2017

Disclosure Report

Helaba

Disclosure Report of the Helaba Group in Accordance with the CRR

31 December 2017

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Preamble

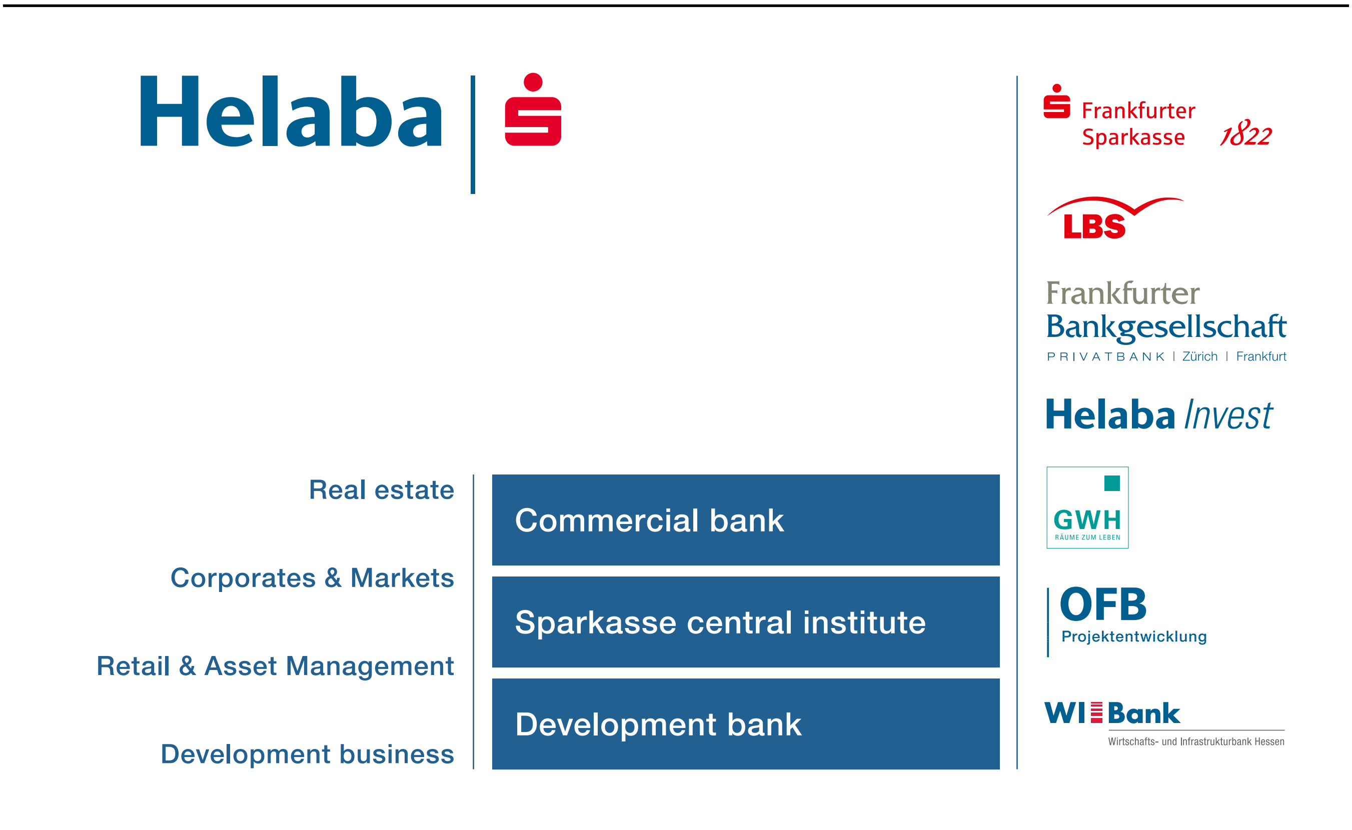
The Helaba Group

Landesbank Hessen-Thüringen Girozentrale, Frankfurt am Main and Erfurt (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.

Helaba provides services for its customers in three different roles. As a commercial bank, it provides support for customers in Germany and abroad. As a Sparkasse central bank, it provides products and services for 40 % of all Germany's Sparkassen. In its capacity as the central development institution for Hesse, Helaba administers public-sector development programmes through Wirtschafts- und Infrastrukturbank Hessen (WIBank).

Frankfurter Sparkasse (FSP), the regional market leader in retail banking, is a wholly owned subsidiary of Helaba. In addition to FSP and WIBank, other entities that form part of the Helaba Group include 1822direkt online bank and Landesbausparkasse Hessen-Thüringen (LBS). The Bank's registered offices are situated in Frankfurt am Main and Erfurt, and it also has branches in Düsseldorf, Kassel, Paris, London and New York. The branches allow Helaba to strengthen its local presence close to customers and Sparkassen. In addition, Helaba's international branches open access to funding markets. The organisation also includes representative and sales offices, subsidiaries and affiliates.

Helaba's business model



Disclosure Report

Helaba is the superordinated institution in the Group and, as such, is responsible for meeting the disclosure requirements at Group level in accordance with Part 8 of Regulation (EU) No 575/2013 (Capital Requirements Regulation, CRR) in conjunction with European Banking Authority (EBA) guideline EBA/GL/2016/11. This Disclosure Report satisfies these requirements for the reporting date of 31 December 2017. The supplementary provisions set out in Sections 10 and 10a of the German Banking Act (Kreditwesengesetz – KWG), Article 13 CRR, the transitional provisions set out in Part 10 CRR and the regulatory and implementing standards, EBA Guidelines and EBA Q&As of relevance to disclosure are also taken into account.

The frequency and scope of the Disclosure Report are based on the requirements specified in the guidelines EBA/GL/2016/11 and EBA/GL/2014/14. The information to be disclosed in this report is subject to the materiality principle as specified in Article 432 CRR in conjunction with the EBA guideline EBA/GL/2014/14. The use of the materiality principle at Helaba is described in the table below and in the sections referenced in the table.

Helaba's approach to disclosures is regularly reviewed on the basis of a framework of requirements established by the Group to ensure that the approach is appropriate and fit for purpose; operational responsibilities are set out in detailed operating procedures. Helaba's entire Board of Managing Directors is responsible for approving publication of the document.

On the basis of the EBA/GL/2016/11 guideline, which had to be applied at Helaba for the first time from 31 December 2017, reports will be issued quarterly from 2018. The content of this reporting, which was previously required in accordance with the CRR, has now been expanded and made more specific.

The following table sets out an overview of the quantitative requirements, the relevance for Helaba and the use of the materiality principle, together with cross-references to the relevant section or external documents. The table also lists qualitative requirements that are not included in the disclosure report but are covered in other Helaba publications.

Overview of quantitative and qualitative requirements in accordance with the CRR and EBA/GL/2016/11

	Disclosure interval		
	Quarterly	Half-yearly	Annually
Preamble			
Overview of quantitative and qualitative requirements in accordance with the CRR and EBA/GL/2016/11	x	–	–
Risk Strategy and Risk Management			
Article 435 CRR – Mandates held by the members of the Board of Managing Directors (in accordance with Section 24 KWG)	–	–	x
Article 435 CRR – Mandates held by the members of the Supervisory Board	–	–	x
Scope of Application			
Group of consolidated companies for regulatory purposes (overview)	–	–	x
EU LI3 – Table of Consolidated Companies	–	–	x
EU LI1 – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories	–	–	x
EU LI2 – Main sources of differences between regulatory exposure amounts and carrying amounts in financial statements	–	–	x
Own Funds and Own Funds Structure			
KM1 – The Helaba Group in figures	x	–	–
Article 437 CRR – Key Features of the Capital Instruments	–	–	x
Article 437 CRR – Disclosure of Own Funds	–	–	x
Article 437 CRR – Reconciliation from the IFRS Consolidated Statement of Financial Position to the Consolidated Statement of Financial Position for Regulatory Purposes	–	–	x
EU OV1 – Overview of RWAs	x	–	–
Article 438 CRR – Overview of RWAs by exposure class	x	–	–
EU INS1 – Equity investments in insurance companies that are not deducted from own funds	–	x	–
EU CR10 – IRB: Equities (simple risk weight approach)	–	x	–
Capital ratios	–	x	–
Countercyclical Capital Buffer			
Article 440 CRR – Geographical distribution of credit risk exposures relevant to the calculation of the countercyclical capital buffer	–	–	x
Article 440 CRR – Amount of the institution-specific countercyclical capital buffer	–	–	x
Leverage Ratio			
Article 451 CRR – LRSum: Summary reconciliation of accounting assets and leverage ratio exposures	–	x	–
Article 451 CRR – LRCom: Leverage ratio common disclosure	–	x	–
Article 451 CRR – LRSpl: Split-up of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	–	x	–
Article 451 CRR – LRQua: Qualitative disclosures	–	x	–

Helaba relevance	Materiality principle applied	Reference
x	–	Preamble section, Disclosure Report subsection
x	–	Risk Strategy and Risk Management section, Risk Management Structure/Members of the management bodies subsections
x	–	Risk Strategy and Risk Management section, Risk Management Structure/Members of the management bodies subsections
x	–	Scope of Application section
x	–	Scope of Application section
x	–	Scope of Application section
x	–	Scope of Application section
x	–	Own Funds and Own Funds Structure section, Own funds structure subsection
x	–	Annex section
x	–	Own Funds and Own Funds Structure section, Own funds structure subsection
x	–	Own Funds and Own Funds Structure section, Own funds structure subsection
x	–	Own Funds and Own Funds Structure section, Capital adequacy subsection
x	–	Own Funds and Own Funds Structure section, Capital adequacy subsection
Generally relevant; no such exposures as at 31.12.2017	–	Own Funds and Own Funds Structure section, Capital adequacy subsection
Generally relevant; no such specialised lending exposures as at 31.12.2017, only equity investments under the simple risk weight approach	Table presentation limited to equities provided no such specialised lending exposures held	Own Funds and Own Funds Structure section, Capital adequacy subsection
Presentation not required for regulatory purposes. Ratios shown for the Group, the Bank, and the significant subsidiary in accordance with Article 13 CRR	–	Own Funds and Own Funds Structure section, Capital adequacy subsection
x	To keep the presentation clear and ensure only relevant information is shown, the data in the table is limited to countries that have specified a countercyclical capital buffer of greater than 0 % or whose weighted proportion of own funds requirements is 1 % or higher.	Countercyclical Capital Buffer section
x	–	Countercyclical Capital Buffer section
x	–	Leverage Ratio section
x	–	Leverage Ratio section
x	–	Leverage Ratio section
x	–	Leverage Ratio section

Overview of quantitative and qualitative requirements in accordance with the CRR and EBA/GL/2016/11

	Disclosure interval		
	Quarterly	Half-yearly	Annually
Liquidity Coverage Ratio (LCR)			
EU LIQ1 – LCR	–	–	x
Credit Risk – General disclosures			
EU CRB-B – Types of credit exposure with average values based on the quarterly reporting dates	–	x	–
EU CRB-C – Geographical breakdown of exposures	–	–	x
EU CRB-D – Concentration of exposures by industry	–	–	x
EU CRB-E – Maturity of exposures (on-balance sheet exposures)	–	–	x
Article 442 CRR – Maturity of exposures (off-balance sheet exposures)	–	–	x
EU CR1-A – Credit quality of exposures by exposure class	–	x	–
EU CR1-B – Credit quality of exposures by industry	–	x	–
EU CR1-C – Credit quality of exposures by geography	–	x	–
EU CR1-D – Ageing of past-due exposures	–	x	–
EU CR1-E – Non-performing and forborne exposures	–	x	–
EU CR2-A – Changes in the stock of general and specific credit risk adjustments (on-balance sheet risk exposures)	–	x	–
Article 442 CRR – Changes in the stock of general and specific credit risk adjustments (off-balance sheet risk exposures)	–	–	x
EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities	–	x	–
Credit Risk – General disclosures on credit risk mitigation			
EU CR3 – Credit risk mitigation techniques	–	x	–
Article 453 CRR – Credit risk mitigation techniques by exposure class	–	–	x
Credit Risk – Credit risk and credit risk mitigation in the Standardised Approach			
EU CR4 – Standardised approach: Credit risk exposure and CRM effects by exposure class	–	x	–
EU CR5 – Standardised approach: Credit risk exposure value by exposure class and risk weight (after credit risk mitigation)	–	x	–
Article 444 CRR – Standardised approach: Credit risk exposure value by exposure class and risk weight (before credit risk mitigation)	–	–	x
Credit Risk – Credit risk and credit risk mitigation in the IRB Approach			
Article 452 CRR – Overview of approved IRB approach rating models in use at Helaba Bank (excluding LBS and WIBank)	–	–	x
Article 452 CRR – Overview of approved IRB approach rating models in use at FSP	–	–	x
Article 452 CRR – Overview of approved IRB approach rating models in use at LBS	–	–	x

Helaba relevance	Materiality principle applied	Reference
x	–	Liquidity Coverage Ratio (LCR) section
x	–	Credit Risk section, General disclosures subsection
x	Countries are shown individually that, in terms of the basis of measurement before credit risk adjustments, together account for at least 95 % of the basis of measurement before credit risk adjustments in the Helaba Group	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
x	Countries are shown individually that, in terms of the basis of measurement before credit risk adjustments, together account for at least 95 % of the basis of measurement before credit risk adjustments in the Helaba Group	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
x	–	Credit Risk section, General disclosures subsection
Generally relevant; table subject to mandatory disclosure for the first time from 30.06.2018	–	–
x	–	Credit Risk section, General disclosures on credit risk mitigation subsection
x	–	Credit Risk section, General disclosures on credit risk mitigation subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the Standardised Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the Standardised Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the Standardised Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection

Overview of quantitative and qualitative requirements in accordance with the CRR and EBA/GL/2016/11

	Disclosure interval		
	Quarterly	Half-yearly	Annually
EU CR6 – IRB: Credit risk exposures by exposure class and PD range	–	x	–
Article 452 CRR – Average PD by country, FIRB	–	–	x
Article 452 CRR – Retail portfolio average PD/LGD by country, AIRB	–	–	x
EU CR7 – IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques	–	x	–
EU CR8 – RWA flow statements of credit risk exposures under the IRB approach	x	–	–
RWA coverage by exposure class	–	–	x
EU CR9 – FIRB: Back-testing of PD per exposure class	–	–	x
EU CR9 – AIRB: Back-testing of PD per exposure class	–	–	x
EU CR9 – AIRB: Back-testing of LGD per exposure class	–	–	x
EU CR9 – AIRB: Back-testing of CCF per exposure class	–	–	x
Article 452 CRR – Actual losses versus expected loss in lending business	–	–	x
Equity Investments in the Banking Book			
Article 447 CRR – Type of equity investment instrument	–	–	x
Counterparty credit risk (CCR)			
EU CCR1 – Analysis of CCR exposure by approach (excluding exposures to CCPs)	–	x	–
EU CCR3 – Standardised approach: CCR exposures by regulatory portfolio and risk (after credit risk mitigation)	–	x	–
Article 444 CRR – Standardised approach: CCR exposures by regulatory portfolio risk (before credit risk mitigation)	–	–	x
EU CCR4 – FIRB approach: CCR exposures by portfolio and PD scale	–	x	–
EU CCR4 – AIRB approach: CCR exposures by portfolio and PD scale	–	x	–
EU CCR6 in conjunction with Article 439 h) CRR – Overview of credit derivatives exposures	–	x	–
EU CCR8 – Exposures to CCPs	–	x	–
EU CCR7 – RWA flow statements of CCR exposures under the IMM	x	–	–
EU CCR5-A – Impact of netting and collateral held on exposure values	–	x	–
EU CCR5-B – Composition of collateral for exposures to CCR	–	x	–
EU CCR2 – CVA capital charge	–	x	–

Helaba relevance	Materiality principle applied	Reference
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
Generally relevant; no such exposures as at 31.12.2017	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
Generally relevant; table subject to mandatory disclosure for the first time from 31.03.2018	–	–
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	The 5-year historical annual default rate is required for regulatory purposes; however, in order to provide a consistent presentation of exposure classes, as at 31.12.2017 it has only been shown since the introduction of the CRR (for 4 years)	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	The 5-year historical annual default rate is required for regulatory purposes; however, in order to provide a consistent presentation of exposure classes, as at 31.12.2017 it has only been shown since the introduction of the CRR (for 4 years)	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	The 5-year historical LGD is required for regulatory purposes; however, in order to provide a consistent presentation of exposure classes, as at 31.12.2017 it has only been shown since the introduction of the CRR (for 4 years)	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	–	Credit Risk section, Credit risk and credit risk mitigation in the IRB Approach subsection
x	–	Equity Investments in the Banking Book section
x	–	Counterparty credit risk (CCR) section
x	–	Counterparty credit risk (CCR) section
x	–	Counterparty credit risk (CCR) section
x	–	Counterparty credit risk (CCR) section
x	–	Counterparty credit risk (CCR) section
Generally relevant; as at 31.12.2017, there were no credit derivatives transactions in connection with intermediation activities, only for Helaba's own credit portfolio	Table presentation limited to credit derivatives transactions for Helaba's own credit portfolio, provided there were no such transactions in connection with intermediation activities	Counterparty credit risk (CCR) section
x	–	Counterparty credit risk (CCR) section
Generally relevant; table subject to mandatory disclosure for the first time from 31.03.2018	–	–
x	–	Counterparty credit risk (CCR) section
x	–	Counterparty credit risk (CCR) section
x	–	Counterparty credit risk (CCR) section

Overview of quantitative and qualitative requirements in accordance with the CRR and EBA/GL/2016/11

	Disclosure interval			
	Quarterly	Half-yearly	Annually	
Securitisations				
Article 449 CRR – Approaches used for securitisation transactions	–	–	x	
Article 449 CRR – Total volume of securitisation exposures by asset type	–	–	x	
Article 449 CRR – Total volume of retained or purchased securitisation exposures by risk weight band	–	–	x	
Article 449 CRR – Total volume of securitisation exposures in respect of own special purpose vehicles	–	–	x	
Article 449 CRR – Requirements for originators	–	–	x	
Market risk				
EU MR1 – Market risk in accordance with the standardised method	–	x	–	
EU MR2-A – Market risk in internal models approach	–	x	–	
EU MR2-B – Market risk under the IMA	x	–	–	
EU MR3 – IMA values for trading portfolios	–	x	–	
EU MR4 – Clean back-testing of the internal model	–	x	–	
EU MR4 – Dirty back-testing of the internal model	–	x	–	
Interest Rate Risk in the Banking Book	**–**	**–**	**x**	
Operational risk	**–**	**–**	**x**	
Asset Encumbrance				
Article 443 CRR – Assets	–	–	x	
Article 443 CRR – Collateral received	–	–	x	
Article 443 CRR – Sources of encumbrance	–	–	x	
Qualitative/Other Disclosure Requirements				
Article 13 CRR – Disclosure by significant subsidiaries				
Article 435 CRR – Adequacy of risk management arrangements				
Article 435 CRR – Risk Strategy and Risk Management				

	Helaba relevance	Materiality principle applied	Reference
	x	–	Securitisations section
	x	–	Securitisations section
	x	–	Securitisations section
	x	–	Securitisations section
	Helaba operates as a sponsor and investor only and so the requirements for originators stipulated in Article 449 CRR do not apply	–	–
	x	–	Market Risk section, Standardised method subsection
	x	–	Market Risk section, Internal model subsection
	Generally relevant; table subject to mandatory disclosure for the first time from 31.03.2018	–	–
	x	–	Market Risk section, Internal model subsection
	x	–	Market Risk section, Internal model subsection
	x	–	Market Risk section, Internal model subsection
	x	**With a view to improving clarity in the presentation of figures, the listing of individual currencies is limited to those that individually account for at least 5 % and those that are necessary to cover at least 95 % of the total foreign currency share**	**Interest Rate Risk in the Banking Book section**
	x	**–**	**Operational Risk section**
	x	–	Asset Encumbrance section
	x	–	Asset Encumbrance section
	x	–	Asset Encumbrance section
	x		The disclosure report for Frankfurter Sparkasse as an individual bank is published in a "Disclosure report" section within its Annual Report, which is available on FSP's website.
	x		Please refer to the "Risk report" section in conjunction with the "Responsibility statement" in the Helaba Group's Annual Report for information on declarations by the Board of Managing Directors regarding the appropriateness of the risk management system at Helaba.
	x		The disclosures relating to the risk strategy and risk management system at Helaba are included in the Annual Report (Group management report (Risk report)). This disclosure report only includes additional information.

Overview of quantitative and qualitative requirements in accordance with the CRR and EBA/GL/2016/11

	Disclosure interval			
	Quarterly	Half-yearly	Annually	
Article 436 CRR – Differences in the basis of consolidation				
Article 447 CRR – Exposures in equities				
Article 450 CRR – Remuneration policy disclosures				
Article 441 CRR – Indicators of global systemic importance				
Article 473 CRR in conjunction with EBA GL 2018/01 – Disclosure of IFRS 9 transitional arrangements				
Section 26a KWG – Country by Country Reporting				
Section 35 SAG – Financial Assistance Provided Within the Group				

	Helaba relevance	Materiality principle applied	Reference
	x		Information on the group of consolidated companies under IFRS may be found in the Annual Report (Note (3) in conjunction with Note (88) in the Notes to the Consolidated Financial Statements)
	x		More detailed information on equity investment exposures, is included in Note (30) et seq. and Note (42) et seq. of the Notes to the Consolidated Financial Statements in the Annual Report.
	x		The disclosures are presented in a separate remuneration report and published on Helaba's website (offenlegung.helaba.de)
	Helaba is identified as an Other Systemically Important Institution and so the requirements stipulated in Article 441 CRR do not apply		–
	Helaba will not make use of the transitional regulatory rules in accordance with Article 473 a) CRR covering the inclusion of the initial application effects when determining capital ratios and so the requirements stipulated in Article 473 CRR in conjunction with EBA GL 2018/01 do not apply		–
	x		Disclosures can be found in the section Country-by-country reporting in accordance with Section 26a KWG in the Annual Report (geschaeftsbericht.helaba.de)
	x		The disclosures are included in the Annual Report (Note (74) in conjunction with Note (75) in the Notes to the Annual Financial Statements). The equivalent disclosures at Helaba Bank level are in the Annual Financial Report (Note (44) in the Notes to the Annual Financial Statements).

Article 13 CRR requires significant subsidiaries of EU parent institutions and those subsidiaries that are of material significance for their local market to prepare their own disclosure report on an individual or sub-consolidated basis.

Helaba's FSP subsidiary falls under this separate disclosure requirement. Since the disclosure reporting date of 31 December 2015, the disclosure report for FSP as an individual bank has been published in a "Disclosure report" section within its **Annual Report**, which is available on FSP's website. The disclosure report will be updated each year in the same way as FSP's **Annual Report**.

The regulatory capital requirements and Helaba's own funds are based on financial reporting in accordance with IFRS. From 1 January 2018, the figures take into account the new financial reporting requirements under IFRS 9. As specified in Note (1) of the Notes to the Consolidated Financial Statements in the **Annual Report** for the year ended 31 December 2017, it is anticipated that the initial application effect from the transition to IFRS 9 will lead to an increase in provisions for losses on loans and advances in the order of € 55 to € 65 m.

