€

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
108	OFB & Procom Objekt Neu-Ulm GmbH & Co. KG, Frankfurt am Main	50.00	0.00		0.5	2	€
109	OFB & Procom Rüdeshheim GmbH & Co. KG, Frankfurt am Main	50.00	0.00		-0.2	-7	€
110	Projekt Wilhelmstraße Wiesbaden GmbH & Co. KG, Frankfurt am Main	30.00	0.00		-0.7	-1,522	€
111	sono west Projektentwicklung GmbH & Co. KG, Frankfurt am Main	70.00	0.00		9.7	-126	€
112	Stresemannquartier GmbH & Co. KG, Berlin	50.00	0.00		0.1	-58	€
113	Westhafen Haus GmbH & Co. Projekt- entwicklungs-KG, Frankfurt am Main	50.00	0.00		0.0	109	€

Associates accounted for using the equity method

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
114	HANNOVER LEASING Wachstumswerte Asien 1 GmbH & Co. KG, Pullach	54.51	0.00		4.3	749	€
115	WoWi Media GmbH & Co. KG, Hamburg	23.72	0.00	19.24	2.8	-3	€

Non-consolidated subsidiaries

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
116	ASTARTE Verwaltungsgesellschaft mbH, Frankfurt am Main	100.00	100.00		0.0	-4	€
117	BGT-Grundstücksverwaltungs- und Beteiligungsgesellschaft mbH, Frankfurt am Main	100.00	100.00		0.0	0	€ ¹⁾
118	BHT-Baugrund Hessen-Thüringen Gesellschaft für Baulandbeschaffung, Erschließung und Kommunalbau mbH & Co. Objekt GZH Gemeindezentrum Hünstetten KG i.L., Frankfurt am Main	100.00	100.00		1.7	112	€
119	BM H Beteiligungs-Managementgesellschaft Hessen mbH, Wiesbaden	100.00	100.00		1.5	676	€
120	BWT Beteiligungsgesellschaft für den Wirtschaftsaufbau Thüringens mbH, Frankfurt am Main	100.00	100.00		5.3	0	€
121	FAM-Grundstücksverwaltungs- und Beteiligungsgesellschaft mbH, Frankfurt am Main	100.00	100.00		0.2	2	€
122	FHP Projektentwicklung GmbH & Co. KG, Berlin	100.00	0.00		n.a.	n.a.	
123	GIMPRO Beteiligungs- und Geschäftsführungsgesellschaft mbH i. L., Frankfurt am Main	100.00	0.00		0.1	1	€
124	GLD Verwaltungsgesellschaft mbH, Frankfurt am Main	100.00	0.00		0.0	0	€
125	Helaba Digital Verwaltungsgesellschaft mbH, Frankfurt am Main	100.00	0.00		0.0	-1	€
126	Helaba Gesellschaft für Immobilienbewertung mbH, Frankfurt am Main	100.00	100.00		0.2	0	€ ¹⁾
127	Helaba Projektbeteiligungsgesellschaft für Immobilien mbH, Frankfurt am Main	100.00	100.00		5.9	-3	€
128	Helaba Representação Ltda., São Paulo, Brazil	100.00	99.00		0.1	0	BRL
129	KOFIBA-Verwaltungsgesellschaft mbH i.L., Berlin	100.00	100.00		n.a.	n.a.	
130	Komplementarselskabet Logistica CPH ApS, Kastrup, Denmark	52.00	52.00		0.0	16	DKK
131	Kornmarkt Arkaden Verwaltung GmbH, Frankfurt am Main	100.00	0.00		0.0	3	€
132	Logistica CPH K/S, Kastrup, Denmark	53.33	53.33		4.3	4,219	DKK
133	Main Funding GmbH, Frankfurt am Main	0.00	0.00		0.3	4	€ ⁴⁾
134	Main Funding II GmbH, Frankfurt am Main	0.00	0.00		0.1	7	€ ⁴⁾

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
135	OFB Berlin Projekt GmbH, Berlin	100.00	0.00		0.0	-1	€
136	S-Beteiligungsgesellschaft Hessen-Thüringen mbH, Frankfurt am Main	100.00	100.00		7.5	1,347	€
137	Sparkassen-Immobilien-Vermittlungs-GmbH, Frankfurt am Main	100.00	100.00		1.9	685	€
138	TE Beta GmbH, Frankfurt am Main	100.00	100.00		0.4	96	€
139	TE Gamma GmbH, Frankfurt am Main	100.00	100.00		0.1	9	€
140	TE Kronos GmbH, Frankfurt am Main	100.00	100.00		0.8	290	€
141	TF H Technologie-Finanzierungsfonds Hessen Gesellschaft mit beschränkter Haftung (TF H GmbH) i.L., Wiesbaden	66.67	66.67		0.5	-27	€
142	Unterstützungseinrichtung der Landesbank Hessen-Thüringen GmbH, Frankfurt am Main	100.00	100.00		0.0	0	€
143	wall park GmbH & Co. KG, Frankfurt am Main	100.00	100.00		0.0	-2	€
144	wall park Grundstücksgesellschaft mbH, Frankfurt am Main	100.00	100.00		0.0	3	€
145	Youco B19-H-95 Vorrats-GmbH, Berlin	100.00	0.00		n.a.	n.a.	