Helaba will not make use of the transitional regulatory rules in accordance with article 473 a) CRR covering the inclusion of the initial application effects when determining capital ratios. The recognition at fair value of subsidiaries not included in the scope of prudential consolidation – which is now mandatory following the elimination of the exemption under IAS 39 allowing the recognition of equity investments at cost – will mean that the switch to IFRS 9 will result in an increase of around 0.7 percentage points in the Common Equity Tier 1 (CET1) capital ratio.

Please refer to the "Risk report" section in conjunction with the "Responsibility statement" in the Helaba Group's **Annual Report** for information on declarations by the Board of Managing Directors regarding the appropriateness of the risk management system at Helaba pursuant to Article 435 (1e) CRR. Given the differences between the scope of prudential consolidation and the basis of consolidation under German commercial law, more detailed information relating to the financial statements can also be found in the **Annual Report**.

Risk Strategy and Risk Management

The disclosures relating to the risk strategy and risk management system at Helaba are included in the **Annual Report** (Group management report (Risk report)). For this reason, this disclosure report only includes additional information.

In addition to the details in the section covering risk management in the Group entities, the following should be noted in respect of FSP, a significant subsidiary: FSP operates as a legally independent institution and accordingly has its own comprehensive risk management system in accordance with Section 25a KWG in conjunction with the German Minimum Requirements for Risk Management (MaRisk). Methods, processes and organisational implementation, as well as the strategies, are documented and regularly updated in FSP's Risk Manual. In particular, the manual contains a description of the established management system and risk early warning system, together with the separation of functions.The implementation of CRR requirements is fully integrated into FSP's operational procedures. The management of risk at FSP has been comprehensively incorporated into all processes from front office through to portfolio management.

Risk Management Process

The risk management methods employed at Helaba are designed to be appropriate to the type, magnitude, complexity and risk content of business activities and the priorities of the Bank's business strategy and risk strategy. These risk management methods have been approved by management in accordance with the requirements imposed by the Charter, national and international law and the banking regulatory authorities. Helaba develops its risk management methods continuously to accommodate changing circumstances, new findings and newly introduced regulatory requirements in both national and international contexts. The risk management methods instituted consider all of the Bank's material risks and are appropriate to the institution's profile and strategy.

The models used at Helaba are subject to an annual inventory check. This model inventory check ensures that key information relating to each model is recorded centrally and that this information can then be used to determine the significance of the models in relation to the assessment and management of model risk.

A description of the risk management process at Helaba and the defined successive phases comprising four elements can be found in the **Annual Report** (Group management report (Risk report)).

Risk Management Structure

Members of the management bodies

Helaba's corporate governance statutes, which are based on the provisions of its Charter, assign responsibility for the appointment of members of the Board of Managing Directors to the Board of Public Owners acting with the consent of the Supervisory Board. Candidates for positions on Helaba's Board of Managing Directors are accordingly selected, with reference to Section 25 d (11) KWG, by the Board of Public Owners, which is assisted in this connection by a nine-member Public Owners' Committee.

The Public Owners' Committee helps the Board of Public Owners determine applicants for positions on Helaba's Board of Managing Directors. The committee takes into account the balance and variety of knowledge, capabilities and experience provided by all the members of the Board of Managing Directors. It drafts a job description with an applicant profile and specifies the time that will be required for the responsibilities in question. The objective is to achieve a balance between the management/control and market functions represented on the Board of Managing Directors based on the size and structure of Helaba's business model.

The committee issues instructions in a suitable form for the operational selection process based on the following requirements profile:

- strategic and conceptual capabilities
- professional knowledge and experience in the area of responsibility for which the appointment is being made
- professional knowledge and experience in lending and capital markets business
- theoretical knowledge and practical expertise in regulation, risk management and corporate management

- leadership and communication skills
- professional experience in the financial services sector.

Article 1 of the Helaba company regulations stipulates that no employee of the organisation may be treated differently to others, either by the Bank or by other employees, on the basis of gender, race, age, religion, skin colour, origin or nationality.

Helaba signed the Diversity Charter, a German corporate initiative to promote diversity in companies and institutions, in 2011. Following the maxims of the Charter, it gives consideration when selecting members of the Board of Managing Directors to the differences in knowledge, skills and experience of all members of the Board of Managing Directors. On 30 May 2017, the Bank's Board of Managing Directors also decided to sign up to the United Nations Global Compact. The ten principles of the UN Global Compact cover a number of areas including a commitment to eliminate discrimination in respect of employment and occupation.

The Board of Public Owners additionally prepares a regular, at least annual, assessment of the knowledge, skills and experience of both the individual members of the Board of Managing Directors and of the Board of Managing Directors as a whole. In a further assessment, the Board of Public Owners regularly reviews the structure, size, composition and performance of the Board of Managing Directors, such review being carried out at least once a year. Close attention is paid to ensuring that the decision-making within the Board of Managing Directors by individuals or groups of individuals is not influenced in a way that might be prejudicial to Helaba's interests. The Public Owners' Committee assists the Board of Public Owners in both of these activities. In the first half of 2017, the Board of Public Owners and the Public Owners' Committee both met on 24 March 2017 and 22 June 2017.

The changes in the management or supervisory functions carried out by the members of the Helaba Board of Managing Directors compared with the details in the Disclosure Report as at 30 June 2016 have been as follows:

Article 435 CRR – Mandates held by the members of the Board of Managing Directors (in accordance with Section 24 KWG)

31 December 2017			30 June 2017		
Members of the Board of Managing Directors	**Number**	**thereof: Subsidiaries/equity investments > 10 %**	**Members of the Board of Managing Directors**	**Number**	**thereof: Subsidiaries/equity investments > 10 %**
Herbert Hans Grüntker	5	4	Herbert Hans Grüntker	5	4
Thomas Groß	5	4	Thomas Groß	6	5
Dr. Detlef Hosemann	4	3	Dr. Detlef Hosemann	4	3
Hans-Dieter Kemler	3	3	Hans-Dieter Kemler	0	0
Klaus-Jörg Mulfinger	4	3	Klaus-Jörg Mulfinger	5	4
Dr. Norbert Schraad	0	0	Dr. Norbert Schraad	2	2
			Jürgen Fenk	6	6

Hans-Dieter Kemler, who has been a member of the Helaba Board of Managing Directors since 1 May 2017 with responsibility for the Capital Markets, Asset/Liability Management, Sales Public Authorities and Asset Management business lines and for providing support for institutional clients, did not hold any mandates at the reporting date 30 June 2017. Jürgen Fenk left the Board of Managing Directors of Helaba on 30 September 2017.

The table below shows the number of positions held by the members of Helaba's Supervisory Board on other executive or supervisory boards as at 31 December 2017. The options for privileged treatment available under Section 25d (3) KWG have been applied when determining the number of positions held.

Article 435 CRR – Mandates held by the members of the Supervisory Board

	Number of executive functions	Number of supervisory functions
Andreas Bausewein		3
Frank Beck		1
Dr. Annette Beller	1	3
Patrick Burghardt		2
Thorsten Derlitzki		1
Gabriele Fuchs		1
Anke Glombik		1
Gerhard Grandke		4
Stefan Hastrich	1	1
Dr. Werner Henning		1
Günter Högner	1	1
Thorsten Kiwitz		1
Dr. Christoph Krämer	1	2
Christiane Kutil-Bleibaum		1
Annette Langner		1
Manfred Michel		1
Frank Nickel	1	1
Susanne Noll		1
Jürgen Pilgenröther		1
Clemens Reif		2
Dr. Hartmut Schubert		4
Birgit Sahlinger-Rasper		1
Dr. Thomas Schäfer		3
Thorsten Schäfer-Gümbel		1
Helmut Schmidt	1	2
Uwe Schmidt		1
Susanne Schmiedebach		1
Wolfgang Schuster		1
Thorsten Sittner		1
Dr. Eric Tjarks	1	1
Alexander Wüerst	1	2
Arnd Zinnhardt	1	1

Helaba's Supervisory Board consists of 36 members. Four positions were vacant as at 31 December 2017. The composition of the Supervisory Board is determined by Article 11 of Helaba's Charter. The right to appoint the members of the Supervisory Board other than the ex officio members and the representatives of the Bank's employees is held by Helaba's public owners.

The Nomination Committee is responsible for the duties specified in Section 25d (11) KWG with the exception of those tasks in connection with the remuneration, recruitment, appointment and dismissal of members of the Board of Managing Directors that fall within the remit of the Public Owners' Committee. The Nomination Committee assists the Supervisory Board with the preparation of proposals for the appointment of members of the Supervisory Board pursuant to Article 11 (1) numbers 1 to 3 of the Charter. In this process, the Nomination Committee takes into account the balance and variety of knowledge, skills and experience provided by all the members of Supervisory Board, draws up a job description with applicant profile and specifies the amount of time that the post will require.

On a regular basis, but at least once a year, the Supervisory Board carries out a self-assessment covering its structure, size, composition and performance. In a further assessment, again on a regular basis and at least once a year, the Supervisory Board reviews the knowledge, skills and experience of both the individual members of the Supervisory Board and of the Supervisory Board as a whole. The Nomination Committee provides support for the Supervisory Board in both of these activities.

Principal Risk Monitoring Areas

Risk reporting is a key tool in the Helaba Group's risk management system aimed at monitoring and containing risk. Its purpose is to ensure there is regular reporting on the main types of risk, risk-bearing capacity and the status of the recovery indicators (German Minimum Requirements for the Design of Recovery Plans, MaSan), to assist the Board of Managing Directors, particularly in the implementation of the risk policy for the risk types set out in the general risk strategy and specific risk strategies, and to keep the Supervisory Board informed about the risk situation in the Helaba Group.

MaRisk specifies that the Board of Managing Directors of Helaba and the Supervisory Board must be informed in writing about the risk situation of the Bank at least quarterly.

In addition to the regular reporting, ad hoc risk reports must be prepared for the Board of Managing Directors of Helaba if this appears to be necessary as a result of the prevailing risk situation at Helaba or the current situation in the markets in which Helaba operates. Helaba's Board of Managing Directors must forward any material risk-related information without delay to the Supervisory Board. An overall risk report is prepared at the end of each quarter. This is broken down as follows:

- Risk dashboard (overarching report), management summary (overarching report) and overall report on recovery indicators (MaSan)
- Report on calculation of risk-bearing capacity
- Default risk report (plus separate risk report on equity investments/other financial instruments in accordance with the German Solvency Regulation (Solvabilitätsverordnung – SolvV))
- Market risk report (plus separate report on risk management in the Pfandbrief business)
- Liquidity risk report (plus separate report on risk management in the Pfandbrief business)
- Operational risk report
- Business risk report
- Real estate risk report
- Supplementary information report (overarching report).

The quarterly overall risk report is submitted to the full Board of Managing Directors and is prepared to coincide with the dates for committee meetings, generally on the first Tuesday of the second month following the reporting date. The full Board of Managing Directors has delegated its responsibility to receive reports to its Risk Committee, on which currently all members of the Board of Managing Directors are represented as members with voting rights. If all the members of the Board of Managing Directors were no longer represented on the Risk Committee with voting rights, decisions would be taken at a meeting of the full Board of Managing Directors, either additionally or alternatively.

After the overall risk report has been discussed by the Board of Managing Directors' Risk Committee, it must be submitted to the Supervisory Board by the Risk Controlling unit.

The Supervisory Board has delegated its responsibility to receive this information to its Risk and Credit Committee (VR-RKA) with the proviso that the chair of the VR-RKA must keep the Supervisory Board regularly informed in a suitable manner about any material content in the risk report and notify the Supervisory Board of the outcome of the committee meeting. The main points of the discussion at the meeting of the VR-RKA and the management summary in the risk report must also be submitted to the Supervisory Board as part of this notification. Information is submitted in a similar manner to the Board of Public Owners.

Other recipients of the overall risk report are the heads of the Group Strategy and Central Staff division and Internal Audit division, the head of audit at the independent auditors and the banking supervisor.

To complement the quarterly overall risk report, there is also a report at each month-end on market and liquidity risk, although the scope of this monthly report is not as great as that of the quarterly reports. The level of detail in the monthly report depends on the prevailing market situation. Further reporting requirements relating to market and liquidity risk are set out in the internal operating procedures.

In addition to the regular reports, other reports are generated on an ad hoc basis if significant risks arise or materialise, or if specified threshold values are reached or exceeded. Such reports are independent of any reports generated in the event of a material deterioration in the credit quality of borrowers.

Strategies and processes to counter and mitigate risks

Strategies and processes to counter and mitigate risks with recourse to suitable collateral are in place. The processes established by Helaba ensure that the collateral received is appropriately measured. Reporting, financial and non-financial covenants, including material adverse change (MAC) clauses, are agreed in line with customary standards and taking into account the market position or credit rating of the borrower/sponsor insofar as this is established practice in the relevant markets. The Helaba Group unit responsible for managing the portfolio (generally the Credit Risk Management unit) continuously reviews compliance with the covenants.

Operational risk is inherent in Helaba's business: the business activities specified in the business strategy involve operational risk and it is therefore not possible to pursue these business activities without some exposure to operational risk. In terms of operational risk, the following determine appetite for the conscious assumption of such risk and the handling of related loss events: transparency creation, monitoring and control. This also includes suitable measures (and associated documentation) for mitigating the risk or limiting losses if risk events materialise.

Risks that are sufficient in scale to put its existence in jeopardy have to be incorporated into Helaba's financial protection concept and transferred by means of insurance cover with due consideration given to the associated costs and benefits. Decisions in this context have to be made on the basis of a proper assessment of the various business administration factors involved and it will be entirely appropriate in certain cases knowingly to assume or accept operational risks.

Market risk and interest rate risk can only be assumed in the banking book within the scope of approved limits (see "Limitation of market risks"). All the processes and models used to reflect market risk must be constantly reviewed to ensure that they are appropriate and then adjusted if required. This relates to both risk and measurement models. This issue must be taken into account especially in the authorisation of new products.

The number one economic liquidity risk management priority is initially to ensure that the Helaba Group has adequate day-to-day (short-term) liquidity to meet its payment obligations. This also includes intraday liquidity. The main objective of medium-/long-term funding management (funding) is to avoid cost risks when obtaining medium- and long-term funding (maturity-matched funding) and to limit dependency on short-term sources of funding. The activities to achieve both objectives are managed and monitored by using a detailed system of limits.

The funding strategy is derived from Helaba's business model and therefore makes optimum use of the "natural" sources of funding. The cornerstones are (1) S-Group funding from the Sparkassen and/or Sparkassen (retail) customers, (2) the sale of Pfandbriefe, (3) the use of development funds and (4) wholesale funding, particularly from institutional clients. Helaba has a further direct retail funding base available at Group level in the form of FSP and LBS. The diversity of individual funding sources is monitored continuously. Access to markets is also continuously reviewed.

An additional liquidity buffer is created for short-term liquidity management by systematically accumulating highly liquid portfolios of securities based on non-encumbered assets. A well-established collateral management system ensures that information is available at all times on the portfolios and asset encumbrance. Measures include the provision of a dedicated liquidity resource to ensure intra-day liquidity.

The Bank maintains compliance with the liquidity coverage ratio (LCR) stipulated by the banking supervisory authorities pursuant to the CRR alongside its economic liquidity risk containment activities. The securities portfolios to be held available for this purpose also form part of the liquidity buffer. The regulatory requirement to comply with a mandatory minimum ratio is being progressively introduced. The Bank has adopted its own conservative roadmap to ensure compliance with these LCR requirements at all times. Mandatory regulatory requirements for structural liquidity at the multi-year level (in the form of the net stable funding ratio or NSFR) pursuant to the CRR are not expected until 2018. Irrespective of this, the NSFR currently still calculated in accordance with the principles of the BCBS already reflects Helaba's established practice of arranging funding largely with matched maturities.

Economic liquidity management and liquidity management for regulatory purposes are combined in the Internal Liquidity Adequacy Assessment Processes (ILAAP) and comprehensively validated on a regular basis. In summary, this process ensures that Helaba has an adequate level of liquidity at all times.

Scope of Application

These disclosures are provided for the Helaba Group on the basis of the group of consolidated companies for regulatory purposes pursuant to the KWG/CRR. The document is prepared and coordinated by the parent company – Helaba.

A total of 22 companies are fully consolidated in the consolidation process for regulatory purposes in accordance with Sections 10 and 10a KWG and Article 18 CRR in addition to Helaba as the superordinated institution, and one other company is included in the consolidation on a pro-rata basis. A further 47 companies are excluded from the scope of consolidation for regulatory purposes in accordance with Section 31 KWG in conjunction with Article 19 CRR. The following two entities were added to the group of consolidated companies for regulatory purposes as at 31 December 2017 and had therefore not been included at the end of the previous year: Family Office der Frankfurter Bankgesellschaft AG and ASTARTE Verwaltungsgesellschaft mbH & Co. Vermietungs KG. The merger of Horrido-Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs OHG into Helaba also led to a change in the group of consolidated companies for regulatory purposes as at 31 December 2017.

Group of consolidated companies for regulatory purposes (overview)

Regulatory treatment	Number and type of companies
Full consolidation	**22 companies** 15 financial institutions 2 asset management companies 3 banks 1 investment firm 1 provider of ancillary services
Proportional consolidation	**1 company** 1 financial institution
Excluded from the scope of consolidation for regulatory purposes	**47 companies** 46 financial institutions 1 provider of ancillary services

EU LI3 - Table of Consolidated Companies

	a
Entity name	**Method of accounting consolidation**
1822direkt Gesellschaft der Frankfurter Sparkasse mbH, Frankfurt am Main	Full consolidation
GGM Gesellschaft für Gebäude-Management mbH, Erfurt	Full consolidation
ASTARTE Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Pullach	Full consolidation
BHT-Baugrund Hessen-Thüringen Gesellschaft für Baulandbeschaffung, Erschließung und Kommunalbau mbH & Co. Objekt FBM Freizeitbad Mühlhausen KG, Frankfurt am Main	Full consolidation
DKB Wohnimmobilien Beteiligungs GmbH & Co. KG, Potsdam	Full consolidation
FHP Friedenauer Höhe Projekt GmbH, Berlin	Equity method
G & O Alpha Hotelentwicklung GmbH, Eschborn	Equity method
G & O Baufeld Alpha 2. BA GmbH & Co. KG, Eschborn	Equity method
GOB Dritte E & A Grundbesitz GmbH, Eschborn	Equity method
GWH Immobilien Holding GmbH, Frankfurt am Main	Full consolidation
Helaba Asset Services Unlimited Company, Dublin, Ireland	Full consolidation
Helicon Verwaltungsgesellschaft mbH & Co. Immobilien KG, Pullach	Full consolidation
LHT MSIP, LLC, Wilmington, USA	Full consolidation
LHT Power Three LLC, Wilmington, USA	Full consolidation
LHT TCW, LLC, Wilmington, USA	Full consolidation
LHT TPF II, LLC, Wilmington, USA	Full consolidation
Main Capital Funding II Limited Partnership, St. Helier, Jersey	Full consolidation
Main Capital Funding Limited Partnership, St. Helier, Jersey	Full consolidation
OFB Beteiligungen GmbH, Frankfurt am Main	Full consolidation

Of the subsidiary enterprises included in the scope of prudential consolidation under the KWG, 22 companies are fully consolidated in the consolidated accounts under IFRS and one other company is accounted for using the equity method. Information on the group of consolidated companies under IFRS may be found in the **Annual Report** (Note (3) in conjunction with Note (88) in the Notes to the Consolidated Financial Statements).

Five of the entities not included in the scope of prudential consolidation are consolidated in the IFRS banking group; the other entities not consolidated for regulatory purposes do not form part of the IFRS group of consolidated companies either.

One of the fundamental reasons for the difference between the two scopes of consolidation is the focus of activities in the entities concerned: entities that are consolidated in accordance with IFRS but whose activities are focused outside the financial sector cannot be included in the prudential scope of consolidation in accordance with the KWG/CRR.

Further information on the regulatory treatment of the entities included in the IFRS consolidated financial statements is shown in the following table.

Helaba does not avail itself of the exemptions listed in Article 7 CRR for institutions belonging to a group. There are no obstacles, either legal or in substance, to the transfer of funds or liable capital within the Helaba Group.

Details of the financial assistance provided within the group in accordance with Section 35 of the German Recovery and Resolution Act (SAG) can also be found in the **Annual Report** (Note (74) in conjunction with Note (75) in the Notes to the Consolidated Financial Statements). The equivalent disclosures at Helaba Bank level are in the Annual Financial Report (Note (44) in the Notes to the Annual Financial Statements).

b	c	d			e	f
Method of regulatory consolidation						
		Neither consolidated nor deducted				
Full consolidation	Proportional consolidation		thereof: Risk weighting	thereof: Exempted in acc. with Art. 19 CRR	Deducted	Description of the entity
x						Provider of ancillary services
		x	x	x		Provider of ancillary services
x						Financial institution
x						Financial institution
x						Financial institution
		x	x	x		Financial institution
		x	x	x		Financial institution
		x	x	x		Financial institution
	x					Financial institution
x						Financial institution
x						Financial institution
x						Financial institution
x						Financial institution
x						Financial institution
x						Financial institution
x						Financial institution
x						Financial institution
x						Financial institution
x						Financial institution

EU LI3 - Table of Consolidated Companies

	a
Entity name	**Method of accounting consolidation**
OPUSALPHA FUNDING LTD, Dublin, Ireland	Full consolidation
TE Kronos GmbH, Frankfurt am Main	Full consolidation
Westhafen-Gelände Frankfurt am Main GbR, Frankfurt am Main	Equity method
WoWi Media GmbH & Co. KG, Hamburg	Equity method
Frankfurter Bankgesellschaft (Deutschland) AG, Frankfurt am Main	Full consolidation
Frankfurter Bankgesellschaft (Schweiz) AG, Zurich, Switzerland	Full consolidation
Frankfurter Sparkasse, Frankfurt am Main	Full consolidation
Airport Office One GmbH & Co. KG, Schönefeld	Full consolidation
BHT Baugrund Hessen-Thüringen GmbH, Kassel	Full consolidation
CORDELIA Verwaltungsgesellschaft mbH, Pullach	Full consolidation
CP Campus Projekte GmbH, Frankfurt am Main	Equity method
Dritte OFB Friedrichstraße GmbH & Co. KG, Frankfurt am Main	Full consolidation
EGERIA Verwaltungsgesellschaft mbH, Pullach	Full consolidation
Einkaufszentrum Wittenberg GmbH, Leipzig	Equity method
Erste OFB Friedrichstraße GmbH & Co. KG, Frankfurt am Main	Full consolidation
Erste Veritas Frankfurt GmbH & Co. KG, Kriftel	Full consolidation
FHP Friedenauer Höhe Erste GmbH & Co. KG, Berlin	Equity method
FHP Friedenauer Höhe Zweite GmbH & Co. KG, Berlin	Equity method
FHP Friedenauer Höhe Dritte GmbH & Co. KG, Berlin	Equity method
FHP Friedenauer Höhe Vierte GmbH & Co. KG, Berlin	Equity method
FHP Friedenauer Höhe Fünfte GmbH & Co. KG, Berlin	Equity method
FHP Friedenauer Höhe Sechste GmbH & Co. KG, Berlin	Equity method
FRAWO Frankfurter Wohnungs- und Siedlungs-Gesellschaft mbH, Frankfurt am Main	Full consolidation
G & O Alpha Projektentwicklungs-GmbH & Co. KG, Eschborn	Equity method
G & O Gateway Gardens Dritte GmbH & Co. KG, Frankfurt am Main	Equity method
G & O Gateway Gardens Erste GmbH & Co. KG, Frankfurt am Main	Equity method
G&O MK 15 Bauherren GmbH & Co. KG, Frankfurt am Main	Equity method
G+S Wohnen in Frankfurt am Main GmbH, Frankfurt am Main	Full consolidation
Galerie Lippe GmbH & Co. KG, Frankfurt am Main	Full consolidation
gatelands Projektentwicklung GmbH & Co. KG; Schönefeld / OT Waltersdorf	Equity method
GHT Gesellschaft für Projektmanagement Hessen-Thüringen mbH, Frankfurt am Main	Full consolidation
GIZS GmbH & Co. KG, Stuttgart	Equity method
GOB Projektentwicklung E & A GmbH & Co. Siebte Rhein-Main KG, Frankfurt am Main	Equity method
GOB Projektentwicklung Fünfte GmbH & Co. KG, Frankfurt am Main	Equity method
Grundstücksgesellschaft Gateway Gardens GmbH, Frankfurt am Main	Equity method
Grundstücksgesellschaft Limes-Haus Schwalbach II GbR, Frankfurt am Main	Full consolidation
Grundstücksverwaltungsgesellschaft Kaiserlei GmbH & Co. Projektentwicklung Epinayplatz KG, Frankfurt am Main	Full consolidation
Grundstücksverwaltungsgesellschaft Kaiserlei GmbH, Frankfurt am Main	Full consolidation
GSG Siedlungsgesellschaft für Wohnungs- und Städtebau mbH, Frankfurt am Main	Full consolidation
GWH Bauprojekte GmbH, Frankfurt am Main	Full consolidation
GWH Wohnungsgesellschaft mbH Hessen, Frankfurt am Main	Full consolidation
Hafenbogen GmbH & Co. KG, Frankfurt am Main	Full consolidation
HANNOVER LEASING Life Invest Deutschland I GmbH & Co. KG, Pullach	Full consolidation
HANNOVER LEASING Life Invest Deutschland II GmbH & Co. KG, Pullach	Full consolidation
HANNOVER LEASING Wachstumswerte Asien 1 GmbH & Co. KG, Pullach	Equity method

a	b	c	d			e	f
	Method of regulatory consolidation						
			Neither consolidated nor deducted				
	Full consolidation	Proportional consolidation		thereof: Risk weighting	thereof: Exempted in acc. with Art. 19 CRR	Deducted	Description of the entity
	x						Financial institution
	x						Financial institution
			x	x	x		Financial institution
			x	x			Financial institution
	x						Bank
	x						Bank
	x						Bank
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x	x			Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x	x			Other undertaking
			x	x			Other undertaking
			x	x			Other undertaking
			x	x			Other undertaking

EU LI3 - Table of Consolidated Companies

	a
Entity name	Method of accounting consolidation
Haus am Brüsseler Platz GmbH & Co. KG, Frankfurt am Main	Full consolidation
Hello Darmstadt Projektentwickung GmbH & Co. KG, Frankfurt am Main	Full consolidation
HeWiPPP II GmbH & Co. KG, Frankfurt am Main	Full consolidation
Honua'ula Partners LLC, Wailea, Hawaii	Full consolidation
Horus AWG GmbH, Pöcking	Equity method
HTB Grundstücksverwaltungsgesellschaft mbH, Frankfurt am Main	Full consolidation
Kornmarkt Arkaden Dritte GmbH & Co. KG, Frankfurt am Main	Full consolidation
Kornmarkt Arkaden Erste GmbH & Co. KG, Frankfurt am Main	Full consolidation
Kornmarkt Arkaden Vierte GmbH & Co. KG, Frankfurt am Main	Full consolidation
Kornmarkt Arkaden Zweite GmbH & Co. KG, Frankfurt am Main	Full consolidation
Logistica CPH K/S, Copenhagen, Denmark	Full consolidation
MAVEST Vertriebsgesellschaft mbH, Frankfurt am Main	Full consolidation
MAVEST Wohnungsbaugesellschaft mbH, Frankfurt am Main	Full consolidation
Merian GmbH Wohnungsunternehmen, Frankfurt am Main	Full consolidation
Montindu S.A./N.V., Brussels, Belgium	Full consolidation
Multi Park Mönchhof Dritte GmbH & Co. KG, Langen (Hesse)	Equity method
Multi Park Mönchhof GmbH & Co. KG, Langen (Hesse)	Equity method
Multi Park Mönchhof Main GmbH & Co. KG, Langen (Hesse)	Equity method
Neunte P 1 Projektgesellschaft mbH & Co. KG, Frankfurt am Main	Full consolidation
OFB Projektentwicklung GmbH, Frankfurt am Main	Full consolidation
OFB & Procom Objekt Neu-Ulm GmbH & Co. KG, Neu-Ulm	Equity method
OFB & Procom Rüdesheim GmbH & Co. KG, Frankfurt am Main	Equity method
Projektentwicklung Königstor GmbH & Co. KG, Kassel	Full consolidation
Projektentwicklung Neuwerkstraße 17 GmbH & Co. KG, Frankfurt am Main	Full consolidation
Projekt Erfurt B38 GmbH & Co. KG, Frankfurt am Main	Full consolidation
Projektgesellschaft ILP Erfurter Kreuz mbH & Co. KG, Frankfurt am Main	Full consolidation
Projekt Hirschgarten MK8 GmbH & Co. KG, Frankfurt am Main	Full consolidation
Projekt Wilhemstraße Wiesbaden GmbH & Co. KG, Frankfurt am Main	Equity method
PVG GmbH, Frankfurt am Main	Full consolidation
sono west Projektentwicklung GmbH & Co. KG, Frankfurt am Main	Equity method
SQO Stadt Quartier Offenburg GmbH & Co. KG, Frankfurt am Main	Full consolidation
Stresemannquartier GmbH & Co. KG, Berlin	Equity method
Systeno GmbH, Frankfurt am Main	Full consolidation
uniQus Projektentwicklung GmbH & Co.KG, Frankfurt am Main	Full consolidation
Versicherungsservice der Frankfurter Sparkasse GmbH, Frankfurt am Main	Full consolidation
Verso Grundstücksentwicklung GmbH & Co. KG, Frankfurt am Main	Full consolidation
Verso Projektentwicklung GmbH & Co. KG, Frankfurt am Main	Full consolidation
Vierte OFB Friedrichstraße GmbH & Co. KG, Frankfurt am Main	Full consolidation
Vierte OFB PE GmbH & Co. KG, Frankfurt am Main	Full consolidation
Westhafen Haus GmbH & Co. Projektentwicklungs-KG, Frankfurt am Main	Equity method
Zweite OFB Friedrichstraße GmbH & Co. KG, Frankfurt am Main	Full consolidation
Zweite OFB PE GmbH & Co. KG, Frankfurt am Main	Full consolidation
HI-A-FSP-Fonds, Frankfurt am Main	Full consolidation
HI-C-FSP-Fonds, Frankfurt am Main	Full consolidation
HI-FBI-Fonds, Frankfurt am Main	Full consolidation
HI-FBP-Fonds, Frankfurt am Main	Full consolidation

	b	c	d			e	f
	Method of regulatory consolidation						
			Neither consolidated nor deducted				
	Full consolidation	Proportional consolidation		thereof: Risk weighting	thereof: Exempted in acc. with Art. 19 CRR	Deducted	Description of the entity
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x				Other undertaking
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			x	x			Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x	x			Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x				Other undertaking
			x	x			Special fund
			x	x			Special fund
			x	x			Special fund
			x	x			Special fund

EU LI3 - Table of Consolidated Companies

	a
Entity name	Method of accounting consolidation
HI-FSP-Fonds, Frankfurt am Main	Full consolidation
HI-H-FSP-Fonds, Frankfurt am Main	Full consolidation
HI-HT-KOMP.-Fonds, Frankfurt am Main	Full consolidation
HI-HTNW-Fonds, Frankfurt am Main	Full consolidation
HI-RentPlus-Fonds, Frankfurt am Main	Full consolidation
Helaba Invest Kapitalanlagegesellschaft mbH, Frankfurt am Main	Full consolidation
LB(Swiss) Investment AG, Zurich, Switzerland	Full consolidation
Family Office der Frankfurter Bankgesellschaft AG, Frankfurt am Main	Full consolidation

The tables below showing a reconciliation from balance sheet items to regulatory risk types and a reconciliation from the balance sheet carrying amount to the exposure amount for regulatory purposes illustrate the differences between the group of consolidated companies for financial reporting purposes under company law (scope of accounting consolidation) and the equivalent group of consolidated companies for regulatory purposes (scope of prudential consolidation) as well as the differences between the accounting and regulatory measurement of transactions.

The risk types are credit risk, counterparty credit risk, risk from securitisation exposures and market risk as well as that portion (with the exception of market risk) that is subject to neither capital requirements nor a capital deduction. Column f includes risk exposures in both the trading book and the banking book that have not been posted in euros (currency risk). The total of the values in columns (c) to (g) does not match the value in column (b) because the carrying amount for some individual exposures is reported in the CRR risk types for both the banking book and the trading book (conventional currency risk).

In EU LI2, there is an overall reconciliation to the net exposure used in market risk because of the different calculation methods for the own funds requirements for market risk in the standardised approach and because of the internal model used to calculate the own funds requirements for general interest rate risk.

b	c	d			e	f
Method of regulatory consolidation						
		Neither consolidated nor deducted				
Full consolidation	Proportional consolidation		thereof: Risk weighting	thereof: Exempted in acc. with Art. 19 CRR	Deducted	Description of the entity
		x	x			Special fund
		x	x			Special fund
		x	x			Special fund
		x	x			Special fund
		x	x			Special fund
x						Asset management company
x						Asset management company
x						Investment firm

EU LI1 – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

in € m

	a	b	c	d	e	f	g
	Carrying amounts under the scope of German commercial law consolidation of the Helaba Group in accordance with IFRS	**Carrying amounts under the scope of regulatory consolidation of the Helaba Group in accordance with IFRS**	**Credit risk**	**CCR**	**Securitisation exposures**	**Market risk**	**Not subject to capital requirement or subject to capital deduction[1]**
Assets							
Cash reserve	9,913	9,913	9,913	0	0	708	0
Loans and advances to banks	11,034	10,975	10,975	0	0	3,275	0
Loans and advances to customers	90,230	90,938	84,910	0	6,028	18,845	0
Impairments on receivables	–401	–516	–482	–16	–18	–360	0
Trading assets	16,319	16,320	0	9,320	0	15,050	7,000
Positive fair values of non-trading derivatives	2,924	2,927	0	2,927	0	2,844	0
Financial investments	24,019	24,934	23,808	0	16	3,276	1,110
Shares in equity-accounted entities	45	0	0	0	0	0	0
Investment property	2,239	2	2	0	0	0	0
Property and equipment	427	412	412	0	0	1	0
Intangible assets	66	66	1	0	0	1	65
Income tax assets	483	439	439	0	0	2	0
Other assets	1,051	470	470	0	0	35	0
Total assets	**158,349**	**156,880**	**130,447**	**12,231**	**6,026**	**43,677**	**8,175**
Equity and liabilities							
Liabilities due to banks	31,514	30,378	0	0	0	427	30,378
Liabilities due to customers	49,521	49,456	0	0	0	6,262	49,456
Securitised liabilities	48,155	48,187	0	0	0	7,167	48,187
Trading liabilities	12,289	12,292	0	0	0	8,673	12,292
Negative fair values of non-trading derivatives	2,281	2,280	0	2,279	0	2,269	1
Provisions	2,129	2,082	40	0	0	10	2,042
Income tax liabilities	268	248	0	0	0	8	248
Other liabilities	648	369	0	0	0	12	369
Subordinated capital	3,510	3,510	0	0	0	0	3,510
Equity	8,034	8,078	0	0	0	14	8,078
Total liabilities	**158,349**	**156,880**	**40**	**2,279**	**0**	**24,842**	**154,562**

[1] Refers solely to items that are not reported under credit risk, counterparty credit risk or risk from securitisation exposures

EU LI2 – Main sources of differences between regulatory exposure amounts and carrying amounts in financial statements in € m

		a	b	c	d	e
			By risk type			
		Total	Credit risk	CCR	Securitisation exposures	Market risk[1]
1	**Total assets: carrying amounts under the scope of regulatory consolidation of the Helaba Group in accordance with IFRS (as per template LI1)**	**192,382**	**130,447**	**12,231**	**6,026**	**43,677**
2	Total liabilities: carrying amounts under the scope of regulatory consolidation of the Helaba Group in accordance with IFRS (as per template LI1)	27,160	40	2,279	0	24,842
3	Net amount: carrying amounts under the scope of regulatory consolidation of the Helaba Group in accordance with IFRS	165,222	130,408	9,953	6,026	18,835
4	Off-balance-sheet exposures	33,918	32,598	0	1,196	124
5	Differences due to the application of credit conversion factors (CCFs)	13,603	13,603	0	0	0
6	Differences due to the application of credit risk adjustments	7	7	0	0	0
7	Differences due to the application, for risk mitigation purposes, of recognised contractual netting for derivative financial instruments and securities financing transactions (SFTs), taking into account add-on amounts for PFE associated with derivatives transactions (regulatory add-on)	–1,998	0	–1,998	0	0
8	Differences due to market risk resulting inter alia from the calculation of the net foreign exchange position under the standardised method for market risk in accordance with Article 325 et seq. CRR	–10,641	0	0	0	–10,641[1]
9	Other differences	–1,808	–1,378	18	–448	0
10	**Exposure amount considered for regulatory purposes (excluding CRM effects)**	**171,097**	**148,032**	**7,972**	**6,774**	**8,318**

[1] Exposures only reported once even if multiple market risk types are applicable

Own Funds and Own Funds Structure

This section presents information about the Helaba Group's own funds and key figures together with a breakdown of the own funds requirements for each risk type in accordance with the COREP report under Pillar I as at 31 December 2017. The capital ratios and the determination of limits for risk-weighted assets are also reported.

KM1 – The Helaba Group in figures

in € m

Composition of own funds for regulatory purposes		
1.	Common Equity Tier 1 capital	7,673
	thereof: Regulatory adjustments	– 281
	Additional Tier 1 capital	507
	thereof: Regulatory adjustments	– 19
2.	Tier 1 capital	8,180
	Tier 2 capital	2,667
	thereof: Regulatory adjustments	– 19
3.	Own funds, total	10,847
Total risk exposure amount		
4.	RWAs, total	49,822
Capital ratios		
5.	Common Equity Tier 1 (CET1) capital ratio in %	15.4
6.	Tier 1 capital ratio in %	16.4
7.	Total capital ratio in %	21.8
Capital buffers		
8.	Capital conservation buffer in %	1.25
9.	Institution-specific countercyclical capital buffer in %	0.03
10.	Buffer for global/other systemically important institutions in %	0.33
11.	Institution-specific buffer requirement in % (lines 8 + 9 + 10)	1.61
12.	CET1 capital available for the buffers in % (expressed as a percentage of the total risk exposure amount)	10.42
Leverage Ratio		
13.	Leverage ratio total exposure measure	167,618
14.	Leverage ratio in %	4.9

Own funds structure

The CRR defines own funds as Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital.

The Helaba Group's Common Equity Tier 1 capital essentially comprises the subscribed capital (paid-up capital and capital contributions), capital reserves and retained earnings.

Shown in the Additional Tier 1 capital category are the silent participations that constituted liable capital in accordance with Section 10 KWG until 31 December 2013 and that fall under the grandfathering provisions set out in the CRR, meaning that they can still be applied as Additional Tier 1 capital, on a steadily decreasing basis, until 2021.

The Tier 2 capital as defined in the CRR consists largely of profit participation rights and other subordinated liabilities of Helaba.

The Helaba Group's Common Equity Tier 1 capital rose by € 139 m compared with the figure as at 31 December 2016. There was a positive impact from additions to retained earnings of approximately € 169 m and a decrease in regulatory adjustments and deductions (totalling € 90 m). On the other hand, there was a notable negative effect from transitional arrangements in relation to deductions (around € 130 m). Total own funds have risen by approximately € 38 m. Other than the positive effects referred to above relating to Common Equity Tier 1 capital , the main reason was the impact from residual maturity amortisation on Tier 2 capital instruments.

A description of the individual capital instruments together with a list of their key features can be found in the Annex under "Key Features of the Capital Instruments".

Details of the composition of the regulatory own funds and the regulatory deduction amounts, together with a presentation of how the regulatory own funds can be derived from the relevant items in the audited consolidated financial statements of the Helaba Group, are shown in the following two tables.

Article 437 CRR – Disclosure of own funds (table based on Annex VI of Implementing Regulation (EU) No 1423/2013) in € m

		(a) Amount at disclosure date	(b) Regulation (EU) no 575/2013 article reference	Implementation of CRD IV/CRR	(c) Amounts subject to pre-regulation (EU) no 575/2013 treatment or prescribed residual amount of regulation (EU) no 575/2013	Notes
Common Equity Tier 1 capital: Instruments and reserves						
1	Capital Instruments and the related share premium accounts	4,055	26 (1), 27, 28, 29, EBA list 26 (3)	4,055	–	
	of which: Share capital	2,509	EBA list 26 (3)	2,509	–	
2	Retained Earnings	3,965	26 (1) (c)	3,965	–	(a)
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	–238	26 (1)	–238	–	(b)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	171	26 (2)	171	–	(c)
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**7,954**		**7,954**	**–**	
Common Equity Tier 1 (CET1) capital: regulatory adjustments						
7	Additional value adjustments	–84	34, 105	–84	–	
8	Intangible assets (net of relaxed tax liability)	–54	36 (1) (b), 37, 472 (4)	–67	–13	
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met)	–4	36 (1) (c), 38, 472 (5)	–5	–1	
12	Negative amounts resulting from the calculation of expected loss amounts	–44	36 (1) (d), 40, 159, 472 (6)	–55	–11	
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	–56	33 (1) (b)	–70	–13	(d)
16	Direct and indirect holdings by an institution of own CET1 instruments	–86	36 (1) (f), 42, 472 (8)	–108	–22	
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment	48		–	–	
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468	48		–	–	
	of which: Filter for unrealised loss	48	467	–	–	(b)
27	Qualifying AT1 deductions that exceed the AT1 Capital of the institution	–	36 (1) (j)	–	–	
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**–281**		**–389**	**–**	
29	**Common Equity Tier 1 (CET1) capital**	**7,673**		**7,565**	**–**	

Article 437 CRR – Disclosure of own funds (table based on Annex VI of Implementing Regulation (EU) No 1423/2013) in € m

		(a) Amount at disclosure date	(b) Regulation (EU) no 575/2013 article reference	Implementation of CRD IV/CRR	(c) Amounts subject to pre-regulation (EU) no 575/2013 treatment or prescribed residual amount of regulation (EU) no 575/2013	Notes
Additional Tier 1 (AT1) capital: instruments						
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	527	486 (3)	–	–	(e)
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**527**		**–**	**–**	
Additional Tier 1 (AT1) capital: regulatory adjustments						
40	Direct and indirect holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above the 10% threshold net of eligible short positions)	–	56 (d), 59, 79, 475 (4)	–	–	
41	Regulatory adjustments applied to additional tier 1 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)	–19		–	–	
41a	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to Article 472 of Regulation (EU) No 575/2013	–19	472, 472 (3) (a), 472 (4), 472 (6), 472 (8) (a), 472 (9), 472 (10) (a), 472 (11) (a)	–	–	
	of which: Intangible assets	–13		–	–	
	of which: Negative amount of provisions for expected losses calculated according to the IRBA	–6		–	–	
41b	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to Article 475 of Regulation (EU) No 575/2013	0	477, 477 (3), 477 (4) (a)	–	–	
	of which: Direct holdings of the T2 capital instruments of financial sector entities	0		–	–	
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**–19**		–	**–**	
44	**Additional Tier 1 (AT1) capital**	**507**		**–**	**–**	
45	**Tier 1 capital (T1 = CET1 + AT1)**	**8,180**		**7,565**	**–**	
Tier 2 (T2) capital: instruments and provisions						
46	Capital Instruments and the related share premium accounts	2,580	62, 63	2,965	–	(f)
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	105	486 (4)	–	–	(g)
51	**Tier 2 (T2) capital before regulatory adjustments**	**2,685**		**2,965**	**–**	

Article 437 CRR – Disclosure of own funds (table based on Annex VI of Implementing Regulation (EU) No 1423/2013) in € m

		(a) Amount at disclosure date	(b) Regulation (EU) no 575/2013 article reference	Implementation of CRD IV/CRR	(c) Amounts subject to pre-regulation (EU) no 575/2013 treatment or prescribed residual amount of regulation (EU) no 575/2013	Notes
Tier 2 (T2) capital: regulatory adjustments						
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans	–9	63 (b) (i), 66 (a), 67, 477 (2)	–9	0	
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)	–4	66 (d), 69, 79, 477 (4)	–5	0	(h)
56	Regulatory adjustments apllied to tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)	–6		–	–	
56a	Residual amounts deducted from Tier 2 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to Article 472 of Regulation (EU) No 575/2013	–6	472, 472 (3) (a), 472 (4), 472 (6), 472 (8) (a), 472 (9), 472 (10) (a), 472 (11) (a)	–	–	
	of which: Negative amount of provisions for expected losses calculated according to the IRBA	–6		–	–	
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tier 1 capital during the transitional period pursuant to Article 475 of Regulation (EU) No 575/2013	0	475, 475 (2) (a), 475 (3), 475 (4) (a)	–	–	
	of which: Direct holdings of the T2 capital instruments of financial sector entities	0		–	–	
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**–19**		**–14**	**–**	
58	**Tier 2 (T2) capital**	**2,667**		**2,950**	**–**	
59	**Total capital (TC = T1 + T2)**	**10,847**		**10,515**	**–**	
59a	Risk weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)	22		–	–	
	of which: Items not deducted from CET1 related to deferred tax assets that rely on future profitability net of related tax liability	–	472, 475 (5), 472 (8) (b), 472 (10) (b), 472 (11) (b)	–	–	
	of which: Items not deducted from CET1 related to indirect holdings of own CET1 instruments	22		–	–	
	of which: items not deducted from CET1 related to holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	0		–	–	
	of which: items not deducted from AT1 items related to holdings of own AT1 instruments	0	477, 477 (2) (b), 477 (2) (c), 477 (4) (b)	–	–	
60	**Total risk weighted assets**	**49,822**		**49,822**	**–**	

Article 437 CRR – Disclosure of own funds (table based on Annex VI of Implementing Regulation (EU) No 1423/2013) in € m

		(a) Amount at disclosure date	(b) Regulation (EU) no 575/2013 article reference	Implementation of CRD IV/CRR	(c) Amounts subject to pre-regulation (EU) no 575/2013 treatment or prescribed residual amount of regulation (EU) no 575/2013	Notes
Eigenkapitalquoten und -puffer						
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	15.40 %	92 (2) (a), 465	15.18 %	–	
62	Tier 1 (as a percentage of risk exposure amount)	16.42 %	92 (2) (b), 465	15.18 %	–	
63	Total capital (as a percentage of risk exposure amount)	21.77 %	92 (2) (c)	21.11 %	–	
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer, expressed as a percentage of risk exposure amount)	6.11 %	CRD 128, 129, 130	8.03 %	–	
65	of which: Capital conservation buffer requirement	1.250 %		2.50 %	–	
66	of which: Countercyclical buffer requirement	0.03 %		0.03 %	–	
67a	of which: Other Systemically Important Institution (O-SII) buffer	0.33 %	CRD 131	1.00 %	–	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	10.42 %	CRD 128	9.18 %	–	
Capital ratios and buffers						
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	214	36 (1) (h), 45, 46, 56, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	214	–	
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	78	36 (1) (i), 45, 48, 470, 472 (11)	78	–	
75	Deferrred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	367	36 (1) (c), 38, 48, 470, 472 (5)	367	–	

Article 437 CRR – Disclosure of own funds (table based on Annex VI of Implementing Regulation (EU) No 1423/2013) in € m

		(a) Amount at disclosure date	(b) Regulation (EU) no 575/2013 article reference	Implementation of CRD IV/CRR	(c) Amounts subject to pre-regulation (EU) no 575/2013 treatment or prescribed residual amount of regulation (EU) no 575/2013	Notes
Applicable caps on the inclusion of provisions in Tier 2						
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	55	62	55	–	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	215	62	215	–	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)						
82	Current cap on AT1 instruments subject to phase out arrangements	527	484 (4), 486 (3) und (5)	–	–	(f)
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	389	484 (4), 486 (3) und (5)	–	–	(f)
84	Current cap on T2 instruments subject to phase out arrangements	125	484 (5), 486 (4) und (5)	–	–	

Rows 3a, 4, 5, 9, 10, 11, 13, 15, 17, 18, 19, 20, 20a, 20b, 20c, 20d, 21, 22, 23, 24, 25, 25a, 25b, 26b, 30, 31, 32, 34, 35, 37, 38, 39, 42, 48, 49, 50, 53, 54, 54a, 54b, 67, 69, 70, 71, 74 76, 78, 80, 81, 85 are not applicable or not relevant in the Helaba Group and are not shown for reasons of clarity.