Joint ventures not accounted for using the equity method

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
146	G & O Alpha Verwaltungsgesellschaft mbH, Frankfurt am Main	50.00	0.00		0.1	7	€
147	G & O Verwaltungsgesellschaft mbH, Frankfurt am Main	50.00	0.00		0.0	2	€
148	gatelands Verwaltungs GmbH, Schönefeld	75.00	0.00		0.0	1	€
149	GLZS Verwaltungs-GmbH, Frankfurt am Main	33.33	33.33		0.0	8	€
150	GOB Projektentwicklungsgesellschaft E & A mbH, Frankfurt am Main	50.00	0.00		0.0	3	€
151	Helaba-Assekuranz-Vermittlungsgesellschaft mbH, Frankfurt am Main	50.00	50.00		0.8	399	€
152	Hessen Kapital I GmbH, Wiesbaden	100.00	100.00		33.1	-2,080	€
153	Hessen Kapital II GmbH, Wiesbaden	100.00	100.00		8.0	95	€
154	Komuno GmbH, Frankfurt am Main	51.00	0.00		n.a.	n.a.	
155	Marienbader Platz Projektentwicklungsgesellschaft mbH, Frankfurt am Main	50.00	0.00		0.1	2	€
156	Marienbader Platz Projektentwicklungs- gesellschaft mbH & Co. Bad Homburg v.d.H. KG, Frankfurt am Main	50.00	0.00		0.1	-247	€
157	Multi Park Verwaltungs GmbH, Neu-Isenburg	50.00	0.00		0.0	1	€
158	Procom & OFB Projektentwicklung GmbH, Hamburg	50.00	0.00		0.0	-1	€
159	Projekt Feuerbachstraße Verwaltung GmbH, Frankfurt am Main	70.00	0.00		0.0	0	€
160	Projekt Wilhelmstraße Wiesbaden Verwaltung GmbH, Frankfurt am Main	30.00	0.00		0.0	0	€
161	Rotunde – Besitz- und Betriebsgesellschaft der S-Finanzgruppe mbH & Co. KG, Erfurt	60.00	60.00	33.33	4.3	125	€
162	Rotunde Verwaltungsgesellschaft mbH, Erfurt	60.00	60.00	33.33	0.0	1	€
163	SKYGARDEN Arnulfpark Verwaltungs GmbH, Grünwald	50.00	0.00		0.0	0	€

Associates not accounted for using the equity method

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
164	Bürgschaftsbank Hessen GmbH, Wiesbaden	21.03	21.03		20.8	850	€
165	Bürgschaftsbank Thüringen GmbH, Erfurt	31.50	31.50		25.9	642	€
166	FinTech Community Frankfurt GmbH, Frankfurt am Main	25.00	25.00		0.2	141	€
167	GbR VÖB-ImmobilienAnalyse, Bonn	0.00	0.00	20.00	n.a.	n.a.	
168	Hessische Landgesellschaft mbH Staatliche Treuhandstelle für ländliche Bodenordnung, Kassel	37.11	37.11		81.2	4,062	€
169	MBG H Mittelständische Beteiligungsgesellschaft Hessen mbH, Wiesbaden	32.52	32.52		11.3	452	€
170	Mittelständische Beteiligungsgesellschaft Thüringen mbH, Erfurt	38.56	38.56		25.9	970	€
171	Sparkassen-Marktservice Beteiligungs GmbH & Co. KG, Frankfurt am Main	50.00	40.00		7.8	214	€
172	Sparkassen-Marktservice Verwaltungs GmbH, Frankfurt am Main	50.00	40.00		0.0	0	€
173	TF H III Technologiefonds Hessen Gesellschaft mit beschränkter Haftung, Wiesbaden	25.00	25.00		5.17	-843	€