(a) “Retained earnings” does not include net income for 2017 attributable to the shareholders of the parent (€ 277 m), remeasurements of defined benefit plans recognised in OCI (€ –441 m) or the home savings protection fund (€ 11 m).

(b) “Accumulated other comprehensive income” includes the AfS remeasurement (€ 192 m), remeasurements of defined benefit plans (€ –441 m) and the currency translation gains/losses (€ 11 m).

(c) This item includes the net income attributable to the shareholders of the parent under the prudential scope of consolidation (€ 277 m) less the excess of regulatory net income over the IFRS consolidated net profit (–€ 16 m) and approved dividends (€ 90 m).

(d) This item includes gains or losses on liabilities measured at fair value (IAS 39) that result from changes in the institution’s own credit standing (Article 33 (1) (b) CRR) and fair value gains and losses arising from the institution’s own credit risk related to derivative liabilities (Article 33 1 (c) CRR).

(e) The Additional Tier 1 capital comprises silent participations that do not satisfy the equity requirements in accordance with IAS 32. These are reported in the statement of financial position under “Subordinated debt”. The silent participations are included, on a transitional basis, as Additional Tier 1 capital in accordance with Article 484 (4) CRR, although the great majority satisfy the requirements of Article 63 CRR (Tier 2 capital). The ineligible amount due to the upper limit defined in Article 486 (3) CRR is € 389 m.

(f) The Tier 2 capital comprises subordinated liabilities and liabilities under profit participation rights. These are reported in the statement of financial position under “Subordinated debt”. The Tier 2 capital also includes an amount of € 389 m from silent participations. This comprises amounts that exceeded the upper limits in Article 486 (3) CRR.

(g) This item includes amounts from silent participations that exceed the upper limits of Article 486 (3) CRR (see (f)) and are eligible, on a transitional basis, as Tier 2 capital in accordance with Article 487 (2) (b) CRR.

(h) Tier 2 instruments that constitute deductible holdings relating to financial sector entities in which a significant investment is held are reported on the statement of financial position under “Loans and advances to customers”.

(i) The minority interests requirements in accordance with Article 81 et seq. CRR are not met. No use is made of transitional provisions.

Article 437 CRR – Reconciliation from the IFRS consolidated statement of financial position to the consolidated statement of financial position for regulatory purposes

in € m

Statement of financial position item	IFRS consolidated statement of financial position	Consolidated statement of financial position for regulatory purposes	Difference due to differing groups of consolidated consolidated companies	Note[1]
	12.2017	12.2017		
I. Assets				
Cash reserve	9,913	9,913	0	
Loans and advances to banks	11,034	10,975	–59	
thereof: Significant investments in the Tier 2 capital of companies in the financial sector	0	0	0	
Loans and advances to customers	90,230	90,938	708	
thereof: Significant investments in the Tier 2 capital of companies in the financial sector	5	5	0	
Allowances for losses on loans and advances	–401	–516	–115	
Trading assets	16,319	16,320	1	
Positive fair values of non-trading derivatives	2,924	2,927	3	
Financial investments	24,019	24,934	915	
thereof: Significant investments in the additional Tier 1 capital of companies in the financial sector	0	0	0	
thereof: Goodwill included in the valuation of significant investments	0	0	0	
Shares in equity-accounted entities	45	0	–45	
thereof: Goodwill included in the valuation of significant investments	0	0	0	
Investment property	2,239	2	–2,237	
Property and equipment	427	412	–15	
Intangible assets	66	66	0	
thereof: Goodwill	0	0	0	
thereof: Other intangible assets	66	66	0	
Income tax assets	483	439	–44	
thereof: Deferred income tax assets	415	372	–43	
thereof: Arising from differences that are not temporary	7	5	–2	
thereof: Arising from temporary differences	408	367	–41	
thereof: to fall upon other Intangible assets	0	0	0	
Non-current assets and disposal groups classified as held for sale	0	0	0	
Other assets	1,051	470	–581	
thereof: Defined-benefit pension fund assets	0	0	0	
Total assets	**158,349**	**156,880**	**–1,469**	

Article 437 CRR – Reconciliation from the IFRS consolidated statement of financial position to the consolidated statement of financial position for regulatory purposes

in € m

Statement of financial position item	IFRS consolidated statement of financial position	Consolidated statement of financial position for regulatory purposes	Difference due to differing groups of consolidated consolidated companies	Note[1]
	12.2017	12.2017		
II. Equity and liabilities				
Liabilities due to banks	31,514	30,378	−1,136	
Liabilities due customers	49,521	49,456	−65	
Securitised liabilities	48,155	48,187	32	
Trading liabilities	12,289	12,292	3	
Negative fair values of non-trading derivatives	2,281	2,280	−1	
Provisions	2,129	2,082	−47	
Income tax liabilities	268	248	−20	
Other liabilities	648	369	−279	
Subordinated capital	3,510	3,510	0	
thereof: Subordinated liabilities	2,313	2,313	0	(f)
thereof: Amortised amount per Art. 64 CRR	–	66	–	
thereof: Difference between regulatory figures and statement of financial position	–	42	–	
thereof: Profit participation rights	216	216	0	(f)
thereof: Amortised amount per Art. 64 CRR	–	124	–	
thereof: Difference between regulatory figures and statement of financial position	–	0	–	
thereof: Silent participations	982	982	0	(e)
thereof: Not eligible per Art. 78 CRR	–	20	–	
thereof: Amount expiring per Art. 486 CRR	–	389	–	
thereof: Difference between regulatory figures and statement of financial position	–	46	–	
Equity	8,034	8,078	44	
Subscribed capital	2,509	2,509	0	
thereof: Indirect own shares	–	0	–	
Capital reserves	1,546	1,546	0	
Retained earnings	3,775	3,813	38	(a)
thereof: Consolidated net profit attributable to shareholders of the parent company	261	277	16	(c)
Revaluation reserve	197	197	0	(b)
Currency translation reserve	10	11	1	(b)
Cash flow hedge reserve	0	0	0	
Non-controlling interests	−3	2	5	(i)
Total equity and liabilities	**158,349**	**156,880**	**−1,469**	

[1] Explanations can be found in the Annex under “Disclosure of Own Funds”

Capital adequacy

The table below shows the RWAs and capital requirements for default risks, broken down by risk type at 31 December 2017.

EU OV1 – Overview of RWAs

in € m

			RWAs	Capital requirement
	1	Credit risk (excluding CCR)	38,983	3,119
Article 438(c)(d)	2	Of which standardised approach (CRSA)	4,227	338
Article 438(c)(d)	3	Of which the foundation IRB (FIRB) approach	33,441	2,675
Article 438(c)(d)	4	Of which the advanced IRB (AIRB) approach	1,076	86
Article 438(d)	5	Of which equity IRB under the simple risk-weight approach or the IMA	240	19
Article 107, Article 438(c)(d)	6	Counterparty credit risk (CCR)	1,903	92
Article 438(c)(d)	7	Of which mark to market	1,144	92
Article 438(c)(d)	8	Of which original exposure	–	–
	9	Of which standardised approach	–	–
	10	Of which internal model method (IMM)	–	–
Article 438(c)(d)	11	Of which contributions to the default fund of a CCP	0	0
Article 438(c)(d)	12	Of which CVA	759	61
Article 438(e)	13	Settlement risk	0	0
Article 449(o)(i)	14	Securitisation exposures in the banking book (after the cap)	2,420	194
	15	Of which IRB approach	1,383	111
	16	Of which supervisory formula approach (SFA)	1,031	82
	17	Of which internal assessment approach (IAA)	344	27
	18	Of which standardised approach	1,037	83
Article 438(e)	19	Market risk	2,785	223
	20	Of which standardised approach	1,338	107
	21	Of which internal model method (IMM)	1,447	116
Article 438(e)	22	Large exposures	0	0
Article 438(f)	23	Operational risk	3,642	291
	24	Of which basic indicator approach	–	–
	25	Of which standardised approach	3,642	291
	26	Of which advanced measurement approaches	–	–
Article 437(2), Article 48 and Article 60	27	Amounts below the thresholds for deduction (subject to 250 % risk weight)	88	7
Article 500	28	Adjustment for Basel I floor	–	–
	29	**Total**	**49,822**	**3,925**

The following table is provided in addition to the differentiated presentation of RWAs in accordance with the requirements in EBA/GL/2016/11 in order to ensure that the requirements of Article 438 CRR are satisfied in full.

Article 438 CRR – Overview of RWAs by exposure class

in € m

Exposure class	RWAs	Own funds requirement
Central governments or central banks	1,331	106
Institutions	3,074	246
Corporates	29,637	2,371
thereof: Specialised lending exposures	15,928	1,274
thereof: SME	1,787	143
thereof: Other	11,921	954
Retail	1,076	86
Secured by real estate	669	54
thereof: SME	184	15
thereof: Non-SME	485	39
Qualifying revolving	51	4
Other	355	28
thereof: SME	83	7
thereof: Non-SME	271	22
IRBA equity exposures	339	27
thereof: Simple risk-weight approach	240	19
Private equity exposures in sufficiently diversified portfolios (190 %)	92	7
Exchange traded equity exposures (290 %)	–	–
Other equity exposures (370 %)	147	12
thereof: PD/LGD approach	82	7
thereof: Risk-weighted equity exposures	18	1
Other non credit-obligation assets	321	26
Total IRB approach	**35,777**	**2,862**
Central governments or central banks	34	3
Regional governments or local authorities	17	1
Public-sector entities	320	26
Multilateral development banks	0	0
International organisations	0	0
Institutions	490	39
Corporates	1,544	124
Retail	93	7
Exposures secured by real estate	592	47
Exposures in default	107	9
Higher risk categories	36	3
Covered bonds	4	0
Exposures to institutions and corporates with a short-term credit rating	–	–
Collective investment undertakings (CIU)	21	2
Equity exposures	923	74
thereof: Grandfathered exposures	265	21
Other exposures	257	21
Total standardised approach (CRSA)	**4,438**	**355**
Total	**40,215**	**3,217**

There were no own funds requirements on the reporting date for trading book activities of the Helaba Group in relation to large exposures above the limits set out in Articles 395 to 401 CRR.

As at the reporting date, there were also no equity investments in insurance companies that are not deducted from own funds in accordance with Article 49 (1) CRR.

The most significant changes compared with 31 December 2016 resulted from a decline in the "Institutions" and "Corporates – Other" IRB exposure classes and from market risk. The RWA reduction under market risk arose, firstly, from a business-related contraction in securities business under specific interest rate risk (approx. € 196 m) and, secondly, from an ECB-approved modification to the internal model. In addition to improving the modelling of trends in interest rates in the environment of low interest rates, this modification also broadened the yield curve universe. The decline of around € 753 m in RWAs in the "Corporates – Other" IRB exposure class resulted from a business-related change in lending and money market business, and the decrease of around € 768 m in the "Institutions" exposure class from a contraction in securities business.

The table below shows the equity investment exposures in the simple risk-weight approach as specified in Article 155 (2) CRR. As at 31 December 2017, Helaba did not hold any specialised lending exposures based on the supervisory slotting criteria. For this reason, the table below is restricted to equity investments.

EU CR10 – IRB: Equities (simple risk-weight approach) in € m

Equity investments under the simple risk-weight approach						
Categories	**Basis of measurement (on-balance sheet)**	**Basis of measurement (off-balance sheet)**	**Risk weight**	**Exposure value**	**RWAs**	**Capital requirement**
Private equity exposures in sufficiently diversified portfolios	35	13	190 %	49	92	7
Exchange-traded equity exposures	–	–	290 %	–	–	–
Other equity exposures	39	1	370 %	40	147	12
Total	**74**	**14**		**88**	**240**	**19**

The table below shows the capital ratios of the Helaba Group, Helaba Bank and the significant subsidiary FSP.

Capital ratios in %

	Total capital ratio	**Tier 1 capital ratio**	**CET1 capital ratio**
Helaba Group (IFRS)	21.8	16.4	15.4
Helaba Bank (HGB)	21.5	15.1	13.9
Frankfurter Sparkasse (HGB)	19.6	18.4	18.4

The Helaba Group has a comfortable capital position with a Tier 1 capital ratio of 16.4 % and a Common Equity Tier 1 capital ratio of 15.4 % as at 31 December 2017.

The RWA limits are derived on the basis of the own funds available and the appetite for risk defined by the Board of Managing Directors, in the form of target ratios, in accordance with the following principles:

- Risk adequacy
- Earnings adequacy
- Operationalisability
- Consistency

The RWA limits are allocated as part of the annual planning process.

Planning proceeds in accordance with the business area strategy, the risk strategy and other provisions intended to ensure accurate alignment with customer and business requirements. The principal parameters of the operational planning process for the subsequent year are defined in the benchmark resolution adopted by the Board of Managing Directors. The profit centres plan elements including their business portfolios, new business, earnings, the regulatory expected loss (EL) resulting from the performance of the business and the RWAs during the local planning phase.

The results of the planning process for each unit are approved on the basis of an integrated earnings and risk assessment. An integrated overall plan comprising a volume plan, an earnings plan and a risk plan is adopted for each unit. The Board of Managing Directors passes a corresponding resolution and the RWA limit allocations are then submitted to the Supervisory Board and Board of Public Owners for approval as part of the annual planning submissions for the financial year.

Risk-Bearing Capacity

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

The calculation of risk-bearing capacity across risk types takes into account risk exposures in relation to default risk, market risk, operational risk, business risk and real estate risk. Risk exposures are quantified as part of an economic assessment, and the regulatory EL and regulatory capital requirement are calculated using the regulatory measurement specifications. A capital deduction from the regulatory EL/impairment comparison is taken into account when quantifying the regulatory own funds.

The liquidity horizon (for liquidity risks) is also reported in addition to the risk-bearing capacity based on cover pools.

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

The scenarios applied comprise a base scenario, which maps the risk-bearing capacity as at the reporting date, plus historical and hypothetical stress scenarios whose implications for the risk-bearing capacity are regularly investigated. These scenarios include a macroeconomic stress scenario and a scenario simulating extreme market dislocation on the basis of observed market behaviour during a global financial crisis. Inverse stress tests are also conducted.

Helaba's Group calculation of risk-bearing capacity maps two distinct situations reflecting the regulatory requirements stipulating a going-concern approach and a gone-concern approach.

The going-concern approach aims to verify that the minimum capital requirements specified by the regulator can be satisfied even if expected and unexpected losses are incurred. Risk exposures are quantified with a 95.0 % confidence level for this purpose. The calculation of risk-bearing capacity under the gone-concern approach is intended to demonstrate that the Helaba Group's capital is sufficient to satisfy all creditors in full even in the event of exceptional and heavy losses being incurred (expected and unexpected losses at a confidence level of 99.9 %).

The going-concern approach involves comparing the total economic risk exposures according to the Group calculation of risk-bearing capacity against a sustainable result before risks and total own funds not committed for regulatory purposes (minus an internally defined risk buffer, depending on the scenario). The going-concern approach also regularly quantifies the implications of the stress scenarios for the regulatory capital requirement and regulatory own funds in order to analyse the impact on the regulatory capital ratios.

Helaba applies particular weight to the going-concern approach, which focuses on compliance with the regulatory capital ratios, in its capital allocation decisions and allocates regulatory capital to divisions and Group units on the basis of the associated anticipated changes in capital ratios. This ensures consistency between capital allocation assuming full utilisation of the limits and the result thus produced in the calculation of risk-bearing capacity. In addition, the economic risk exposures are limited to ensure that, if the allocated regulatory capital is utilised at the same time as the economic risk exposures, the capital does not fall below the internally specified minimum capital requirements even if economic risks materialise.

The gone-concern approach draws on an economic cover pool to cover the internal capital requirement. This pool takes into account the cumulative consolidated net profit on the reporting date, the equity capital and the subordinated debt under IFRS. Cover pool components are also adjusted in accordance with economic criteria. The gone-concern approach does not treat silent reserves as a cover pool.

The risk-bearing capacity assessment for the Group covering all risk types reveals that the existing risk cover pools once again exceeded the quantified risk exposures by a substantial margin at the end of 2017. The same applies in respect of the calculation of risk-bearing capacity for Helaba Bank.

The base scenario of the going-concern approach for the Group shows a capital buffer of € 2.6 bn (31 December 2016: € 3.5 bn) with respect to the economic risk exposures taking account of an internal risk buffer. The capital buffer with respect to the economic risk exposures under the gone-concern approach for the Group amounts to € 7.7 bn (31 December 2016: € 7.1 bn).

The capital ratios achieved under the simulated stress scenarios exceed the regulatory minimum requirements by a significant margin.

Helaba additionally conducts two inverse stress tests to investigate what nature of event could jeopardise its continued existence. The associated scenarios, “minimum capital requirements not met” and “illiquid”, examine the implications of a variety of economic developments that could result in Helaba being unable to comply with the minimum capital requirements specified by the regulator or consuming its liquidity reserves. There is currently no indication of these scenarios becoming a reality.

In addition to the stress tests across risk types carried out as part of Helaba’s calculation of risk-bearing capacity and the overarching reverse stress tests, Helaba also carries out risk-type-specific stress tests for selected business activities and portfolios to ensure that it carries out continuous monitoring and is able to identify new threats, weaknesses and/or changes in the environment for its specific individual products and markets.

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 LBS, the subsidiary FSP, 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 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 € 15.6 bn in total (31 December 2016: € 15.1 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 FSP 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 FSP 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 € 518 m at the end of 2017 (31 December 2016: € 522 m). The total contributions paid in cash as at the same date amounted to € 442 m (31 December 2016: € 410 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.

Countercyclical Capital Buffer

The aim of the institution-specific countercyclical capital buffer is to limit excessive growth in lending by requiring the institution concerned to maintain an additional capital buffer comprising Common Equity Tier 1 capital.

In Germany, the value of the countercyclical capital buffer is specified by BaFin quarterly on the basis of analyses of macroeconomic data. The figure for Germany at 31 December 2017 was 0 %. A capital buffer higher than 0 % has been specified by the competent supervisory authorities in Hong Kong, Sweden, Norway, Iceland, Slovakia and the Czech Republic for those countries. If, in accordance with the definition specified in Article 140 (4) CRD, an institution has relevant credit exposures in other countries, the institution-specific countercyclical capital buffer is calculated as a weighted average of the domestic and foreign countercyclical capital buffers.

Pursuant to Article 440 CRR in conjunction with Delegated Regulation (EU) No 1555/2015, banks must disclose the geographical distribution of the credit exposures relevant to the calculation of the countercyclical capital buffer and the amount of their institution-specific countercyclical capital buffer. The main credit risk exposures are defined not on the basis of the extent of risk exposures in each country but simply encompass certain exposure classes and certain exposures in the trading book.

The following table shows the geographical distribution of the relevant credit exposures for which the geographical location has been determined in accordance with Delegated Regulation (EU) No 1152/2014. To keep the presentation clear and ensure only relevant information is shown, the data in the table is limited to countries that have specified a countercyclical capital buffer of greater than 0 % (column 120 in the table below) or whose weighted proportion of own funds requirements is 1 % or higher (column 110 in the table below). As at 31 December 2017, this resulted in a weighted proportion of the own funds requirements in respect of the relevant credit exposures of approximately 97 % for the countries shown. The limitation is in accordance with Article 432 CRR in conjunction with EBA guidelines EBA/GL/2014/14.

Article 440 CRR – Geographical distribution of credit risk exposures relevant to the calculation of the countercyclical capital buffer

in € m

		General credit exposures		Trading book exposures		Securitisation exposures	
		Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for SA	Exposure value for IRB
Row		010	020	030	040	050	060
010	**Breakdown by country**						
	Germany	4,935	45,349	1,964	–	585	3,059
	United States of America	222	10,086	323	–	414	477
	United Kingdom	74	5,260	241	–	–	350
	France	54	3,843	934	–	–	629
	Luxembourg	85	1,848	15	–	–	–
	Spain	37	627	604	–	17	84
	Poland	0	1,231	67	–	54	169
	The Netherlands	75	1,438	294	–	80	0
	Ireland	36	1,169	9	–	–	–
	Italy	48	191	606	–	–	109
	Austria	9	864	27	–	–	–
	Sweden	2	833	266	–	0	155
	Switzerland	92	545	136	–	–	–
	Cayman Islands	31	323	–	–	–	–
	Finland	0	675	10	–	–	–
	Norway	1	227	204	–	–	–
	Czech Republic	0	347	2	–	–	47
	Hong Kong	0	159	–	–	–	–
	Slovakia	0	13	–	–	–	–
	Iceland	–	0	–	–	–	–
	Other	66	1,551	871	–	0	173
020	**Total**	**5,767**	**76,579**	**6,570**	**0**	**1,149**	**5,253**

Article 440 CRR – Geographical distribution of credit risk exposures relevant to the calculation of the countercyclical capital buffer

in € m

		Own funds requirements					
		thereof: General credit exposures	thereof: Trading book exposures	thereof: Securitisation exposures	Total	Own funds requirements weights	Countercyclical capital buffer rate
Row		070	080	090	100	110	120
010	**Breakdown by country**						
	Germany	1,597	14	102	1,712	0.56	0.00 %
	United States of America	386	4	36	426	0.14	0.00 %
	United Kingdom	172	4	2	178	0.06	0.00 %
	France	160	11	4	175	0.06	0.00 %
	Luxembourg	91	0	–	92	0.03	0.00 %
	Spain	27	8	33	69	0.02	0.00 %
	Poland	53	1	10	63	0.02	0.00 %
	The Netherlands	49	6	5	60	0.02	0.00 %
	Ireland	37	–	0	37	0.01	0.00 %
	Italy	13	18	1	32	0.01	0.00 %
	Austria	30	1	–	31	0.01	0.00 %
	Sweden	23	4	1	28	0.01	2.00 %
	Switzerland	21	2	–	23	0.01	0.00 %
	Cayman Islands	21	–	–	21	0.01	0.00 %
	Finland	21	0	–	21	0.01	0.00 %
	Norway	11	2	–	13	0.00	2.00 %
	Czech Republic	11	0	0	11	0.00	0.50 %
	Hong Kong	5	–	–	5	0.00	1.25 %
	Slovakia	0	–	–	0	0.00	0.50 %
	Iceland	0	–	–	0	0.00	1.25 %
	Other	71	8	1	79	0.03	
020	**Total**	**2,798**	**82**	**194**	**3,074**	**1.00**	

Article 440 CRR – Amount of the institution-specific countercyclical capital buffer

in € m

Row		Column
		010
010	Total risk exposure amount	49,822
020	Institution-specific countercyclical capital buffer rate	0.03
030	Institution-specific countercyclical capital buffer requirement	15

Leverage Ratio

In January 2015, the requirements for calculating the leverage ratio were redefined and issued by the European Commission in Delegated Act EU 2015/62.

The leverage ratio is based on the relationship between Tier 1 capital and the unweighted total of all on-balance sheet and off-balance sheet asset items (including derivatives).

The disclosures have been published in accordance with Commission Implementing Regulation (EU) 2016/200 (disclosure of the leverage ratio). The table below presents the variables used to determine the leverage ratio taking account of the transitional provisions in accordance with Article 499 (1b) CRR.

Article 451 CRR – Leverage ratio in accordance with Delegated Act

in € m

Reference date	31.12.2017
Entity name	Landesbank Hessen-Thüringen
Level of application	Consolidated

LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

		Applicable amount
1	Total assets as per published financial statements	158,385
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	– 1,469
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013)	
4	Adjustments for derivative financial instruments	(3,674)
5	Adjustment for securities financing transactions (SFTs)	1
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	15,601
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(7) of Regulation (EU) No 575/2013)	
EU-6b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)	
7	Other adjustments	(1,226)
8	**Leverage ratio total exposure measure**	**167,618**

LRCom: Leverage ratio common disclosure

		CRR leverage ratio exposures
	On-balance sheet exposures (excluding derivatives and SFTs)	
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	143,726
2	(Asset amounts deducted in determining Tier 1 capital)	(301)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)**	**143,424**
	Derivative exposures	
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	6,004
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	2,491
EU-5a	Exposure determined under Original Exposure Method	
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	
8	(Exempted CCP leg of client-cleared trade exposures)	
9	Adjusted effective notional amount of written credit derivatives	2,433
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(2,359)
11	**Total derivatives exposures (sum of lines 4 to 10)**	**8,569**
	SFT exposures	
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	22
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	
14	Counterparty credit risk exposure for SFT assets	1
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429b(4) and 222 of Regulation (EU) No 575/2013	
15	Agent transaction exposures	
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	
16	**Total securities financing transaction exposures (sum of lines 12 to 15a)**	**2**
	Other off-balance sheet exposures	
17	Off-balance sheet exposures at gross notional amount	34,214
18	(Adjustments for conversion to credit equivalent amounts)	(18,613)
19	**Other off-balance sheet exposures (sum of lines 17 and 18)**	**15,601**
	Exempted exposures in accordance with Article 429(7) and (14) of Regulation (EU) No 575/2013 (on and off balance sheet)	
EU-19a	(Intragroup exposures (solo basis) exempted in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	
EU-19b	(Exposures exempted in accordance with Article 429(14) of Regulation (EU) No 575/2013 (on and off balance sheet))	
	Capital and total exposure measure	
20	**Tier 1 capital**	**8,180**
21	**Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)**	**167,618**
	Leverage ratio	
22	**Leverage ratio**	**4.88 %**
	Choice on transitional arrangements and amount of derecognised fiduciary items	
EU-23	Choice on transitional arrangements for the definition of the capital measure	Transitional
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013	

LRSpl: Split-up of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

		CRR leverage ratio exposures
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	143,726
EU-2	Trading book exposures	7,033
EU-3	Banking book exposures, of which:	136,693
EU-4	Covered bonds	4,898
EU-5	Exposures treated as sovereigns	37,008
EU-6	Exposures to regional governments, MDBs, international organisations and PSEs not treated as sovereigns	5,272
EU-7	Institutions	20,133
EU-8	Secured by mortgages of immovable properties	14,454
EU-9	Retail exposures	1,500
EU-10	Corporate	44,586
EU-11	Exposures in default	458
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	8,383

Description of the process for monitoring the risk of excessive leverage

Helaba takes the leverage ratio requirements into account in the optimisation of its business portfolio. The risk of excessive leverage is addressed by including the leverage ratio in the planning and control process. Based on the business and risk strategy, an internal target ratio is specified as an additional key performance indicator, supplementing the capital ratios. Helaba is managing its business using qualitative and quantitative guidelines, taking into account the limits it will have to comply with in the future. Changes in the leverage ratio are subject to regular monitoring. In addition to ex-post analyses of the leverage ratio in the internal reporting system, future changes in the ratio and in the basis of measurement form an integral part of the Bank's internal planning process.

Description of the factors that impacted the disclosed leverage ratio during the reporting period

As at 31 December 2017, the leverage ratio had risen to 4.9 % (31 December 2016: 4.7 %). The total risk exposure declined year on year to € 167.6 bn. The main factors contributing to this decline were the decreases in volume in the Global Markets business division, in the securities business connected with the liquidity buffer and in the real estate lending business. However, a countervailing effect was evident in the ECB reserve available on a day-to-day basis. The changes were predominantly in on-balance sheet items.

Tier 1 capital as at 31 December 2017 had risen to € 8.2 bn (31 December 2016: € 8.1 bn). Please refer to "Own Funds and Own Funds Structure" in this report for further information on the changes in Tier 1 capital.

Liquidity Coverage Ratio (LCR)

The liquidity coverage ratio (LCR) is a regulatory measure of liquidity available at short notice and banks are required to comply with a specified minimum ratio. For Helaba, this requirement replaced the provisions of the German Liquidity Regulation (LiqV) on 1 January 2018. In order to satisfy the minimum ratio of 100 %, a bank's available, liquid assets must, for a period of 30 days, be greater than the forecast cumulative net cash outflows in a serious stress scenario (which may assume, for example, the withdrawal of a certain level of customer deposits with a simultaneous loss of unsecured funding). The disclosures relating to the LCR are published in accordance with Article 435 of Regulation (EU) No 575/2013 and EBA Guidelines EBA/GL/2017/01.

Helaba uses an internal liquidity adequacy assessment process (ILAAP) to ensure that it has adequate liquidity available at all times and that its short- and medium-term funding is sound. This process identifies, measures and monitors all material liquidity and funding risks and facilitates corrective action in good time to avoid a liquidity squeeze, where necessary. The process also includes liquidity stress tests, contingency planning and a validation of risk quantification methods. The Board of Managing Directors is responsible for ensuring that the ILAAP is underpinned by a robust system of governance. The ILAAP forms an integral component of the management framework.

The risk strategy is part of the ILAAP and, at least annually, is approved by the Board of Managing Directors before being submitted to the supervisory bodies for information purposes and discussion. As part of the risk appetite framework and again at least annually, the Board of Managing Directors also sets limits for appetite and tolerance in relation to liquidity and funding risks, translating into minimum LCRs of 135 % and 120 % respectively. These lower limits are well above the regulatory requirements. In addition to the LCR, limits are also set for short-term liquidity risk, structural liquidity risk and market liquidity risk. The underlying models and assumptions are regularly validated and submitted to the Board of Managing Directors. The Board of Managing Directors is also responsible for designing and implementing the risk management system in the Helaba Group. In the liquidity adequacy statement resulting from the ILAAP, the Board of Managing Directors confirms that the liquidity and the systems, methods and processes are all adequate.

The Asset/Liability Management unit working in collaboration with the Money Markets Trading organisational unit within the Capital Markets unit is responsible for the entire management of liquidity and funding risks in all currencies relevant to Helaba. Independent monitoring is the responsibility of the Risk Controlling unit, which includes a validation unit that operates separately from methodology development. The third line of defence is Internal Audit. The aim is to establish a conservative risk profile for liquidity and funding risks. This is achieved and continuously monitored through a comprehensive system of limits.

The number one economic liquidity risk management priority is initially to ensure that the Helaba Group has adequate day-to-day (short-term) liquidity to meet its payment obligations. This also includes intraday liquidity. At operational level, short-term liquidity is managed by obtaining or investing funds in money markets, utilising facilities provided by the ECB or by making use of facilities offered by any other central banks to which Helaba enjoys direct access. A combined scenario with a four-stage traffic-light system is used to manage and monitor this liquidity. On the basis of stress test analyses, this system ensures each day that the liquidity level – in particular the free liquidity reserve – is adequate for the next 30 trading days. Helaba, as an entity whose securities are admitted to trading on a regulated market in the EU, must also hold a portfolio of highly liquid assets that can be liquidated at any time without any significant loss in value to cover liquidity requirements in heightened stress circumstances over a period of at least five working days. In addition, each month, Helaba determines one market-wide, one bank-specific and one combined stress scenario for a time horizon of one year and these scenarios are likewise subject to limits. The liquidity risk processes referred to above are complemented by reverse stress tests and are dovetailed with the calculation of risk-bearing capacity.

The main objective of medium-/long-term funding management (funding), which is the responsibility of the Asset/Liability Management unit, is to avoid cost risks when obtaining medium- and long-term funding (maturity-matched funding) and to limit dependency on short-term sources of funding. The activities to achieve both objectives are managed and monitored by using a detailed system of limits. The diversification of individual funding sources across certain types of products and investor groups, and access to the relevant markets, is continuously monitored and subject to threshold values.

The funding strategy is derived from Helaba's business model. The cornerstones are S-Group funding from the Sparkassen and/or Sparkassen (retail) customers, the sale of Pfandbriefe, the use of development funds, and wholesale funding, particularly from institutional clients. Helaba has a further direct retail funding base available at Group level in the form of FSP and LBS, as a result of which the sources of funding are well diversified. Helaba has complied with the relevant threshold values.

Market liquidity risk is measured monthly using the risk model for market risk based on a scaling of holding periods. In the case of securities, bid/offer spreads are analysed as an indicator of market liquidity. For the most part, the Capital Markets and Asset/Liability Management units enter into positions in markets that have sufficient liquidity, with the result that the vast majority of trading positions can be sold or closed at short notice.

Liquidity risk is regularly reported to the units responsible for its management as well as to the Risk Committee (whose members include all the members of the Board of Managing Directors) and the Supervisory Board. As at 31 December 2017, this risk reflected Helaba's excellent level of liquidity, a situation that was unchanged compared with the previous year. At the reporting date, the degree of limit utilisation in the individual scenarios used to measure short-term liquidity risk was well below average historical levels and in the most critical scenario came to 11 % for Helaba Bank and 16 % for the group analysis including FSP. The same also applies to the survival horizon, which hovered well above the internal early warning threshold. The structural liquidity requirements are satisfied in full. There are no significant market liquidity risks. Helaba has adhered to all limits, which are consistent with its business and risk strategies.

In the opinion of the Board of Managing Directors, Helaba's current liquidity resources are adequate in relation to the regulatory liquidity requirements, the business strategy and the Bank's underlying risk profile.

In accordance with the applicable transitional provisions, the LCR table presented below does not include those quarters in which at least one of the months used to calculate the average values was before the first reporting date for the LCR as specified in the Delegated Act. As a consequence, only the reporting dates 31 December 2017 and 30 September 2017 are included in the table.

EU LIQ1 – LCR

in € m

	LCR DISCLOSURE TEMPLATE Scope of consolidation (solo/consolidated): Consolidated Currency and units: € m	Total unweighted value (average)		Total weighted value (average)	
	Quarter ending on:	30 Sep. 2017	31 Dec. 2017	30 Sep. 2017	31 Dec. 2017
	Number of data points used in the calculation of averages	**12**	**12**	**12**	**12**
		030	**040**	**070**	**080**
	HIGH-QUALITY LIQUID ASSETS				
1	Total high-quality liquid assets (HQLA)			29,928	31,356
	CASH OUTFLOWS				
2	Retail deposits and deposits from small business customers, of which:	13,551	13,681	1,142	1,163
3	Stable deposits	9,411	9,505	471	475
4	Less stable deposits	3,964	3,989	495	501
5	Unsecured wholesale funding	24,083	25,501	16,575	17,658
6	Operational deposits (all counterparties) and deposits in an institutional protection scheme (IPS) or network of cooperative banks	3,804	3,957	1,013	1,047
7	Non-operational deposits (all counterparties)	16,049	17,069	11,332	12,135
8	Unsecured debt	4,230	4,476	4,230	4,476
9	Secured wholesale funding			5	5
10	Additional requirements	20,161	19,492	6,857	6,186
11	Outflows related to derivative exposures and other collateral requirements	3,841	3,290	3,841	3,290
12	Outflows related to loss of funding on debt products	0	0	0	0
13	Credit and liquidity facilities	16,320	16,202	3,017	2,896
14	Other contractual funding obligations	851	340	724	213
15	Other contingent funding obligations	10,057	10,038	433	432
16	TOTAL CASH OUTFLOWS			**25,736**	**25,658**
	CASH INFLOWS				
17	Secured lending (e.g. reverse repos)	18	14	18	14
18	Inflows from fully performing exposures	7,892	7,885	4,834	4,744
19	Other cash inflows	1,468	1,458	1,373	1,361
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries in which there are transfer restrictions or in which the transactions are denominated in non-convertible currencies)				
EU-19b	(Excess inflows from a related specialised credit institution)				
20	TOTAL CASH INFLOWS	**9,378**	**9,357**	**6,225**	**6,119**
EU-20a	**Fully exempt inflows**	**1,177**	**1,033**	**838**	**682**
EU-20b	**Inflows subject to a 90 % cap**	**0**	**0**	**0**	**0**
EU-20c	**Inflows subject to a 75 % cap**	**8,201**	**8,324**	**5,387**	**5,437**
	TOTAL ADJUSTED VALUE				
21	**Liquidity buffer**			**29,928**	**31,356**
22	**Total net cash outflows**			**19,512**	**19,538**
23	**Liquidity coverage ratio (%)**			**154 %**	**161 %**

Credit Risk

General disclosures

As at 31 December 2017, the Helaba Group's basis of measurement for credit risk after credit risk adjustments amounted to € 161,284 m. Credit risk exposures per exposure class are shown below with the average values on the quarterly reporting dates. To meet the requirements specified in EBA/GL/2016/11, disclosures related to securitisations are not included. These are covered in the "Securitisations" section. The figures include all companies comprising the group of consolidated companies for regulatory purposes in accordance with the KWG/CRR.

EU CRB-B – Types of credit exposure with average values based on the quarterly reporting dates in € m

		a	b
		Basis of measurement at 31.12.2017	Average basis of measurement over the reporting year
1	Central governments or central banks	28,584	31,216
2	Institutions	15,346	15,883
3	Corporates	78,811	78,883
4	thereof: Specialised lending exposures	34,425	34,986
5	thereof: SME	3,809	3,585
	thereof: Other	40,577	40,312
6	Retail	5,415	5,364
7	Secured by real estate	3,460	3,446
8	thereof: SME	541	536
9	thereof: Non-SME	2,919	2,910
10	Qualifying revolving	810	815
11	Other	1,145	1,103
12	thereof: SME	249	229
13	thereof: Non-SME	896	875
14	IRBA equity exposures	162	151
	Other non credit-obligation assets	402	433
15	**Total IRB approach**	**128,720**	**131,930**
16	Central governments or central banks	989	987
17	Regional governments or local authorities	9,588	9,610
18	Public-sector entities	3,262	3,163
19	Multilateral development banks	179	180
20	International organisations	551	553
21	Institutions	9,755	10,573
22	Corporates	3,526	3,627
23	thereof: SME	491	465
24	Retail	862	1,034
25	thereof: SME	16	20
26	Exposures secured by real estate	1,723	1,521
27	thereof: SME	479	448
28	Exposures in default	102	129
29	Higher risk categories	24	46
30	Covered bonds	332	178
31	Exposures to institutions and corporates with a short-term credit rating	–	–
32	Collective investment undertakings (CIU)	21	19
33	Equity exposures	1,392	1,420
34	Other exposures	259	276
35	**Total standardised approach (CRSA)**	**32,565**	**33,317**
36	**Total**	**161,284**	**165,247**

The tables below show the types of credit exposure by geography, industry and residual maturity.

To keep the presentation clear and ensure only relevant information is shown, the data in the table is limited to countries that, in terms of the basis of measurement before credit risk adjustments, together account for at least 95 % of the basis of measurement before credit risk adjustments in the Helaba Group.

EU CRB-C – Geographical breakdown of exposures

in € m

		a	b	c	d	e	f	g
		Basis of measurement						
		Europe	Germany	Finland	France	Ireland	Luxembourg	The Netherlands
1	Central governments or central banks	28,046	26,205	22	1,393	6	17	57
2	Institutions	11,415	1,551	245	2,430	16	67	1,103
3	Corporates	64,842	42,104	683	4,344	1,178	3,990	1,793
4	Retail	5,398	5,361	0	3	0	1	1
5	IRBA equity exposures	158	121	–	1	–	1	–
	Other non credit-obligation assets	402	402	–	–	–	–	–
6	**Total IRB approach**	**110,260**	**75,745**	**950**	**8,171**	**1,200**	**4,077**	**2,953**
7	Central governments or central banks	821	328	25	19	–	1	–
8	Regional governments or local authorities	9,588	9,588	–	–	–	–	–
9	Public-sector entities	1,381	1,380	–	–	–	–	–
10	Multilateral development banks	17	–	–	–	–	17	–
11	International organisations	4	4	–	–	–	0	–
12	Institutions	9,611	9,265	–	53	0	3	34
13	Corporates	3,283	2,816	–	52	35	82	72
14	Retail	851	794	0	0	0	0	0
15	Exposures secured by real estate	1,723	1,664	–	–	–	0	0
16	Exposures in default	49	48	–	0	0	0	0
17	Higher risk categories	13	8	–	–	–	3	–
18	Covered bonds	332	321	–	1	0	–	3
19	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–
20	Collective investment undertakings (CIU)	21	21	–	–	–	–	–
21	Equity exposures	1,356	1,356	–	–	–	0	–
22	Other exposures	259	244	–	–	1	–	–
23	**Total standardised approach (CRSA)**	**29,308**	**27,838**	**25**	**126**	**37**	**106**	**108**
24	**Total**	**139,568**	**103,583**	**975**	**8,296**	**1,236**	**4,183**	**3,062**

EU CRB-C – Geographical breakdown of exposures

in € m

		h	i	j	k	l	m	n
		Basis of measurement						
		Norway	Austria	Poland	Sweden	Switzer-land	Spain	United Kingdom
1	Central governments or central banks	–	121	–	–	2	184	24
2	Institutions	525	273	14	1,260	718	102	1,760
3	Corporates	239	1,226	1,224	903	725	684	3,643
4	Retail	0	3	0	0	14	3	6
5	IRBA equity exposures	–	–	–	–	–	–	0
	Other non credit-obligation assets	–	–	–	–	–	–	–
6	**Total IRB approach**	**765**	**1,623**	**1,238**	**2,163**	**1,458**	**973**	**5,434**
7	Central governments or central banks	–	28	18	–	283	20	37
8	Regional governments or local authorities	–	–	–	–	0	–	–
9	Public-sector entities	–	–	–	–	1	–	–
10	Multilateral development banks	–	–	–	–	–	–	–
11	International organisations	–	–	–	–	–	–	–
12	Institutions	19	–	–	49	62	–	97
13	Corporates	–	8	0	–	2	35	86
14	Retail	0	0	0	0	52	0	2
15	Exposures secured by real estate	–	–	–	–	58	0	0
16	Exposures in default	–	0	–	–	0	0	1
17	Higher risk categories	–	–	–	–	–	–	0
18	Covered bonds	1	1	–	2	–	2	1
19	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–
20	Collective investment undertakings (CIU)	–	–	–	–	–	–	–
21	Equity exposures	–	–	–	–	0	–	–
22	Other exposures	–	–	–	–	14	–	–
23	**Total standardised approach (CRSA)**	**20**	**37**	**18**	**51**	**473**	**57**	**223**
24	**Total**	**785**	**1,660**	**1,257**	**2,214**	**1,931**	**1,030**	**5,656**

EU CRB-C – Geographical breakdown of exposures

in € m

		o	p	q	r	s	t	u
		Basis of measurement						
		Other	**North America**	Canada	United States of America	Other	**Central and South America**	**Australia and New Zealand**
1	Central governments or central banks	16	417	–	417	–	0	–
2	Institutions	1,349	3,477	1,640	1,837	–	14	400
3	Corporates	2,104	12,772	164	12,258	350	563	177
4	Retail	5	5	1	5	–	1	1
5	IRBA equity exposures	34	0	–	0	–	4	–
	Other non credit-obligation assets	–	–	–	–	–	–	–
6	**Total IRB approach**	**3,509**	**16,671**	**1,804**	**14,517**	**350**	**581**	**578**
7	Central governments or central banks	63	167	–	167	–	0	–
8	Regional governments or local authorities	–	–	–	–	–	–	–
9	Public-sector entities	–	1,881	–	1,881	–	–	–
10	Multilateral development banks	–	–	–	–	–	–	–
11	International organisations	–	–	–	–	–	–	–
12	Institutions	29	123	51	72	–	0	18
13	Corporates	94	226	–	225	0	17	0
14	Retail	2	1	0	1	–	1	0
15	Exposures secured by real estate	0	0	–	0	–	–	–
16	Exposures in default	0	25	–	25	–	28	0
17	Higher risk categories	2	7	–	2	5	4	–
18	Covered bonds	1	–	–	–	–	–	0
19	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–
20	Collective investment undertakings (CIU)	–	–	–	–	–	–	–
21	Equity exposures	1	36	–	36	–	–	–
22	Other exposures	–	–	–	–	–	–	–
23	**Total standardised approach (CRSA)**	**191**	**2,466**	**51**	**2,409**	**6**	**50**	**19**
24	**Total**	**3,700**	**19,137**	**1,855**	**16,926**	**356**	**631**	**597**

EU CRB-C – Geographical breakdown of exposures

in € m

		v	w	x	y
		Basis of measurement			
		Asia	Africa	Other regions[1]	Total
1	Central governments or central banks	–	0	121	28,584
2	Institutions	38	2	–	15,346
3	Corporates	317	141	–	78,811
4	Retail	9	1	–	5,415
5	IRBA equity exposures	–	–	–	162
	Other non credit-obligation assets	–	–	–	402
6	**Total IRB approach**	**364**	**144**	**121**	**128,720**
7	Central governments or central banks	1	0	–	989
8	Regional governments or local authorities	0	–	–	9,588
9	Public-sector entities	–	–	–	3,262
10	Multilateral development banks	–	–	162	179
11	International organisations	–	–	547	551
12	Institutions	2	0	–	9,755
13	Corporates	0	–	–	3,526
14	Retail	1	9	–	862
15	Exposures secured by real estate	0	0	–	1,723
16	Exposures in default	0	0	–	102
17	Higher risk categories	–	–	–	24
18	Covered bonds	–	–	–	332
19	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–
20	Collective investment undertakings (CIU)	–	–	–	21
21	Equity exposures	–	–	–	1,392
22	Other exposures	–	–	–	259
23	**Total standardised approach (CRSA)**	**3**	**10**	**709**	**32,564**
24	**Total**	**367**	**154**	**830**	**161,284**

[1] Exposures to supranational organisations

To meet the requirements specified in Article 442 e) CRR, the "SME" "of which" items have been added to the following table by industry.