List of Other Shareholdings

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
174	ABE CLEARING S.A.S à capital variable, Paris, France	1.85	1.85		27.9	3,194	€
175	Advent International GPE IX-A SCSp, Luxembourg, Luxembourg	0.43	0.43		n.a.	n.a.	
176	Advent International GPE V-B Limited Partnership, George Town, Cayman Islands	1.99	1.99	0.30	20.6	-4,301	€
177	Advent International GPE VI Limited Partnership, George Town, Cayman Islands	0.24	0.24		938.3	106,586	€
178	AKA Ausfuhrkredit-Gesellschaft mbH, Frankfurt am Main	1.14	1.14		246.7	12,040	€
179	Almack Mezzanine II Unleveraged LP, London, United Kingdom	5.83	5.83		10.1	6,617	€
180	AlphaHaus GmbH & Co. KG i.L., Erzhausen	5.50	0.00		1.1	12	€
181	Antenne Thüringen GmbH & Co. KG, Weimar	3.50	3.50		2.0	1,175	€
182	AWW Assekuranzvermittlung der Wohnungswirtschaft GmbH & Co. KG, Bosau	11.76	0.00	11.63	0.2	17,408	€
183	Bauverein für Höchst a. M. und Umgebung eG, Frankfurt am Main	0.03	0.00		28.6	762	€
184	BC European Capital VIII-8, St. Peter Port, Guernsey	1.83	1.83	0.17	535.5	561,767	€
185	BCECX Luxembourg 1 SCSp, Luxembourg, Luxembourg	7.37	7.37		125.8	-2,212	€
186	BIL Leasing GmbH & Co. Objekt Verwaltungsgebäude Halle KG i.L., Munich	100.00	0.00	0.21	0.0	-8	€
187	BOF III CV Investors LP, Wilmington, USA	4.16	4.16		57.5	35,768	€
188	Campus Kronberg GmbH & Co. KG, Hamburg	6.00	0.00		60.3	-157	€
189	Capnamic Ventures Fund II GmbH & Co. KG, Cologne	4.27	4.27	4.35	25.7	-1,767	€
190	CapVest Equity Partners II, L.P., Hamilton, Bermuda	3.48	3.48		0.6	91	€
191	CapVest Equity Partners IV (Feeder) SCSp, Findel, Luxembourg	2.66	2.66		n.a.	n.a.	
192	Carlyle Europe Partners V – EU SCSp, Luxembourg, Luxembourg	0.32	0.32		n.a.	n.a.	
193	Castra Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs KG, Mainz	2.85	0.00		-20.9	-599	€
194	Clareant Mezzanine Fund II (No. 1) Limited Partnership, St. Helier, Jersey	4.07	4.07		17.4	14,072	€

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
195	Clareant Mezzanine No. 1 Fund Limited Partnership, St. Helier, Jersey	3.40	3.40		19.4	758	€
196	DBAG Fund IV GmbH & Co. KG i. L., Frankfurt am Main	6.13	6.13		3.4	203	€
197	DBAG Fund V GmbH & Co. KG, Frankfurt am Main	7.59	7.59	15.11	11.8	1,254	€
198	Deutsche Sparkassen Leasing AG & Co. KG, Bad Homburg v. d. Höhe	1.71	0.00		652.5	50,404	€
199	Deutsche WertpapierService Bank AG, Frankfurt am Main	3.74	3.74		195.8	17,078	€
200	Deutscher Sparkassen Verlag Gesellschaft mit beschränkter Haftung, Stuttgart	5.41	5.41		205.4	45,926	€ ⁶⁾
201	"Dia" Productions GmbH & Co. KG, Pullach	0.27	0.00		n.a.	n.a.	
202	DIV Grundbesitzanlage Nr. 30 Frankfurt-Deuschherrnufer GmbH & Co. KG i.L., Frankfurt am Main	0.06	0.06		13.8	42,812	€
203	Doughty Hanson & Co. V LP No. 1, London, United Kingdom	1.60	1.60		26.3	-2,713	€
204	Dritte Projektentwicklungs-GmbH & Co. Schulen Landkreis Kassel KG, Kassel	6.00	0.00		12.6	1,945	€
205	EQT Expansion Capital II (No.1) Limited Partnership, St. Peter Port, Guernsey	4.57	4.57		143.9	16,860	€
206	EQT V (No. 1) Limited Partnership, St. Peter Port, Guernsey	0.28	0.28		226.4	102,462	€
207	Erste Schulen Landkreis Kassel Verwaltungs-GmbH, Kassel	6.00	0.00		0.1	5	€
208	Erste ST Berlin Projekt GmbH & Co. KG, Berlin	0.50	0.00		1.4	-1,096	€
209	Erwerbsgesellschaft der S-Finanzgruppe mbH & Co. KG, Neuhausen	1.76	0.00	0.00	3,366.6	122,030	€
210	EUFISERV Payments s.c.r.l., Brussels, Belgium	11.37	11.37		0.3	12	€
211	Fachmarktzentrum Fulda GmbH & Co. KG, Munich	5.10	0.00		43.5	1,584	€
212	Fiducia & GAD IT AG, Karlsruhe	0.02	0.00		440.2	1,584	€
213	FIDUCIA Mailing Services eG, Karlsruhe	0.13	0.06		0.1	0	€
214	Fourth Cinven Fund (No. Limited Partnership, St. Peter Port, Guernsey	1.42	1.42		69.7	1,145,743	€
215	GbR Datenkonsortium OpRisk, Bonn	0.00	0.00	9.09	n.a.	n.a.	
216	GbR Legicheck, Bonn	0.00	0.00	12.50	n.a.	n.a.	