EU CRB-D – Concentration of exposures by industry

in € m

		a	b	c	d	e	f
		Basis of measurement					
		Civil engineering, real estate and housing	**Data processing, telecommunication, media**	**Energy, utilities, waste disposal**	**Financial enterprises and insurance companies**	**Trade and services**	**Banks**
1	Central governments or central banks	–	–	1	–	–	557
2	Institutions	38	–	830	353	105	12,919
3	Corporates	33,941	2,698	8,405	9,404	7,505	15
	thereof: SME	2,222	40	151	182	880	–
4	Retail	140	59	3	38	584	–
	Secured by real estate	84	37	2	25	375	–
	thereof: SME	83	37	2	25	352	–
	Other	48	18	1	10	153	–
	thereof: SME	47	18	1	10	147	–
5	IRBA equity exposures	23	5	–	57	0	2
	Other non credit-obligation assets	–	–	–	–	–	–
6	**Total IRB approach**	**34,141**	**2,761**	**9,239**	**9,852**	**8,195**	**13,494**
7	Central governments or central banks	–	–	–	–	–	501
8	Regional governments or local authorities	–	–	16	–	16	–
9	Public-sector entities	0	0	0	547	176	539
10	Multilateral development banks	–	–	–	–	–	179
11	International organisations	–	–	–	407	–	–
12	Institutions	–	–	–	22	–	9,570
13	Corporates	442	131	6	677	692	5
	thereof: SME	72	130	4	134	146	–
14	Retail	1	3	0	1	73	–
	thereof: SME	1	1	0	0	8	–
15	Exposures secured by real estate	1,357	0	2	16	62	–
	thereof: SME	446	0	2	0	28	–
16	Exposures in default	26	1	–	34	16	–
17	Higher risk categories	–	–	–	24	–	–
18	Covered bonds	–	–	–	–	–	321
19	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–
20	Collective investment undertakings (CIU)	–	–	–	–	–	–
21	Equity exposures	132	1	–	146	10	45
22	Other exposures	–	–	–	12	0	4
23	**Total standardised approach (CRSA)**	**1,958**	**136**	**24**	**1,884**	**1,046**	**11,165**
24	**Total**	**36,099**	**2,896**	**9,263**	**11,736**	**9,241**	**24,658**

EU CRB-D – Concentration of exposures by industry

in € m

		g	h	i	j	k
		Basis of measurement				
		Public-sector entities, organisations, services	Manufacturing	Transport (including vehicle manufacturing)	Other	Total
1	Central governments or central banks	18,720	–	–	9,307	28,584
2	Institutions	1,018	–	–	81	15,346
3	Corporates	112	7,952	7,922	855	78,811
	thereof: SME	–	221	40	72	3,809
4	Retail	–	45	23	4,523	5,415
	Secured by real estate	–	24	15	2,898	3,460
	thereof: SME	–	23	14	6	541
	Other	–	18	6	891	1,145
	thereof: SME	–	17	5	2	249
5	IRBA equity exposures	–	–	–	75	162
	Other non credit-obligation assets	–	–	–	402	402
6	**Total IRB approach**	**19,850**	**7,998**	**7,946**	**15,243**	**128,720**
7	Central governments or central banks	173	–	–	315	989
8	Regional governments or local authorities	9,307	–	–	249	9,588
9	Public-sector entities	1,985	–	8	5	3,262
10	Multilateral development banks	–	–	–	–	179
11	International organisations	140	–	–	4	551
12	Institutions	–	–	–	163	9,755
13	Corporates	113	68	490	902	3,526
	thereof: SME	–	2	3	0	491
14	Retail	0	2	0	783	862
	thereof: SME	–	1	0	6	16
15	Exposures secured by real estate	0	0	0	286	1,723
	thereof: SME	–	–	–	3	479
16	Exposures in default	–	1	1	23	102
17	Higher risk categories	–	–	–	–	24
18	Covered bonds	–	–	–	11	332
19	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–
20	Collective investment undertakings (CIU)	–	–	–	21	21
21	Equity exposures	–	–	–	1,059	1,392
22	Other exposures	2	–	–	241	259
23	**Total standardised approach (CRSA)**	**11,720**	**72**	**499**	**4,061**	**32,564**
24	**Total**	**31,571**	**8,069**	**8,445**	**19,305**	**161,284**

EU CRB-E – Maturity of exposures (on-balance sheet exposures) in € m

		a	b	c	d	e	f
		Basis of measurement					
		Payable on demand	≤1 year	>1 year ≤5 years	>5 years	No stated maturity	Total
1	Central governments or central banks	1,134	2,623	14,459	9,895	–	28,110
2	Institutions	206	2,906	8,857	1,691	–	13,660
3	Corporates	972	5,897	23,615	23,413	20	53,917
4	Retail	82	89	516	3,587	–	4,274
5	IRBA equity exposures	–	–	74	–	73	147
	Other non credit-obligation assets	86	12	191	0	113	402
6	**Total IRB approach**	**2,480**	**11,527**	**47,712**	**38,586**	**207**	**100,511**
7	Central governments or central banks	220	31	380	75	283	989
8	Regional governments or local authorities	8	691	3,635	4,347	3	8,684
9	Public-sector entities	60	850	980	95	47	2,032
10	Multilateral development banks	–	0	141	38	–	179
11	International organisations	0	195	141	215	–	551
12	Institutions	270	1,891	1,616	4,611	47	8,435
13	Corporates	28	513	1,959	529	4	3,032
14	Retail	12	117	376	123	6	634
15	Exposures secured by real estate	0	109	414	1,073	1	1,597
16	Exposures in default	25	57	8	6	0	96
17	Higher risk categories	–	–	–	0	14	15
18	Covered bonds	0	62	200	69	–	332
19	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–
20	Collective investment undertakings (CIU)	–	–	21	–	–	21
21	Equity exposures	–	–	1,035	0	328	1,363
22	Other exposures	4	–	249	0	7	260
23	**Total standardised approach (CRSA)**	**627**	**4,516**	**11,156**	**11,182**	**738**	**28,218**
24	**Total**	**3,107**	**16,043**	**58,867**	**49,768**	**944**	**128,729**

To ensure that the requirements of Article 442 f) CRR are satisfied in full, the following table shows the off-balance sheet risk exposures by residual maturity and exposure class.

Article 442 CRR – Maturity of exposures (off-balance sheet exposures) in € m

		Basis of measurement					
		Payable on demand	≤1 year	>1 year ≤5 years	>5 years	No stated maturity	Total
1	Central governments or central banks	1	11	52	410	–	474
2	Institutions	3	621	1,039	23	–	1,686
3	Corporates	2,228	4,847	13,892	3,926	–	24,893
4	Retail	895	15	29	202	–	1,141
5	IRBA equity exposures	–	–	2	–	13	14
	Other non credit-obligation assets	–	–	–	–	–	–
6	**Total IRB approach**	**3,128**	**5,493**	**15,013**	**4,562**	**13**	**28,209**
7	Central governments or central banks	0	–	0	–	–	0
8	Regional governments or local authorities	75	–	829	–	–	904
9	Public-sector entities	63	265	1,618	–	1	1,947
10	Multilateral development banks	–	–	–	–	–	–
11	International organisations	–	–	–	–	–	–
12	Institutions	21	214	35	334	0	603
13	Corporates	5	145	301	42	0	494
14	Retail	185	4	22	16	0	228
15	Exposures secured by real estate	0	2	124	0	–	126
16	Exposures in default	0	0	5	0	–	6
17	Higher risk categories	–	–	–	–	9	9
18	Covered bonds	–	–	–	–	–	–
19	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–
20	Collective investment undertakings (CIU)	–	–	–	–	–	–
21	Equity exposures	–	–	23	–	6	29
22	Other exposures	–	–	–	–	–	–
23	**Total standardised approach (CRSA)**	**349**	**628**	**2,959**	**393**	**17**	**4,347**
24	**Total**	**3,477**	**6,122**	**17,972**	**4,954**	**30**	**32,556**

Additional information relating to exposures in default and exposures past due – similarly broken down by exposure class, industry and geography – is presented below to augment the data for the basis of measurement after credit risk adjustments. Transactions involving a customer with which a default event as defined in Article 178 CRR has occurred are designated as in default irrespective of the recognition of any credit risk adjustment. Transactions are deemed to be past due if they are more than 90 days in arrears and this has also been recorded as a default criterion in bank systems.

The following table also includes, in the CRSA in column a, a breakdown of the exposures in default by original exposure class (shown in italics) in accordance with EBA Q&A 2017_3481.

EU CR1-A – Credit quality of exposures by exposure class

in € m

		a	b	c	d	e	f	g
		Basis of measurement before credit risk adjustments						Basis of measurement after credit risk adjustments
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Change in credit risk adjustments compared with the prior period	(a+b-c-d)
1	Central governments or central banks	0	28,586	2	–	–	–2	28,584
2	Institutions	0	15,349	4	–	0	–3	15,346
3	Corporates	612	78,536	338	–	326	–368	78,811
4	thereof: Specialised lending exposures	286	34,324	185	–	144	–267	34,425
5	thereof: SME	54	3,775	19	–	15	–1	3,809
	thereof: Other	273	40,437	133	–	167	–101	40,577
6	Retail	49	5,386	20	–	63	–1	5,415
7	Secured by real estate	29	3,437	5	–	26	–2	3,460
8	thereof: SME	0	541	–	–	10	–	541
9	thereof: Non-SME	28	2,896	5	–	15	–2	2,919
10	Qualifying revolving	2	810	1	–	16	0	810
11	Other	19	1,139	13	–	22	0	1,145
12	thereof: SME	0	249	0	–	9	0	249
13	thereof: Non-SME	19	890	13	–	13	0	896
14	IRBA equity exposures	0	162	–	–	–	–	162
	Other non credit-obligation assets	–	402	–	–	–	–	402
15	**Total IRB approach**	**662**	**128,421**	**363**	**–**	**390**	**–375**	**128,720**
16	Central governments or central banks	–	989	–	–	–	–	989
17	Regional governments or local authorities	–	9,588	0	–	–	0	9,588
18	Public-sector entities	–	3,273	12	–	–	1	3,262
19	Multilateral development banks	–	179	–	–	–	–	179
20	International organisations	–	551	–	–	–	–	551
21	Institutions	–	9,755	0	–	–	0	9,755
22	Corporates	*204*	3,541	15	–	–	–14	3,526
23	thereof: SME	*4*	491	0	–	–	0	491
24	Retail	*46*	865	3	–	0	–2	862
25	thereof: SME	*2*	16	0	–	0	0	16
26	Exposures secured by real estate	–	1,723	–	–	–	–	1,723
27	thereof: SME	–	479	–	–	–	–	479
28	Exposures in default	250	0	148	–	116	32	102
29	Higher risk categories	0	24	–	–	–	–	24
30	Covered bonds	–	332	–	–	–	–	332
31	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–
32	Collective investment undertakings (CIU)	–	21	–	–	–	–	21
33	Equity exposures	–	1,392	–	–	–	–	1,392
34	Other exposures	–	259	–	–	–	–	259
35	**Total standardised approach (CRSA)**	**250**	**32,492**	**178**	**–**	**116**	**17**	**32,564**
36	**Total**	**912**	**160,913**	**541**	**–**	**506**	**–358**	**161,284**
37	thereof: Loans	844	104,344	474	–	506	–325	104,714
38	thereof: Bonds	–	24,014	–	–	–	–	24,014
39	thereof: Off-balance-sheet exposures	68	32,556	68	–	–	–33	32,556

EU CR1-B – Credit quality of exposures by industry

in € m

		a		b	c	d	e	f	g
		Basis of measurement before credit risk adjustments							Basis of measurement after credit risk adjustments
		Defaulted exposures	Defaulted exposures: Of which past due	Non-defaulted exposures	Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Change in credit risk adjustments compared with the prior period	(a+b-c-d)
1	Civil engineering, real estate and housing	266	25	36,074	241	–	261	−62	36,099
2	Data processing, telecommunication, media	4	1	2,898	6	–	15	0	2,896
3	Energy, utilities, waste disposal	79	–	9,226	41	–	29	−20	9,263
4	Financial enterprises and insurance companies	78	0	11,705	47	–	26	−31	11,736
5	Trade and services	133	17	9,175	67	–	61	−5	9,241
6	Banks	–	–	24,660	2	–	–	−2	24,658
7	Public-sector entities, organisations, services	0	–	31,581	11	–	–	−4	31,571
8	Manufacturing	48	2	8,056	35	–	36	−26	8,069
9	Transport (including vehicle manufacturing)	216	0	8,293	64	–	51	−158	8,445
10	Other	88	21	19,244	27	–	27	−51	19,305
11	**Total**	**912**	**67**	**160,913**	**541**	**–**	**506**	**−358**	**161,284**

To keep the presentation clear and ensure only relevant information is shown, the data in the table is, similar to EU CR1-C (Credit quality of exposures by geography) limited to countries that, in terms of the basis of measurement before credit risk adjustments, together account for at least 95 % of the basis of measurement before credit risk adjustments in the Helaba Group.

EU CR1-C – Credit quality of exposures by geography | in € m

		a		b	c	d	e	f	g
		Basis of measurement before credit risk adjustments							Basis of measurement after credit risk adjustments
		Defaulted exposures	Defaulted exposures: Of which past due	Non-defaulted exposures	Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Change in credit risk adjustments compared with the prior period	(a+b-c-d)
1	**Africa**	**8**	**0**	**147**	**2**	**–**	**1**	**–1**	**154**
2	**Asia**	**0**	**0**	**367**	**0**	**–**	**0**	**0**	**367**
3	**Australia and New Zealand**	**0**	**0**	**597**	**0**	**–**	**0**	**0**	**597**
4	**Europe**	**691**	**67**	**139,253**	**376**	**–**	**389**	**–332**	**139,568**
5	Germany	497	67	103,288	202	–	261	–302	103,583
6	Finland	–	–	977	2	–	1	–1	975
7	France	0	–	8,314	17	–	13	–1	8,296
8	Ireland	0	0	1,239	3	–	1	–5	1,236
9	Luxembourg	32	0	4,193	42	–	31	7	4,183
10	The Netherlands	0	0	3,066	4	–	3	–29	3,062
11	Norway	–	–	786	1	–	1	0	785
12	Austria	0	0	1,663	3	–	2	0	1,660
13	Poland	0	0	1,263	6	–	5	–1	1,257
14	Sweden	–	–	2,217	3	–	2	0	2,214
15	Switzerland	0	0	1,933	2	–	1	–1	1,931
16	Spain	51	0	995	16	–	12	–14	1,030
17	United Kingdom	46	0	5,651	41	–	32	22	5,656
18	Other	64	0	3,669	32	–	22	–10	3,700
19	**North America**	**174**	**0**	**19,114**	**151**	**–**	**107**	**–26**	**19,137**
20	Canada	–	–	1,856	1	–	–	0	1,855
21	United States of America	174	0	16,902	150	–	107	–26	16,926
22	Other	–	–	356	1	–	–	0	356
23	**Central and South America**	**39**	**4**	**604**	**12**	**–**	**9**	**1**	**631**
24	**Other regions[1]**	**–**	**–**	**830**	**–**	**–**	**–**	**–**	**830**
25	**Total**	**912**	**67**	**160,913**	**541**	**–**	**506**	**–358**	**161,284**

[1] Exposures to supranational organisations

The extent of the credit risk adjustments is determined on the basis of an assessment of the financial circumstances including the use of appropriate rating results and including forecasts of going concern value or break-up value, and the measurement of collateral at the expected recovery value taking into account the time required for collateral recovery and appropriate recovery costs.

Specific and portfolio loan loss allowances, provisions and direct write-offs are submitted for approval in the form of an application for an allowance for losses on loans and advances. The adequacy of the credit risk adjustment is reviewed regularly and adjustments are made where necessary. The credit risk adjustments for the Bank are recorded and updated in the central Credit Loss Database system. Detailed information on the calculation of the credit risk adjustment and the approval process is available in the form of an internal set of rules and regulations and can be found in Note (14) of the Notes to the Consolidated Financial Statements in the **Annual Report**.

The following four tables are based on the FINREP reports.

EU CR1-D – Ageing of past-due exposures

in € m

		a	b	c	d	e	f
		Basis of measurement before credit risk adjustments					
		≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
1	Loans	26	19	672	7	18	219
2	Debt securities	–	–	5	–	–	–
3	**Total**	**26**	**19**	**677**	**7**	**18**	**219**

EU CR1-E – Non-performing and forborne exposures

in € m

		a	b	c	d	e	f	g
		Gross carrying amount						
					Of which non-performing			
			Of which performing, past due > 30 days and ≤ 60 days	Of which performing forborne exposures		Of which defaulted	Of which impaired	Of which forborne exposures
010	Debt securities	111,290	22,079	–	5	5	–	–
020	Loans	111,709	110,795	349	915	912	805	662
030	Off-balance-sheet exposures	31,102	–	3	51	51	–	13

EU CR1-E – Non-performing and forborne exposures

in € m

		h	i	j	k	l	m
		Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
		on non-performing exposures		on performing exposures			
			Of which forborne exposures		Of which forborne exposures	on non-performing exposures	Of which on forborne exposures
010	Debt securities	−2	–	–	–	–	–
020	Loans	−131	−8	−390	−297	197	173
030	Off-balance-sheet exposures	12	0	28	10	1	–

The table below shows the changes in the credit risk adjustments over the reporting period. To ensure that requirements of Article 442 i) CRR are satisfied in full, the changes are also shown for off-balance sheet risk exposures. In contrast to the presentation of data in tables CR1-B (Credit quality of exposures by industry) and CR1-C (Credit quality of exposures by geography), these tables also include data on securitisation exposures.

EU CR2-A – Changes in the stock of general and specific credit risk adjustments (on-balance sheet risk exposures) in € m

		a	b
	On-balance sheet exposures	**Specific credit risk adjustments**	**General credit risk adjustments**
1	**Opening balance**	**915**	**–**
2	Additions	196	–
3	Reversals	199	–
4	Utilisations	341	–
5	Transfers between types of credit risk adjustment	8	–
6	Impact of exchange rate differences	–48	–
7	Impact of consolidation effects	–2	–
8	Other adjustments	–12	–
9	**Closing balance**	**516**	**–**
10	Recoveries on loans and advances previously written off	29	–
11	Direct write-offs	5	–

Article 442 CRR – Changes in the stock of general and specific credit risk adjustments (off-balance sheet risk exposures) in € m

	Off-balance-sheet exposures	**Specific credit risk adjustments**	**General credit risk adjustments**
1	**Opening balance**	**54**	**–**
2	Additions	23	–
3	Reversals	27	–
4	Utilisations	–	–
5	Transfers between types of credit risk adjustment	–8	–
6	Impact of exchange rate differences	–3	–
7	Impact of consolidation effects	–	–
8	Other adjustments	–	–
9	**Closing balance**	**40**	**–**
10	Recoveries on loans and advances previously written off	–	–
11	Direct write-offs	–	–

The information in the tables above relates to the 31 December 2017 reporting date and comprises the amounts of the credit risk adjustments under IFRS based on the group of consolidated companies for regulatory purposes.

The quantitative information on the credit risk adjustments under IFRS that is included in the disclosures pursuant to the CRR differs from the credit risk adjustments in the consolidated accounts under IFRS due to differences between the group of consolidated companies for regulatory purposes and the group of consolidated companies for accounting purposes.

General disclosures on credit risk mitigation

Like the creditworthiness of borrowers or counterparties, the collateral arrangements (or general risk mitigation techniques) available are of major importance when determining the adequacy of own funds to cover default risks. Helaba takes the following collateral instruments into account for regulatory purposes in the context of credit risk mitigation techniques insofar as the instruments concerned comply with the requirements of the CRR:

- unfunded credit protection (e.g. guarantees and sureties).
- mortgage security (e.g. charges over real estate)
- financial collateral (e.g. assigned or pledged securities, cash collateral)
- ships and aircraft as other physical collateral (e.g. registered ship or aircraft mortgages)
- assignment of receivables as collateral (e.g. assignment of trade receivables as collateral)

FSP, as an institution within the Helaba Group, takes the same collateral instruments into account – ships and aircraft excepted – when calculating its own funds requirements.

The systems for measuring and managing collateral are set out in the Helaba Group's organisational guidelines. The Lending Principles lay down basic rules as to the types and scope of collateral instruments permitted and define measures against which the recoverability of these instruments can be assessed. The recoverability of collateral must be reviewed accordingly prior to every loan decision and on a continuous and ad hoc basis during the term of the loan. The assessment of the recoverability of collateral is generally based on fair values. External valuations are used in principle provided that they have demonstrably been performed by an expert third party and are subjected to an internal bank plausibility check.

The measurement approach, the review and the regular measurement of the collateral provided form a mandatory part of the opinion to be rendered by Credit Risk Management. The stated values of collateral arrangements are reviewed by Credit Risk Management, annually in ordinary cases and at shorter intervals in the case of critical exposures, in the course of the loan monitoring and review process and are adapted as necessary if factors of relevance for valuation have changed.

The market fluctuation concept for commercial and residential real estate markets, which is permitted as a statistical method in relation to regulatory charge relief for commercial and residential real estate loans, is also used in the context of the Bank's internal monitoring and review processes to monitor real estate collateral. As regards ships and aircraft, certain asset types are subject to internal market fluctuation monitoring.

The collateral provided is administered in an application system that meets all of the requirements under the CRR in order to use credit risk mitigation techniques to release regulatory capital. When determining the eligibility of collateral for regulatory purposes, collateral values are reduced by the markdowns specified in regulatory requirements. In the case of mortgage collateral and other physical collateral (in particular ships and aircraft), the markdown in accordance with Article 230 CRR is approximately 29 %; the markdown for assigned receivables is 20 %.

Helaba currently has no involvement with nth-to-default credit derivatives. The necessary conditions for the recognition of guarantees, unfunded credit protection and credit derivatives are reviewed and, if they are met, the collateral is recognised as mitigating the credit risk under the CRR.

Guarantees provided by public-sector entities with investment-grade ratings represent the largest item (66.2 %) in the unfunded credit protection class in the context of regulatory credit risk mitigation in accordance with the CRR. Guarantors from the banking sector with investment-grade ratings constitute a further large block (17.8 %).

Concentration risks affecting collateral based on real estate and guarantees represent another risk parameter of particular interest to Helaba, which reviews these risks on the basis of regular analyses. The Collateral Management System provides dedicated analysis options for real estate and real estate portfolios. Financial collateral is generally of lesser importance for Helaba as far as concentration risk is concerned (with the exception of cash deposits at third-party banks). As at 31 December 2017 there are no concentration risks in terms of individual guarantors or individual properties.

Helaba employs close-out netting for derivatives. Close-out netting is a bilateral netting arrangement under which all transactions falling under the arrangement are netted by close-out in the event of the counterparty defaulting (for example as a result of insolvency). This method, unlike novation netting, also enables transactions involving different maturities and currencies to be netted. Netting is carried out using the method specified in Article 298 (1) c) CRR. The basic necessary condition for recognition in respect of risk mitigation is compliance with the requirements of Articles 295 et seq. CRR. This means that derivatives are only netted with a counterparty if (1) there is a bilateral netting agreement with the counterparty (e.g. in accordance with ISDA, DRV, etc.) and corresponding clearing rules apply, and (2) the agreement has been notified in writing to the competent authority (previously Deutsche Bundesbank, now ECB), and (3) the agreement has been confirmed as legally enforceable by appropriate legal opinion. The Legal Database Information System (LeDIS) is used to monitor legal enforceability on an ongoing basis.

The deduction of collateral within the scope of collateral management is also used for derivatives at Helaba. This involves entering into collateral agreements (standardised collateral arrangements recognised by the supervisory authorities) with counterparties, in the form of credit support annexes to netting master agreements, or using clearing rules so that counterparty default risks from derivatives can be covered by transferring title to liquid funds and securities. The transfer here does not constitute the provision of collateral in contractual terms (as in the case of the conventional contract of pledge), but rather a settlement to cover an outstanding balance after the netting of receivables and liabilities from transactions. The basic necessary condition for recognition is compliance with the requirements of Articles 196, 206 and 220 CRR in conjunction with a related interpretation by the EBA (netting of negative market values and collateral provided). Helaba does not avail itself of on-balance sheet netting arrangements.

EU CR3 – Credit risk mitigation techniques

in € m

		a	b	c	d	e	f
		Basis of measurement (unsecured)	Basis of measurement (secured)	thereof: Exposures secured by guarantees	thereof: Exposures secured by financial collateral	thereof: Exposures secured by credit derivatives	Thereof: Exposures secured by physical/other collateral
1	Loans	79,257	25,457	5,092	1,878	–	18,487
2	Debt securities	23,902	112	48	–	–	64
	Off-balance-sheet exposures	31,098	1,458	865	142	–	453
3	**Total**	**134,258**	**27,026**	**6,004**	**2,020**	**–**	**19,003**
4	Of which defaulted	323	189	12	11	–	166

In contrast to EU CR3 (Credit risk mitigation techniques), the following table shows the applied credit risk mitigation techniques in accordance with Article 453 f) and g) CRR, including the securitisation exposure classes in the CRSA/IRB approach and counterparty credit risk exposures.

Article 453 CRR – Credit risk mitigation techniques by exposure class

in € m

	Exposures secured by guarantees	Exposures secured by financial collateral	Exposures secured by credit derivatives	Exposures secured by physical/other collateral
Central governments or central banks	63	1,191	–	–
Institutions	544	384	–	4
Corporates	4,106	557	–	14,662
thereof: Specialised lending exposures	725	131	–	7,843
thereof: SME	86	104	–	1,717
thereof: Other	3,295	322	–	5,102
Retail	19	141	–	2,810
Secured by real estate	3	96	–	2,810
thereof: SME	1	1	–	415
thereof: Non-SME	2	95	–	2,395
Qualifying revolving	–	–	–	0
Other	16	45	–	0
thereof: SME	9	7	–	0
thereof: Non-SME	8	38	–	0
IRBA equity exposures	–	–	–	–
PD/LGD approach	–	–	–	–
Simple risk weight approach	–	–	–	–
Risk-weighted equities	–	–	–	–
Other non credit-obligation assets	–	–	–	–
Securitisation exposures	–	48	–	–
Total IRB approach	**4,732**	**2,322**	**–**	**17,476**
Central governments or central banks	–	–	–	–
Regional governments or local authorities	–	–	–	–
Public-sector entities	14	21	–	–
Multilateral development banks	–	–	–	–
International organisations	–	–	–	–
Institutions	12	513	–	–
Corporates	1,464	579	–	–
thereof: SME	436	0	–	–
Retail	422	250	–	–
thereof: SME	9	0	–	–
Exposures secured by real estate	0	–	–	1,723
thereof: SME	0	–	–	479
Exposures in default	9	1	–	–
Higher risk categories	–	–	–	–
Covered bonds	–	–	–	–
Exposures to institutions and corporates with a short-term credit rating	–	–	–	–
Collective investment undertakings (CIU)	–	–	–	–
Equity exposures	–	512	–	–
Other exposures	–	–	–	–
Securitisation exposures	–	350	–	–
Total standardised approach (CRSA)	**1,922**	**2,226**	**–**	**1,723**
Total	**6,654**	**4,548**	**–**	**19,199**

Assigned endowment insurance policies are also taken into account as collateral. Under the CRR, endowment insurance policies assigned as collateral for IRB transactions are classified as other physical collateral. If they are used as collateral for CRSA exposures, they are treated in the same way as guarantees and therefore shown in the above table under guarantees.

Credit risk and credit risk mitigation in the Standardised Approach

Helaba calculates the own funds requirements for default risk exposures under the CRSA using exclusively external ratings from Standard & Poor's and Moody's Investors Service (the latter only in FSP). The two rating agencies are nominated for the following asset classes: Central governments or central banks, Regional governments or local authorities, Public-sector entities, Multilateral development banks, Institutions, Corporates, Exposures in the form of covered bonds and Exposures in the form of shares in CIUs. When calculating the own funds requirements in relation to securitisations, reference is made to other agencies as well, as explained in greater detail in the section "Securitisations". When applying credit assessments of issues to exposures, an issue rating is assigned to each transaction if one is available. If no issue rating is available, the issuer rating is used. If no issuer rating is available, the country of domicile rating is applied in the case of churches and institutions. If no issuer or country of domicile rating is available, Helaba investigates the possibility of applying long-term ratings of other issues to short- and long-term exposures with the borrower. External ratings are mapped to the CRR rating grades using the standard classification published by the EBA.

EU CR4 – Standardised approach: Credit risk exposure and CRM effects by exposure class

in € m

		a	b	c	d	e	f
		Basis of measurement		Exposure value		RWAs and RWA density	
Exposure classes		On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	RWAs	RWA density in %
1	Central governments or central banks	989	0	989	0	34	3.49
2	Regional governments or local authorities	8,684	904	9,833	569	17	0.17
3	Public-sector entities	1,315	1,947	1,301	941	320	14.28
4	Multilateral development banks	179	0	179	4	0	0.00
5	International organisations	551	0	551	0	0	0.00
6	Institutions	9,151	603	9,572	265	378	3.84
7	Corporates	3,032	494	1,576	105	1,518	90.35
8	Retail	634	228	109	5	91	80.16
9	Exposures secured by real estate	1,597	126	1,597	71	592	35.51
10	Exposures in default	96	6	87	5	107	116.30
11	Higher risk categories	15	9	15	9	36	150.00
12	Covered bonds	332	0	332	0	4	1.09
13	Exposures to institutions and corporates with a short-term credit rating	0	0	0	0	0	0.00
14	Collective investment undertakings (CIU)	21	0	21	0	21	100.00
15	Equity exposures	1,363	29	864	506	923	67.35
16	Other exposures	259	0	259	0	257	99.28
17	**Total**	**28,218**	**4,347**	**27,283**	**2,481**	**4,298**	**14.44**

The tables below show the CRSA exposure value before and after collateral provided. The Comprehensive Method in accordance with Article 223 CRR is applied for financial collateral in the great majority of cases. Helaba also avails itself of Article 113 CRR to exempt default risk exposures to companies belonging to the same group or members of the same institutional protection system permanently from the IRB Approach and to treat them instead as CRSA exposures.

EU CR5 – Standardised approach: Credit risk exposure value by exposure class and risk weight (after credit risk mitigation)

in € m

	Exposure classes	Risk weight 0 %	2 %	4 %	10 %	20 %	35 %	50 %	70 %	75 %
1	Central governments or central banks	715	–	–	–	1	–	18	–	–
2	Regional governments or local authorities	10,310	–	–	–	85	–	–	–	–
3	Public-sector entities	642	–	–	–	1,600	–	–	–	–
4	Multilateral development banks	183	–	–	–	–	–	–	–	–
5	International organisations	551	–	–	–	–	–	–	–	–
6	Institutions	8,657	–	–	–	711	–	463	–	–
7	Corporates	5	–	–	–	125	66	33	–	–
8	Retail	0	–	–	–	–	–	–	–	85
9	Exposures secured by real estate	–	–	–	–	–	1,604	57	–	–
10	Exposures in default	1	–	–	–	–	–	–	–	–
11	Higher risk categories	–	–	–	–	–	–	–	–	–
12	Covered bonds	303	–	–	21	7	–	–	–	–
13	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–	–	–
14	Collective investment undertakings (CIU)	–	–	–	–	–	–	–	–	–
15	Equity exposures	490	–	–	–	–	–	–	–	–
16	Other exposures	2	–	–	–	0	–	–	–	–
17	**Total standardised approach exposure value after credit risk mitigation**	**21,859**	**–**	**–**	**21**	**2,530**	**1,610**	**572**	**–**	**85**

EU CR5 – Standardised approach: Credit risk exposure value by exposure class and risk weight (after credit risk mitigation)

	Exposure classes	Risk weight 100 %	150 %	250 %	370 %	1250 %	Others	Deduct-ed	Total	Of which unrated
1	Central governments or central banks	1	–	–	–	–	254	–	989	989
2	Regional governments or local authorities	–	–	–	–	–	7	–	10,402	10,394
3	Public-sector entities	–	–	–	–	–	–	–	2,242	642
4	Multilateral development banks	–	–	–	–	–	–	–	183	183
5	International organisations	–	–	–	–	–	–	–	551	551
6	Institutions	1	–	–	–	–	4	–	9,837	8,543
7	Corporates	1,039	6	–	–	–	407	–	1,681	1,676
8	Retail	28	–	–	–	–	–	–	113	113
9	Exposures secured by real estate	6	–	–	–	–	–	–	1,668	1,668
10	Exposures in default	59	32	–	–	–	–	–	92	92
11	Higher risk categories	–	24	–	–	–	–	–	24	24
12	Covered bonds	–	–	–	–	–	–	–	332	322
13	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–	–	–
14	Collective investment undertakings (CIU)	21	–	–	–	–	–	–	21	21
15	Equity exposures	852	–	28	–	–	–	–	1,370	1,370
16	Other exposures	257	–	–	–	–	–	–	259	259
17	**Total standardised approach exposure value after credit risk mitigation**	**2,265**	**62**	**28**	**–**	**–**	**672**	**–**	**29,763**	**26,847**

The additional details in the following table are included to meet the requirement in Article 444 e) CRR for a comparative presentation of exposure values before and after credit risk mitigation.

Article 444 CRR – Standardised approach: Credit risk exposure value by exposure class and risk weight (before credit risk mitigation)

in € m

		Risk weight								
Exposure classes		**0 %**	**2 %**	**4 %**	**10 %**	**20 %**	**35 %**	**50 %**	**70 %**	**75 %**
1	Central governments or central banks	714	–	–	–	1	–	18	–	–
2	Regional governments or local authorities	9,008	–	–	–	85	–	–	–	–
3	Public-sector entities	642	–	–	–	1,615	–	–	–	–
4	Multilateral development banks	179	–	–	–	–	–	–	–	–
5	International organisations	551	–	–	–	–	–	–	–	–
6	Institutions	8,203	–	–	–	743	–	464	–	–
7	Corporates	5	–	–	–	5	0	33	–	–
8	Retail	0	–	–	–	–	–	–	–	637
9	Exposures secured by real estate	–	–	–	–	–	1,604	57	–	–
10	Exposures in default	0	–	–	–	–	–	–	–	–
11	Higher risk categories	–	–	–	–	–	–	–	–	–
12	Covered bonds	303	–	–	21	7	–	–	–	–
13	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–	–	–
14	Collective investment undertakings (CIU)	–	–	–	–	–	–	–	–	–
15	Equity exposures	490	–	–	–	–	–	–	–	–
16	Other exposures	2	–	–	–	0	–	–	–	–
17	**Total standardised approach exposure value before credit risk mitigation**	**20,096**	**–**	**–**	**21**	**2,457**	**1,604**	**572**	**–**	**637**

Article 444 CRR – Standardised approach: Credit risk exposure value by exposure class and risk weight (before credit risk mitigation)

in € m

		Risk weight							
Exposure classes		**100 %**	**150 %**	**250 %**	**370 %**	**1250 %**	**Others**	**Deduct-ed**	**Total**
1	Central governments or central banks	1	–	–	–	–	254	–	989
2	Regional governments or local authorities	–	–	–	–	–	7	–	9,099
3	Public-sector entities	–	–	–	–	–	–	–	2,257
4	Multilateral development banks	–	–	–	–	–	–	–	179
5	International organisations	–	–	–	–	–	–	–	551
6	Institutions	1	–	–	–	–	4	–	9,416
7	Corporates	2,840	6	–	–	–	407	–	3,296
8	Retail	64	–	–	–	–	–	–	700
9	Exposures secured by real estate	6	–	–	–	–	–	–	1,668
10	Exposures in default	58	43	–	–	–	–	–	101
11	Higher risk categories	–	24	–	–	–	–	–	24
12	Covered bonds	–	–	–	–	–	–	–	332
13	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–	–
14	Collective investment undertakings (CIU)	21	–	–	–	–	–	–	21
15	Equity exposures	852	–	28	–	–	–	–	1,370
16	Other exposures	257	–	–	–	–	–	–	259
17	**Total standardised approach exposure value before credit risk mitigation**	**4,100**	**73**	**28**	**–**	**–**	**672**	**–**	**30,261**

Credit risk and credit risk mitigation in the IRB Approach

In December 2006, Helaba received approval from the German Federal Financial Supervisory Authority (BaFin) to use the Foundation Internal Ratings-Based (FIRB) Approach as specified in the German Solvency Regulation (Solvabilitätsverordnung – SolvV); this approval covered both the Helaba Group and Helaba Bank. The parameters laid down in the Foundation Approach for internal ratings have been applied for both regulatory capital backing and internal management purposes since 1 January 2007. The approval of the rating model for aircraft finance in December 2010 marked the completion of the regulatory audits in relation to the use of the internal rating models for the FIRBA and thus the full delivery of the IRBA implementation plan. The AIRB Approach has been applied for the retail portfolio of FSP since the second quarter of 2008. In 2013, LBS became the first Bausparkasse to gain permission to use the "LBS-Kunden-Scoring" rating model and the LGD model devised by Sparkassen Rating- und Risikosysteme GmbH (S-Rating) in the AIRB Approach for retail exposures.

Helaba Bank (excluding LBS and WIBank) uses internal rating models for all material portfolios. A total of 14 rating models are available for measuring IRB Approach exposures. These methods make it possible to measure the Bank's credit risks against a uniform standard and express the rating result using a uniform scale. All but one of these models are maintained and refined in collaboration with other Landesbanken and Sparkassen. Helaba works together in this connection with Rating Service Unit GmbH & Co. KG (RSU) at Landesbank level and with Sparkassen Rating- und Risikosysteme GmbH (S-Rating), both of which are companies providing internal rating models in accordance with the CRR. The remaining rating model has been developed for portfolios for which no pooling project has been initiated. The rating models are based on statistical models and classify loan exposures by probability of default using a 25-point cardinal master scale.

The rating models are based on two different methods:

- Scorecard method
  A scorecard (or scoring) method allocates scores to certain customer characteristics (quantitative and qualitative) using a mathematical/statistical analysis with the aim of determining an overall score that can be used as a measure of credit standing. The scores determined in this way are then converted into ratings using a calibration function. Warning indicators and liability scenarios are included in the method to complement the risk assessment.
- Simulation method
  Simulation methods are mainly used to classify risk arising in connection with asset finance. These rating models generate scenarios for future cash flow trends, which are then used to determine a rating and probability of default based on loan-to-value and debt service coverage with the help of a default test that distinguishes between performing and non-performing loan situations. Qualitative factors and warning indicators are added to the quantitative risk assessment.

The use of the rating models is governed by detailed internal specifications plus supplementary application guidelines issued by pooling service providers RSU and S-Rating. The latter are also incorporated as appropriate into the internal procedural instruction system. External credit assessments are mapped to the internal rating scale or reviewed by RSU in a process that is updated every year in order to ensure equivalence between internal ratings and external credit assessments.

a) The application of the rating models in the Bank's operating processes and the functioning of the models are continuously monitored and then also validated in an annual process.

   The rating model application and the functioning of the models is monitored monthly in standardised processes by the unit at the Bank responsible for model development. This monitoring focuses on compliance with process requirements and on the level of appropriate risk differentiation and calibration of the models, taking particular account of override behaviour. Defined quality criteria are used as a basis both for informing the Risk Committee of the Board of Managing Directors about particular trends and for determining certain activities or courses of action, which may also lead to an ad hoc validation.

b) Since 2017, the annual process for validating the rating models (quantitatively and qualitatively) – which had previously been carried out by the Credit Risk Methods department – has been the responsibility of a special Independent Validation group set up for this purpose within the Risk Controlling unit. The validation is based on comprehensive quantitative analyses of the rated portfolio using historical and current data and on qualitative user feedback provided during the ongoing utilisation of the models and at regular user meetings. A structured approach is used to consolidate the findings from the validation process into an overall outcome which is classified as "unqualified validity", "qualified validity", "no validity". Depending on the findings obtained from the quantitative and qualitative validation process, any identified weaknesses are documented and measures initiated to eliminate the weaknesses. Before any action is implemented, modifications to the rating models to eliminate identified weaknesses or to improve rating model attributes are evaluated on the basis of a model change policy, which includes the relevant regulatory requirements and is enshrined in internal operating procedures, and then subjected to the specified acceptance processes in accordance with the defined criteria. Regardless of the introduction of the Independent Validation group, the substance of the existing auditing processes operated by Internal Audit has been retained unchanged. Similar validation activities are also carried out at FSP, where an independent validation function has been established in the Risk Controlling department.

As regards the pooling models used by the Bank, the Helaba processes described above are coordinated with the corresponding processes used by pooling service providers RSU and S-Rating. The separation between Model Development and Independent Validation, which has already been completed internally at Helaba, has now also been completed at the pooling service providers in terms of design. In this context, Helaba ensures that the main findings from the internal application of the models are made available to the pooling service providers so that the information can be taken into account in the central validation and maintenance processes. For their part, the pooling service providers make available to Helaba – in standardised processes and appropriate infrastructure – all the information and data that Helaba needs to carry out the internal validation. A key role is also played by the evidence of the representative nature of the results at pooling level for the portfolio at the level forming an integral component of the validity assessment of the models used.

c) The Risk Committee of the Board of Managing Directors is kept regularly informed of the status of model validity and any model adjustment measures that have been initiated. This is carried out annually as part of an overview of all the models used and also on an ongoing basis through presentations of refinement measures that give rise to a direct impact in terms of regulatory own funds requirements or internal processes at the Bank. The “Validation and Models for Default Risk” management group has been set up to support Helaba management in this reporting process. The results from the validation and further development processes are regularly presented to the group in detail. This forms the basis for a critical assessment, any resulting recommendation and approval. The members of this management group are the heads of division in the lending units that utilise the models at Helaba (front office/back office).

Helaba has developed a Rating Map, providing an overview of the approved rating models, sub-modules, definition criteria and areas of application to help assign exposures and debtors to rating models. The table below shows the Rating Map with the rating models and their assignment to borrowers/exposures in simplified form. The table also shows the use of the rating models in the regulatory exposure classes, although the regulatory exposure classes in the Helaba Group are determined and allocated in an automated downstream process after the ratings are created. This process takes into account information on the rating model applied as well as debtor-specific criteria. In this context the requirement on the assignment of exposure classes satisfies Article 112 et seq. (CRSA) and Article 147 (IRBA) CRR. Other than in the case of securitisations, external credit assessments are not used in calculating the regulatory own funds for transactions handled in accordance with the IRBA.

Article 452 CRR – Overview of approved IRB approach rating models in use at Helaba Bank (excluding LBS and WIBank)

Borrower/exposure	Rating models	Method	Origin of the model
Countries and central, regional and local authorities in Germany	Country and Transfer Risks	Scorecard	Pool model
Central, regional and local authorities outside Germany	International Public Finance	Scorecard	Pool model
Large/multinational corporations, public-sector enterprises (municipal corporations) in Germany and abroad	Corporates Rating	Scorecard	Pool model
Small and mid-sized domestic companies	DSGV Standard Rating	Scorecard	Pool model
Commercial domestic real estate business	DSGV Real Estate Business Rating	Simulation	Pool model
Banks, financial services institutions, financial companies	Bank Rating	Scorecard	Pool model
Insurance companies	Insurance Companies Rating	Scorecard	Pool model
Leasing companies, special purpose vehicles (SPV) for real estate leasing	Leasing Rating	Scorecard	Pool model
Special purpose vehicles (SPV) for project finance	Project Finance Rating	Simulation	Pool model
Special purpose vehicles (SPV) for ship finance	Ship Finance Rating	Simulation	Pool model
International commercial real estate business	International Commercial Real Estate	Simulation	Pool model
Special purpose vehicles (SPV) for aircraft finance	Aircraft Finance Rating	Simulation	Pool model
Securitisations in accordance with Article 259 (4) CRR with no external rating	Internal Assessment Approach (IAA) for Securitisations	Scorecard	Helaba development
Leveraged finance	Leveraged Finance Rating	Scorecard	Pool model

Article 452 CRR – Overview of approved IRB approach rating models in use at Helaba Bank (excluding LBS and WIBank)

	IRB exposure classes						
Borrower/exposure	Central governments or central banks	Institutions	Corporates – SME	Corporates – Specialised lending exposures	Corporates – Other	Equity exposures	Securitisation exposures
Countries and central, regional and local authorities in Germany	x	x			x		
Central, regional and local authorities outside Germany	x	x					
Large/multinational corporations, public-sector enterprises (municipal corporations) in Germany and abroad	x	x	x[1]		x	x[2]	
Small and mid-sized domestic companies		x	x		x		
Commercial domestic real estate business			x	x	x		
Banks, financial services institutions, financial companies		x			x		
Insurance companies					x		
Leasing companies, special purpose vehicles (SPV) for real estate leasing				x	x		
Special purpose vehicles (SPV) for project finance				x			x[3]
Special purpose vehicles (SPV) for ship finance				x			
International commercial real estate business				x		x[2]	x[3]
Special purpose vehicles (SPV) for aircraft finance				x			
Securitisations in accordance with Article 259 (4) CRR with no external rating							x
Leveraged finance				x			

1 Entities that individually constitute SMEs but belong to a corporate group with sales revenue of more than € 50 m.
2 No separate IRB approach rating method has been registered for equity exposures. In the PD/LGD approach, treatment is on the basis of the specified IRBA rating system.
3 These exposures are not conventional securitisation exposures, but financing with structural components similar to securitisation.