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
217	GeckoGroup AG (insolvent), Wetzlar	5.02	0.00		n.a.	n.a.	
218	GELIMER Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Pullach	8.93	8.93		-1.5	235	€
219	GLB GmbH & Co. OHG, Frankfurt am Main	11.20	11.20		2.9	-61	€
220	GLB-Verwaltungs-GmbH, Frankfurt am Main	11.20	11.20		0.1	2	€
221	Gründerfonds Ruhr GmbH & Co. KG, Essen	8.70	8.70		0.9	-897	€
222	HaemoSys GmbH, Jena	38.33	0.00		-4.8	-524	€ ⁷⁾
223	HANNOVER LEASING GmbH & Co. KG, Pullach	5.10	5.10		24.2	29,410	€
224	Hessisch-Thüringische Sparkassen- Beteiligungsgesellschaft mbH, Frankfurt am Main	15.49	0.00		1.9	553	€
225	HQ Equita Beteiligungen V GmbH & Co. KG, Bad Homburg v.d.H.	3.24	3.24		89.7	-9,664	€
226	Hutton Collins Capital Partners III L.P., London, United Kingdom	1.45	1.45		57.8	8,763	€
227	ICG Europe Fund VII Feeder SCSp, Luxembourg, Luxembourg	0.64	0.64		n.a.	n.a.	
228	Icon Brickell LLC, Miami, USA	14.94	14.94		0.0	-137	USD
229	Interessengemeinschaft Frankfurter Kreditinstitute GmbH, Frankfurt am Main	16.90	4.21		25.5	9,771	€
230	Investcorp Private Equity 2007 Fund, L.P., George Town, Cayman Islands	2.01	2.01		92.4	27,499	USD
231	Kornmarkt Arkaden Dritte GmbH & Co. KG, Frankfurt am Main	5.10	0.00		-0.2	-71	€
232	Kornmarkt Arkaden Erste GmbH & Co. KG, Frankfurt am Main	5.10	0.00		-3.5	-701	€
233	Kornmarkt Arkaden Vierte GmbH & Co. KG, Frankfurt am Main	5.10	0.00		-0.2	-61	€
234	Kornmarkt Arkaden Zweite GmbH & Co. KG, Frankfurt am Main	5.10	0.00		-1.1	-286	€
235	LBS IT Informations-Technologie GmbH & Co KG, Berlin	7.30	7.30		0.0	19	€
236	LEA Venturepartner GmbH & Co. KG, Karlsruhe	4.17	4.17		n.a.	n.a.	
237	Magical Produktions GmbH & Co. KG, Pullach	2.11	0.00		4.2	16,872	€
238	MESTO Grundstücksgesellschaft mbH & Co. KG, Grünwald	1.00	1.00	0.78	-2.8	630	€
239	Mezzanine Management Fund IV 'A' L.P., Hamilton, Bermuda	7.46	7.46		3.5	9,463	€

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
240	MezzVest II, L.P., St. Helier, Jersey	3.50	3.50		0.3	158	€
241	NAsP III/V GmbH, Marburg	14.92	0.00		1.8	-558	€
242	Nassauische Heimstätte Wohnungs- und Entwicklungsgesellschaft mbH, Frankfurt am Main	0.89	0.00		723.9	43,602	€
243	neue leben Pensionsverwaltung AG, Hamburg	3.20	0.00		2.2	-23	€
244	Objekt Limes Haus GmbH & Co. KG i.L., Hamburg	5.10	0.00		14.2	-2,225	€
245	PALMYRA Verwaltungsgesellschaft mbH & Co. Vermietungs KG S.e.n.c., Luxembourg, Luxembourg	5.20	0.00		32.4	-1,315	€
246	Pan-European Infrastructure Fund LP, St. Helier, Jersey	0.73	0.73		3,015.4	306,515	€
247	PATRIZIA Hessen Zehn GmbH & Co. KG, Hamburg	5.20	0.00		17.2	870	€
248	PineBridge PEP IV Co-Investment L.P., Wilmington, USA	9.51	0.00		5.7	-2,847	USD
249	PineBridge PEP IV Non-U.S. L.P., Wilmington, USA	17.00	0.00		2.1	-610	USD
250	PineBridge PEP IV Secondary L.P., Wilmington, USA	16.10	0.00		5.6	-417	USD
251	PineBridge PEP IV U.S. Buyout L.P., Wilmington, USA	17.21	0.00		7.8	-1,170	USD
252	PineBridge PEP IV U.S. Venture L.P., Wilmington, USA	17.51	0.00		11.4	-2	USD
253	Private Equity Thüringen GmbH & Co. KG i.L., Erfurt	14.11	14.11		1.4	15,561	€
254	Projektentwicklungs-GmbH & Co. Landratsamt KG, Wolfhagen	6.00	0.00		4.1	564	€
255	RSU Rating Service Unit GmbH & Co. KG, Munich	9.60	9.60		11.3	-2,245	€
256	S CountryDesk GmbH, Cologne	5.13	2.56		0.5	50	€
257	SCHUFA Holding AG, Wiesbaden	0.28	0.00		101.6	34,599	€
258	Seventh Cinven Fund (No. 1) Limited Partnership, St Peter Port, Guernsey	0.20	0.20		n.a.	n.a.	
259	SIX Group AG, Zurich, Switzerland	0.00	0.00		4,961.3	2,655,887	CHF
260	SIZ GmbH, Bonn	5.32	5.32		6.1	716	€

No.	Name and location of the entity	Holding in % as per Section 16 (4) AktG		Voting rights if different from holding total in %	Equity in € m	Net profit in € thou- sands	Original currency
		Total	Thereof directly				
261	S.W.I.F.T. Society for Worldwide Interbank Financial Telecommunication SCRL, La Hulpe, Belgium	0.00	0.00	0.20	325.2	20,722	€
262	TCW/Crescent Mezzanine Partners IVB, L.P., Los Angeles, USA	2.08	2.08		2.9	5,609	USD
263	THE TRITON FUND II L.P. i.L., St. Helier, Jersey	0.77	0.77		124.7	-34,827	€
264	Treuhandgesellschaft für die Südwestdeutsche Wohnungswirtschaft mbH, Frankfurt am Main	3.25	0.00		1.9	15	€
265	Triton Fund III L.P., St. Helier, Jersey	0.71	0.71		963.8	-15,731	€
266	Triton Fund V SCSp, Luxembourg, Luxembourg	0.39	0.39		n.a.	n.a.	
267	True Sale International GmbH, Frankfurt am Main	8.33	8.33		4.6	-163	€
268	VCM Golding Mezzanine GmbH & Co. KG i.L., Munich	6.48	6.48		6.7	2,335	€
269	VCM Golding Mezzanine SICAV II, Munsbach, Luxembourg	4.20	4.20		27.2	-4,758	€
270	Volks- Bau- und Sparverein Frankfurt am Main eG, Frankfurt am Main	0.01	0.00		10.6	3,557	€
271	Zweite Schulen Landkreis Kassel Verwaltungs-GmbH, Kassel	6.00	0.00		0.1	3	€
272	Zweite ST Berlin Projekt GmbH & Co. KG, Berlin	0.50	0.00		6.8	-257	€

¹⁾ A profit and loss transfer agreement has been signed with the entity.

²⁾ Section 264b HGB has been applied with regard to the entity's annual financial statements.

³⁾ Section 264 (3) HGB has been applied with regard to the entity's annual financial statements.

⁴⁾ The entity is classified as a subsidiary, but not based on the majority of voting rights held.

⁵⁾ Financial year end: 31 January; funds included in the consolidated financial statements with values at 31 December.

⁶⁾ Holding larger than 5 % in a large corporation.

⁷⁾ The entity has been liquidated following the initiation of insolvency proceedings.

n.a. There are no adopted financial statements.

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and results of operations of the Helaba Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Helaba Group, together with a description of the principal opportunities and risks associated with the expected development of the Helaba Group.

Frankfurt am Main/Erfurt, 25 February 2020

Landesbank Hessen-Thüringen Girozentrale

The Board of Managing Directors

Grüntker Groß Dr. Hosemann

Kemler Schmid Dr. Schraad

This page has intentionally been left blank

Further Information and Auditors

(except for the "Independent Auditor's Limited Assurance Report")

272 Country by Country Reporting Pursuant to Section 26a KWG

276 Independent Auditor's Report

Country by Country Reporting Pursuant to Section 26a KWG

“Country by country reporting” has to be performed in accordance with the requirements stipulated in EU Directive 2013/36/EU (“Capital Requirements Directive”, CRD IV) and transposed into German law by section 26a of the German Banking Act (Kreditwesengesetz, KWG).

The report sets out the sales revenues generated and number of employees in the reporting period for each EU member state and third country in which, as at 31 December 2019, the entities included in the consolidated financial statements via full consolidation have a branch or their head office.

The figures disclosed as sales revenue, consolidated net profit and income tax expenses are before consolidation effects. The figures disclosed as sales revenue are each office’s net profit,

before allowances for losses on loans and advances and general and administrative expenses, as included in the consolidated accounts under IFRS. The figures disclosed as consolidated net profit before taxes and taxes on income refer to the balance of contributions to these two items on the consolidated income statement in accordance with IFRS. Income tax expenses refers to the corporation taxes for the reporting unit in question.

The average figures disclosed under number of employees are based on full-time equivalent (FTE) employees.

Within the meaning of an EU subsidy program, the consolidated entities did not receive any subsidies during the reporting period.

	Sales revenue	Consolidated net profit before taxes on income	Taxes on income ¹⁾	Number of employees
	in € m	in € m	in € m	
European Union	2,128	564	-49	5,578
Belgium	1	1	-	-
Germany	2,041	513	-39	5,480
France	-	1	-1	20
Ireland	9	6	-1	2
Sweden	-	-	-	8
United Kingdom	77	43	-8	68
Switzerland	29	-2	1	104
USA	124	42	-25	86
Other	4	3	-	-
Total	2,285	607	-73	5,768

¹⁾ The amount of tax reported for a country relates only to the tax liabilities borne by the entities in question and can be affected by the following factors, for example: the measurement basis for tax purposes can differ from the net profit shown according to commercial law, for example due to non-taxable income and non-tax-deductible expenses. The amount of tax reported can additionally be affected by the occurrence or use of tax loss carryforwards and by changes in current and deferred taxes relating to other periods.

The entities included in country by country reporting are assigned to the regions below:

Entity	Nature of activity	Head office/location	Country
1822direkt Gesellschaft der Frankfurter Sparkasse mbH	Provider of ancillary services	Frankfurt am Main	Germany
Airport Office One GmbH & Co. KG	Other undertaking	Schönefeld	Germany
ASTARTE Verwaltungsgesellschaft mbH & Co. Vermietungs KG	Financial institution	Pullach	Germany
BHT Baugrund Hessen-Thüringen GmbH	Other undertaking	Kassel	Germany
BHT-Baugrund Hessen-Thüringen Gesellschaft für Baulandbeschaffung, Erschließung und Kommunalbau mbH & Co. Objekt FBM Freizeitbad Mühlhausen KG	Other undertaking	Frankfurt am Main	Germany
CORDELIA Verwaltungsgesellschaft mbH	Financial institution	Pullach	Germany
DKB Wohnimmobilien Beteiligungs GmbH & Co. KG	Financial institution	Potsdam	Germany
Dritte OFB Friedrichstraße GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Dritte OFB PE GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
EGERIA Verwaltungsgesellschaft mbH	Financial institution	Pullach	Germany
Erste OFB Friedrichstraße GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Erste Veritas Frankfurt GmbH & Co. KG	Other undertaking	Kriftel	Germany
Family Office der Frankfurter Bankgesellschaft AG	Other undertaking	Frankfurt am Main	Germany
FHP Friedenauer Höhe Dritte GmbH & Co. KG	Other undertaking	Berlin	Germany
FHP Friedenauer Höhe Erste GmbH & Co. KG	Other undertaking	Berlin	Germany
FHP Friedenauer Höhe Fünfte GmbH & Co. KG	Other undertaking	Berlin	Germany
FHP Friedenauer Höhe Projekt GmbH	Other undertaking	Berlin	Germany
FHP Friedenauer Höhe Sechste GmbH & Co. KG	Other undertaking	Berlin	Germany
FHP Friedenauer Höhe Vierte GmbH & Co. KG	Other undertaking	Berlin	Germany
FHP Friedenauer Höhe Zweite GmbH & Co. KG	Other undertaking	Berlin	Germany
Frankfurter Bankgesellschaft (Deutschland) AG	Bank	Frankfurt am Main	Germany
Frankfurter Sparkasse	Bank	Frankfurt am Main	Germany
G+S Wohnen in Frankfurt am Main GmbH	Other undertaking	Frankfurt am Main	Germany
Galerie Lippe GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
GGM Gesellschaft für Gebäude-Management mbH	Provider of ancillary services	Erfurt	Germany
GHT Gesellschaft für Projektmanagement Hessen-Thüringen mbH	Other undertaking	Frankfurt am Main	Germany
Grundstücksgesellschaft Limes-Haus Schwalbach II GbR	Other undertaking	Frankfurt am Main	Germany
Grundstücksverwaltungsgesellschaft Kaiserlei GmbH	Other undertaking	Frankfurt am Main	Germany
Grundstücksverwaltungsgesellschaft Kaiserlei GmbH & Co. Projektentwicklung Epinayplatz KG	Other undertaking	Frankfurt am Main	Germany
GSG Siedlungsgesellschaft für Wohnungs- und Städtebau mbH	Other undertaking	Frankfurt am Main	Germany

Entity	Nature of activity	Head office/location	Country
GWH Bauprojekte GmbH	Other undertaking	Frankfurt am Main	Germany
GWH Immobilien Holding GmbH	Financial institution	Frankfurt am Main	Germany
GWH Komplementär I. GmbH	Other undertaking	Frankfurt am Main	Germany
GWH Projekt Braunschweig I GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
GWH Projekt I. GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
GWH WertInvest GmbH	Other undertaking	Frankfurt am Main	Germany
GWH Wohnungsgesellschaft mbH Hessen	Other undertaking	Frankfurt am Main	Germany
GWH WohnWertInvest Deutschland II	Securities investment fund	Hamburg	Germany
Hafenbogen GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
HANNOVER LEASING Life Invest Deutschland I GmbH & Co. KG	Other undertaking	Pullach	Germany
HANNOVER LEASING Life Invest Deutschland II GmbH & Co. KG	Other undertaking	Pullach	Germany
Haus am Brüsseler Platz GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Helaba Invest Kapitalanlagegesellschaft mbH	Investment trust company	Frankfurt am Main	Germany
Helicon Verwaltungsgesellschaft mbH & Co. Immobilien KG	Financial institution	Pullach	Germany
HeWiPPP II GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
HI A-FSP FONDS	Securities investment fund	Frankfurt am Main	Germany
HI C-FSP FONDS	Securities investment fund	Frankfurt am Main	Germany
HI FBI FONDS	Securities investment fund	Frankfurt am Main	Germany
HI FBP FONDS	Securities investment fund	Frankfurt am Main	Germany
HI FSP FONDS	Securities investment fund	Frankfurt am Main	Germany
HI H-FSP FONDS	Securities investment fund	Frankfurt am Main	Germany
HI-HT-KOMP-FONDS	Securities investment fund	Frankfurt am Main	Germany
HI-HTNW-FONDS	Securities investment fund	Frankfurt am Main	Germany
HI-RENTPLUS-FONDS	Securities investment fund	Frankfurt am Main	Germany
HTB Grundstücksverwaltungsgesellschaft mbH	Other undertaking	Frankfurt am Main	Germany
Landesbank Hessen-Thüringen Girozentrale Düsseldorf	Bank	Düsseldorf	Germany
Landesbank Hessen-Thüringen Girozentrale	Bank	Frankfurt am Main/ Erfurt	Germany
Landesbausparkasse Hessen-Thüringen – legally dependent division of Landesbank Hessen-Thüringen Girozentrale	Bank	Offenbach	Germany
Landeskreditkasse zu Kassel – branch of Landesbank Hessen-Thüringen Girozentrale	Bank	Kassel	Germany
MAVEST Wohnungsbaugesellschaft mbH	Other undertaking	Frankfurt am Main	Germany
Merian GmbH Wohnungsunternehmen	Other undertaking	Frankfurt am Main	Germany
Neunte P 1 Projektgesellschaft mbH & Co. KG	Other undertaking	Frankfurt am Main	Germany

Entity	Nature of activity	Head office/location	Country
OFB Beteiligungen GmbH	Financial institution	Frankfurt am Main	Germany
OFB Bleidenstraße GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
OFB Projektentwicklung GmbH	Other undertaking	Frankfurt am Main	Germany
OFB Schiersteiner Berg GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Projekt Erfurt B38 GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Projekt Hirschgarten MK8 GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Projektentwicklung Neuwerkstraße 17 GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Projektgesellschaft ILP Erfurter Kreuz mbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
PVG GmbH	Other undertaking	Frankfurt am Main	Germany
RAMIBA Verwaltung GmbH	Financial institution	Pullach	Germany
SQO Stadt Quartier Offenburg GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Systemo GmbH	Other undertaking	Frankfurt am Main	Germany
unIQus Projektentwicklung GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Versicherungsservice der Frankfurter Sparkasse GmbH	Other undertaking	Frankfurt am Main	Germany
Verso Grundstücksentwicklung GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Verso Projektentwicklung GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Vierte OFB Friedrichstraße GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Vierte OFB PE GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Wirtschafts- und Infrastrukturbank Hessen – legally dependent entity within Landesbank Hessen-Thüringen Girozentrale	Bank	Frankfurt am Main	Germany
Zweite OFB Friedrichstraße GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Zweite OFB PE GmbH & Co. KG	Other undertaking	Frankfurt am Main	Germany
Montindu S.A./N.V.	Other undertaking	Brussels	Belgium
Landesbank Hessen-Thüringen Girozentrale – Paris branch	Bank	Paris	France
Helaba Asset Services Unlimited Company	Financial institution	Dublin	Ireland
OPUSALPHA FUNDING LTD	Financial institution	Dublin	Ireland
Landesbank Hessen-Thüringen Girozentrale – Stockholm branch	Bank	Stockholm	Sweden
Landesbank Hessen-Thüringen Girozentrale – London branch	Bank	London	United Kingdom
Main Capital Funding II Limited Partnership	Financial institution	Saint Helier	Jersey
Main Capital Funding Limited Partnership	Financial institution	Saint Helier	Jersey
Frankfurter Bankgesellschaft (Schweiz) AG	Bank	Zurich	Switzerland
Honua'ula Partners LLC	Other undertaking	Wailea	USA
HP Holdco LLC	Other undertaking	New York	USA
Landesbank Hessen-Thüringen Girozentrale – New York branch	Bank	New York	USA

Independent Auditor's Report

To Landesbank Hessen-Thüringen Girozentrale,
Frankfurt am Main/Erfurt

Report on the audit of the consolidated financial statements and of the group management report

Opinions

We have audited the consolidated financial statements of Landesbank Hessen-Thüringen Girozentrale Frankfurt am Main/Erfurt, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and the consolidated cash flow statement for the financial year from 1 January 2019 to 31 December 2019, and notes to the financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Landesbank Hessen-Thüringen Girozentrale, Frankfurt am Main/Erfurt, for the financial year from 1 January 2019 to 31 December 2019. In accordance with the German legal requirements, we have not audited the content of the non-financial statement included in the "Non-financial statement" section of the group management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB ["Handelsgesetzbuch": German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2019 and of its financial performance for the financial year from 1 January 2019 to 31 December 2019, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of the "Non-financial statement" in the group management report referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and the EU Audit Regulation (No 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Art. 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January 2019 to 31 December 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

Below, we describe what we consider to be the key audit matters:

1. First-time inclusion of KOFIBA-Kommunalfinanzierungsbank GmbH, Berlin

Reasons why the matter was determined to be a key audit matter

Landesbank Hessen-Thüringen Girozentrale, Frankfurt am Main/ Erfurt, acquired all shares of KOFIBA-Kommunalfinanzierungsbank GmbH, Berlin, with effect from 2 May 2019.

In light of the first-time inclusion of the KOFIBA-Kommunalfinanzierungsbank GmbH, Berlin, in the consolidated financial statements of Helaba, the judgment exercised upon first-time consolidation and the effects on the assets, liabilities and financial performance, the first-time inclusion was a key audit matter.

Auditor's response

We inspected the contractual arrangements for the acquisition of KOFIBA-Kommunalfinanzierungsbank GmbH, Berlin, and verified the acquisition date and the calculation of the purchase price.

We consulted our valuation specialists to assess the valuation models, the fair values calculated by the Bank in revaluing the assets acquired and liabilities assumed and the calculation of the negative consolidation difference. We obtained an understanding of the deferred taxes with the aid of our tax specialists. Further, we assessed the accounting treatment of the termination of the relationships predating the acquisition.

We assessed the appropriateness and completeness of the disclosures made by Landesbank Hessen-Thüringen Girozentrale, Frankfurt am Main/ Erfurt, on the acquisition of KOFIBA-Kommunalfinanzierungsbank GmbH, Berlin, in the notes to the consolidated financial statements.

Our procedures did not lead to any reservations relating to the first-time inclusion of KOFIBA-Kommunalfinanzierungsbank GmbH, Berlin.

Reference to related disclosures

Comments on the transaction are provided in notes 2 and 15 of the notes to the consolidated financial statements.

2. Recognition and measurement of a restructuring provision

Reasons why the matter was determined to be a key audit matter

Landesbank Hessen-Thüringen Girozentrale, Frankfurt am Main/ Erfurt, initiated the efficiency program "Scope – growth through efficiency" in the financial year, recognizing a restructuring provision of € 71 m in this process.

In light of the scope of the program, the recognition requirements to be met, the judgment exercised for the measurement and the impact on the financial performance, the recognition and measurement of the restructuring provision was a key audit matter.

Auditor's response

We satisfied ourselves that a detailed restructuring plan had been drawn up and determined that the minimum requirements for the recognition of a provision in accordance with IFRSs were met. We inspected, among other things, the presentations and minutes of the Board of Managing Directors meetings in which the restructuring measures were discussed and determined.

In particular, we inspected the communication between senior management and the employee committee and assessed the announcements of the planned measures. On this basis, we satisfied ourselves that the measures have been clearly defined and are clearly intended.

With regard to the measurement of the restructuring provision, we obtained an understanding of the budgets and forecasts provided with regard to the underlying assumptions such as the planned utilization and costs of each instrument.

We assessed the completeness and appropriateness of the disclosures concerning the restructuring provision in the notes to the consolidated financial statements in light of the resulting presentation requirements.

Our procedures did not lead to any reservations relating to the recognition and measurement of the restructuring provision.

Reference to related disclosures

Information on the recognition and measurement of the restructuring provision is provided in notes 15 and 34 of the notes to the consolidated financial statements.

Other information

The Supervisory Board is responsible for the "Report of the Supervisory Board," while the Board of Public Owners is responsible for the "Report of the Board of Public Owners." In all other respects, the executive directors are responsible for the other information. The other information comprises the group non-financial statement included in the "Non-financial statement" section of the group management report in accordance with Sec. 315b HGB.

In addition, the other information comprises the other sections of the annual report that we expect to be provided to us after we have issued our auditor's report:

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the executive directors and the Supervisory Board for the consolidated financial statements and the group management report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as group auditor by the Board of Public Owners on 29 March 2019 and were engaged by the Board of Managing Directors on 23 April 2019. We have been the group auditor of Landesbank Hessen-Thüringen Girozentrale Frankfurt am Main/Erfurt since financial year 2018.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Mr. Christoph Hultsch.

Eschborn/Frankfurt am Main, 26 February 2020

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Müller-Tronnier
Wirtschaftsprüfer
[German Public Auditor]

Hultsch
Wirtschaftsprüfer
[German Public Auditor]