The following sections describe the models used in each exposure class and their scope of application.

Central governments or central banks exposure class

At Helaba, country and transfer risk is measured using a special rating model. The core points are the economic situation, the political environment and domestic and foreign trade trends in each country. The country and transfer risk rating model is used to classify loans and advances to borrowers allocated to the "Central governments or central banks" IRB exposure class in accordance with Article 147 (3) CRR in conjunction with Article 115 (2), Article 115 (4), Article 116 (4), Article 117 (2) and Article 118 CRR.

The rating model currently in use was developed at pooling level by RSU in collaboration with the Landesbanken. The development followed a statistical approach (primarily comparison with external ratings, additionally taking into account internal default history). Expert assessments were also included to ensure that the results from the models were economically plausible.

The (further) development of the rating model is also being carried out by RSU in cooperation with the Landesbanken. The (further) development is based on a data pool from many different institutions. The data pool mainly consists of data from institutions' internal systems, such as input values and default experience over time. The analyses forming part of the regular maintenance and validation at pooling level are provided by RSU.

At FSP and LBS, the standardised approach (CRSA) is used for these exposures.

Institutions exposure class

The rating model for institutions is used to classify all borrowers allocated to the "Institutions" IRB exposure class in accordance with Article 147 (4) CRR and taking into account Article 4 (1) sentences 1, 2, 3, Article 115 (2) and (4), Article 116 (4), Article 117 and Article 119 (5) CRR. The objective of the rating model for institutions is to measure the default risk arising from banks worldwide. The application of the model is limited to rated institutions in which most of the operations consist of typical banking activities (application of the term "bank" in substance). It is therefore intended that this rating model should also be used for bank holding companies, savings and loan associations, government financing agencies, finance/financial companies and financial service providers regardless of legal structure if most of their operations consist of typical banking activities. The institutions rating model is also used to rate institutions that are de facto banks on the basis that most of their operations consist of typical banking activities even though they may not have a banking licence. Another important factor is that the model is only used to rate institutions that are subject to supervision and that therefore operate in a regulated environment.

In accordance with Article 107 (3) CRR, non-EU investment firms, banks, exchanges and clearing houses are allocated to the "Institutions" exposure class if they are subject to prudential and supervisory requirements that are at least equivalent to those applied in the EU. If such prudential and supervisory requirements are not equivalent, these institutions are classified as corporates.

The rating model currently in use was developed at pooling level by RSU in collaboration with the Landesbanken. The development followed a statistical approach (comparison with internal default history and with external ratings). Expert assessments were also included to ensure that the results from the models were economically plausible.

The (further) development of the rating model is also being carried out by RSU in cooperation with the Landesbanken. The (further) development is based on a data pool from many different institutions. The data pool mainly consists of data from institutions' internal systems, such as input values and default experience over time. The analyses forming part of the regular maintenance and validation at pooling level are provided by RSU.

At FSP, the ratings for these exposures are taken from the ratings determined by Helaba. At LBS, the standardised approach (CRSA) is used for these exposures.

Corporates exposure class

The rating systems for corporate customers classify borrowers allocated to the "Corporates" IRB exposure class in accordance with Article 147 (7) CRR. A large part of the portfolio is subject to the corporates rating model. It is used to rate major domestic customers with consolidated revenue of € 50 m or more (FSP: more than € 500 m) and all international corporate customers. Domestic borrowers with revenue of less than € 50 m (FSP: € 500 m or less) are rated with the DSGV standard rating system, as are those customers whose relationship is managed by Sparkassen as part of the S-Group business. Institutions that are assessed using the rating system for insurance companies are also assigned to the "Corporates" exposure class. The objective of the insurance company rating system is to assess the default risk arising in connection with insurance companies. For this purpose, insurance companies are also deemed to include those companies (including comprehensive financial services providers) in which most of the income is derived from typical insurance activities. Information on the differences in the procedure used at FSP is provided further down.

The "Corporates" exposure class is subdivided into three subclasses: "Corporates – Specialised lending exposures", "Corporates – SMEs" and "Corporates – Other". If exposures fall within the scope of the rules described below for the first two exposure sub-classes, then they are assigned to the sub-class concerned. Other exposures are allocated to the "Corporates – Other" exposure sub-class.

The rating models currently in use were developed at pooling level by RSU and S-Rating in collaboration with the Landesbanken and Sparkassen. The development followed a statistical approach (depending on data availability, comparison with internal default history and with external ratings). Expert assessments were also included to ensure that the results from the models were economically plausible.

The (further) development of the rating models is also being carried out by RSU and S-Rating in cooperation with the Landesbanken and Sparkassen. The (further) development is based on a data pool from many different institutions. The data pool mainly consists of data from institutions' internal systems, such as input values and default experience over time. The analyses forming part of the regular maintenance and validation at pooling level are provided by RSU and S-Rating.

Corporates exposure class: Specialised lending exposures subclass

The rating systems for specialised lending exposures classify borrowers allocated to the "Corporates – Specialised lending exposures" IRB exposure class in accordance with Article 147 (8) CRR. These exposures form a subclass within the "Corporates" exposure class.

In the case of project finance, ratings are normally based on the cash flow or the user/recipient of the project output. One of the factors that distinguishes project finance from other specialised lending exposures is that the cash flows are generated from a narrowly defined activity rather than from a number of business strategies pursued in parallel. The simulation-based rating model is based on an economic model that reflects the connections between cause and effect. Cash flows, project value and specific transaction details are used as key risk drivers in the simulation. The results from the simulation are transformed, calibrated and then adjusted with the help of qualitative factors.

The specialised lending exposure subclass also includes real estate lending in which the debt is serviced exclusively from the income generated from the financed asset in the form of rent, lease payments or sale proceeds. If the financed real estate is located outside Germany, the rating model developed for this scenario is based on the entire international commercial real estate finance business. The simulation-based rating model is based on an economic model that reflects the connections between cause and effect. Cash flows, asset value and specific transaction details are used as key risk drivers in the simulation. The results from the simulation are transformed, calibrated and then adjusted with the help of qualitative factors. The real estate lending segment also uses the "Real estate business rating" model, which covers commercial real estate finance business involving real estate located in Germany. The model is applied in the same way as the models described above. FSP operates real estate lending business exclusively in Germany.

Further models used in this segment are those applied in respect of aircraft finance and shipping finance (not at FSP); the scope of these models includes financing provided for a special purpose vehicle (SPV) closely related to the financed asset. All of the financing falling within the scope of the rating models used for aircraft and shipping finance is allocated to the specialised lending exposures subclass. These simulation-based rating models are based on an economic model that reflects the connections between cause and effect. In the model used for shipping finance, cash flows, asset value and specific transaction details are used as the main risk drivers, whereas in the case of aircraft finance, the cash flows are not the main source of risk.

In the latter scenario, asset values, the probability of airline default and specific transaction details are used as the principal risk drivers in the simulation.

Corporates exposure class: SME subclass

Article 147 (5) a) ii) in conjunction with Article 501 CRR specifies that the customer's (consolidated) annual revenue must be used as the size indicator (SME threshold).

In accordance with the regulatory requirement, a business is classified as an SME if its annual revenue is greater than 0 and no more than € 50 m.

Equity exposure class

Depending on the nature of the equity investment, it is generally possible to use the same rating models as those described for the exposure classes above. No separate IRB approach rating model has been registered for equity exposures. Action is taken to ensure that the equity investments can be clearly identified in systems and allocated to the "Equity" exposure class in accordance with Article 147 (6) CRR. FSP measures its equity investments using standardised CRR risk weights in the IRB portfolio; as at 31 December 2017, they were measured for the last time in the CRSA portfolio (grandfathering).

Securitisation exposure class

The IAA rating model is generally used for securitisation exposures in the IRB approach. Further details can be found in the "Securitisations" section.

One exception is finance with structural elements similar to securitisation. The rating models for real estate or project finance are used to rate these arrangements in the same way as financing of a similar nature.

The following rating models are used in the business areas served by FSP.

Article 452 CRR – Overview of approved IRB approach rating models in use at FSP

Borrower/exposure	Rating models	Method	Origin of the model
Small and mid-sized domestic companies	DSGV Standard Rating/KKR	Scorecard	Pool model
Commercial domestic real estate business	DSGV Real Estate Business Rating	Simulation	Pool model
Private customers, retail business	Sparkassen – Customer Scoring	Scorecard	Pool model
Banks, financial services institutions, finance companies	LBR Bank Rating	Scorecard	Pool model
Large/multinational corporations, public-sector enterprises (municipal corporations) in Germany and abroad	LBR Corporates Rating	Scorecard	Pool model
Leasing companies, special purpose vehicles (SPV)	LBR Leasing Rating	Scorecard	Pool model

Article 452 CRR – Overview of approved IRB approach rating models in use at FSP

	IRB exposure classes						
Borrower/exposure	**Central governments or central banks**	**Institutions**	**Corporates – SME**	**Corporates – Specialised lending exposures**	**Corporates – Other**	**Equity exposures**	**Securitisation exposures**
Small and mid-sized domestic companies		x	x		x		
Commercial domestic real estate business		x	x		x		
Private customers, retail business			x		x		
Banks, financial services institutions, finance companies	x	x			x		
Large/multinational corporations, public-sector enterprises (municipal corporations) in Germany and abroad		x			x		
Leasing companies, special purpose vehicles (SPV)					x		

Article 452 CRR – Overview of approved IRB approach rating models in use at FSP

	AIRB exposure classes				
	Retail				
Borrower/exposure	**Secured by real estate**	**thereof: SME**	**Qualifying revolving**	**Other retail**	**thereof: SME**
Small and mid-sized domestic companies	x	x	x	x	x
Commercial domestic real estate business					
Private customers, retail business	x	x	x	x	x
Banks, financial services institutions, finance companies					
Large/multinational corporations, public-sector enterprises (municipal corporations) in Germany and abroad					
Leasing companies, special purpose vehicles (SPV)					

In addition to the LBR ratings already described above, the following models are also applied, mainly in the “Corporates” and “Retail” exposure classes:

In the “Corporates” exposure class, ratings are determined for the commercial real estate lending business (e.g. real estate developers, investors or persons of independent means) using the Sparkassen real estate business rating system “Sparkassen-ImmobiliengeschäftsRating”.

This rating system enables Sparkassen to provide their customers with the best possible level of support in connection with the financing of commercial real estate. In this context, commercial real estate is property in connection with which the servicing of the associated debt is to be covered by the income generated from the property (e.g. rent or disposal proceeds). The analysis of the income-generating potential of the real estate covers an extended period.

In the Sparkassen-ImmobiliengeschäftsRating system, the analysis focuses on the property concerned as the borrower’s sole or predominant source of income. The model uses a process consisting of up to four stages to analyse both risk aspects relating to the customer or entity themselves and risk associated with their investment properties.

To ensure that all real estate customers are properly rated, the Sparkassen-ImmobiliengeschäftsRating system must reflect their various strategies. A distinction is made between three customer groups:

- Investors
- Residential real estate companies
- Real estate developers

There are also different levels according to complexity, with various routes to the rating itself, depending on type of customer and value of lending, from the full four-stage process to the considerably more straightforward real estate compact rating (“ImmobilienKompaktRating”).

The other rating models referred to are used in the “Retail” exposure class and also, for relevant customers with an exposure value in excess of the retail business limit of € 750 thousand, in the “Corporates” exposure class.

The rating models for retail exposures classify borrowers allocated to the “Retail” AIRB exposure class in accordance with Article 147 (5) CRR. The “Retail” exposure class is subdivided into four subclasses: “Retail – Secured by real estate”, “Retail – Qualifying revolving exposures”, “Retail – SME” and “Other retail”. If exposures fall within the scope of the rules for the first three exposure sub-classes, then they are assigned to the sub-class concerned. Other exposures are allocated to the “Other retail” exposure sub-class.

A large part of the portfolio is subject to the “SR KundenScoring” (“SR Customer Scoring”) rating model. This model is used to rate non-independent retail customers in connection with retail home finance, consumer credit, overdrafts and credit cards.

The “SR KundenScoring” system makes use of information on the customer’s individual product use, his/her personal data, previous payment history and details available from third parties. Based on the customer’s individual circumstances and the scoring approach, the system aggregates the various scores to determine a specific overall score for each customer.

The “SR-KundenkompaktRating” (“SR Customer Compact Rating”) and “SR-StandardRating” (“SR Standard Rating”) models are also used. The SR-StandardRating model is used to produce ratings for business start-ups, the self-employed and small business borrowers with revenue up to € 500 m.

The Sparkassen standard rating has a modular structure. An initial check is carried out to establish what information is already known about a business and can be fed into the calculation of the rating. This information can be subdivided into a number of categories: financial rating, qualitative factors, account history, warning signals, liability scheme, default information. If information for any of these categories is not available in relation to a business, it is disregarded when determining the rating.

In certain circumstances, existing business customers may be rated with the completely electronic SR-KundenkompaktRating (KKR) system.

This fully automated model provides the customer advisor at the Sparkasse with a rapid credit quality assessment based on a number of factors, including the course of the business relationship to date. The KKR also highlights changes in account use or in the repayment of loans, thereby indicating possible changes in credit quality.

The KKR is suitable for customers who have a lending volume that falls within the scope specified by the bank concerned (maximum total exposure of € 750 thousand) and who have had a business relationship with the bank for at least six months. The credit rating is based on figures that are calculated on a fully automated basis each month.

The KKR can take into account financial products already used by the customer, customer information and previous payment history. For some time, the system has also been able to include information from a standard rating or real estate business rating determined in the past. Depending on the extent to which the data is up to date and available, various data groups (modules) each comprising a number of attributes are assessed. The assessment process involves the allocation of scores, which are then aggregated.

In FSP’s AIRB portfolio, i.e. in the “Retail” exposure class, FSP also applies its own LGD estimates and its own conversion factors (CCFs) in accordance with Article 151 (7) CRR. An integrated system is used for collecting loss data. This constitutes a largely automated process for capturing, managing and analysing loss data.

Loss data must be collected when borrowers are in default, i.e. in arrears or completely insolvent. This includes all information relating to cash flows after the default of the borrower or after the borrower is able to exit default status. This base data can be used to estimate recovery, collection and reverse credit migration ratios. It is also used to calculate the risk costs of future transactions.

The loss data for individual institutions is collected in a loss data pool for the whole of the Sparkassen-Finanzgruppe throughout Germany. As a result, all institutions have access to a representative, statistically validated estimate of loss ratios – even for segments that some individual institutions would find impossible to analyse for statistical purposes because of insufficient data.

For the purposes of the LGD estimate, probabilities are assessed for both recovery and workout scenarios. In the case of the workout scenario, collateral recovery rates and collection rates for unsecured portions of lending are estimated. This procedure takes into account cash flows after default up to the conclusion of the workout process, a period that could cover several years.

The credit conversion factor (CCF) expresses the proportion of an as yet unutilised commitment that will have been drawn down at the time of default. This is calibrated on the basis of the collected loss data by observing the additional drawdowns of agreed but unused facilities in the twelve months prior to a default.

FSP calculates the risk-weighted assets (RWAs) for its retail business using the parameters PD, LGD and CCF, which it estimates itself.

The rating systems currently in use were developed at pooling level by S-Rating in collaboration with the institutions in the Sparkassen-Finanzgruppe. The development followed a statistical approach because, in the case of the “Retail” exposure class, it could generally be assumed that the necessary data would be available. Expert assessments were also included to ensure that the results from the models were plausible from both banking and economic perspectives.

The (further) development of the rating systems is also being carried out by S-Rating in cooperation with the institutions in the Sparkassen-Finanzgruppe. The (further) development is based on a data pool from virtually all the institutions in the Sparkassen-Finanzgruppe. The data pool comprises data almost exclusively from the internal systems of the institutions concerned. This data includes, for example, customer data, customer account data, default experience over time and data from work-out processes in connection with non-performing loans. The analyses forming part of the regular maintenance and validation at pooling and institution levels are provided by S-Rating in close collaboration with FSP.

Application of regulatory minimum PDs

The CRR requires the application of a minimum PD in the PD/LGD approach for exposures in the “Institutions”, “Corporates” and “Equity” exposure classes. A minimum PD of 0.03 % is applied in respect of institutions and corporates. In the case of equity investments, the minimum PD is between 0.09 % and 1.25 % in the PD/LGD approach.

At FSP, a minimum PD of 0.03 % is applied in all exposure classes.

Article 452 CRR – Overview of approved IRB approach rating models in use at LBS

Borrower/exposure	Rating models	Method	Origin of the model
Retail	LBS Customer Scoring	Scorecard	Pool model

Article 452 CRR – Overview of approved IRB approach rating models in use at LBS

	AIRB exposure classes				
	Retail				
Borrower/exposure	Secured by real estate	thereof: SME	Qualifying revolving	Other retail	thereof: SME
Retail	x			x	

LBS makes use of the “LBS-Kunden-Scoring” (LBS Customer Scoring) method devised by S-Rating to evaluate the home finance loans assigned to retail exposures. The assessment of creditworthiness applied here takes account of patterns of behaviour typical for home loan and savings products as well as the customer features considered in the Sparkasse methods, such as length of employment, sector and the like. As at 31 December 2017, LBS had achieved coverage of 99.0 % (RWAs) and 99.7 % (exposure value).

The input parameters and results of the regulatory own funds calculation are integrated into internal management activities at the divisions. Management in the divisions proceeds using a multi-level contribution margin accounting system in which standard risk costs for expected losses and imputed capital costs for the capital requirement are considered.

The table below shows the following for IRB exposures: basis of measurement, exposure value, RWAs, EL and credit risk adjustments in accordance with the CRR, including various averages, such as the average probability of default (PD).

EU CR6 – IRB: Credit risk exposures by exposure class and PD range

		a	b	c	d	e
	PD band	Basis of measurement (on-balance sheet)	Basis of measurement (off-balance sheet)	Average CCF for off-balance-sheet exposures in %	Exposure value	Average PD in %
Central governments or central banks	0.00–<0.15	27,742	474	75.61	30,838	0.00
	0.15–<0.25	–	–	–	–	–
	0.25–<0.50	–	–	–	–	–
	0.50–<0.75	–	–	–	–	–
	0.75–<2.50	–	–	–	–	–
	2.50–<10.00	1	–	–	1	3.95
	10.00–<100.00	369	0	0.00	367	20.00
	100	0	–	–	0	100.00
Subtotal		**28,112**	**474**	**75.55**	**31,206**	**0.24**
Institutions	0.00–<0.15	13,275	1,345	70.54	14,159	0.04
	0.15–<0.25	106	28	12.73	109	0.17
	0.25–<0.50	39	43	46.10	59	0.34
	0.50–<0.75	25	7	56.14	9	0.59
	0.75–<2.50	145	112	45.72	45	0.94
	2.50–<10.00	3	13	28.99	5	4.44
	10.00–<100.00	69	139	74.78	9	19.58
	100	0	–	–	0	0.00
Subtotal		**13,662**	**1,687**	**67.27**	**14,395**	**0.06**
Corporates – Specialised lending exposures	0.00–<0.15	13,073	1,642	68.69	14,012	0.08
	0.15–<0.25	3,697	830	74.25	4,300	0.17
	0.25–<0.50	6,084	1,865	69.03	7,336	0.32
	0.50–<0.75	1,849	704	72.21	2,241	0.59
	0.75–<2.50	3,101	623	67.37	3,310	1.16
	2.50–<10.00	504	86	75.30	569	3.74
	10.00–<100.00	263	2	74.35	148	14.28
	100	278	8	80.04	284	100.00
Subtotal		**28,849**	**5,761**	**70.01**	**32,200**	**1.31**
Corporates – SME	0.00–<0.15	594	257	67.23	766	0.09
	0.15–<0.25	259	50	39.48	275	0.17
	0.25–<0.50	741	188	58.79	848	0.33
	0.50–<0.75	352	109	70.54	435	0.59
	0.75–<2.50	770	237	68.81	930	1.19
	2.50–<10.00	121	31	77.51	85	3.86
	10.00–<100.00	51	13	62.30	59	16.67
	100	45	9	88.69	53	100.00
Subtotal		**2,934**	**895**	**65.22**	**3,451**	**2.42**
Corporates – Other	0.00–<0.15	13,125	11,692	50.97	19,032	0.07
	0.15–<0.25	2,575	1,835	69.10	3,850	0.17
	0.25–<0.50	3,086	2,767	67.26	4,725	0.30
	0.50–<0.75	601	710	71.17	999	0.59
	0.75–<2.50	811	730	61.14	1,118	1.23
	2.50–<10.00	55	75	68.52	91	4.24
	10.00–<100.00	1,936	441	11.24	566	18.93
	100	230	43	73.00	260	100.00
Subtotal		**22,418**	**18,292**	**55.61**	**30,642**	**1.39**

in € m

f	g	h	i	j	k	l
Number of obligors	Average LGD in %	Average maturity	RWAs	RWA density in %	EL	Credit risk adjustments
1291	31.88	2.50	402	1.30	0	
–	–	–	–	–	–	
–	–	–	–	–	–	
–	–	–	–	–	–	
–	–	–	–	–	–	
3	45.00	2.50	1	146.41	0	
38	0.05	2.50	927	252.51	0	
1	45.00	2.50	0	0.00	0	
1333	**31.51**	**2.50**	**1,331**	**4.26**	**0**	**2**
294	34.01	2.50	2,594	18.32	2	
19	35.54	2.50	39	35.29	0	
21	33.88	2.50	29	49.26	0	
5	25.82	2.50	5	50.99	0	
20	43.77	2.50	54	119.26	0	
17	45.00	2.50	8	159.68	0	
40	45.00	2.50	22	250.89	1	
1	0.00	0.00	0	0.00	0	
417	**34.05**	**2.50**	**2,750**	**19.10**	**3**	**4**
418	42.66	2.50	3,682	26.28	5	
143	43.14	2.50	1,773	41.23	3	
271	42.64	2.50	4,114	56.09	10	
68	43.23	2.50	1,704	76.02	6	
112	41.86	2.50	3,117	94.18	16	
19	43.85	2.50	801	140.70	9	
15	42.42	2.50	314	212.52	9	
33	43.46	2.50	0	0.00	124	
1079	**42.70**	**2.50**	**15,506**	**48.15**	**182**	**185**
550	40.82	2.50	171	22.28	0	
362	39.09	2.50	86	31.37	0	
821	36.55	2.50	345	40.63	1	
341	39.28	2.50	263	60.42	1	
606	39.30	2.50	729	78.36	4	
104	40.78	2.50	87	102.89	1	
351	38.76	2.50	106	179.06	4	
36	41.73	2.50	0	0.00	22	
3171	**39.01**	**2.50**	**1,786**	**51.76**	**34**	**19**
1153	42.79	2.50	4,701	24.70	6	
295	43.51	2.50	1,617	42.00	3	
529	41.57	2.50	2,613	55.29	6	
167	42.73	2.50	769	76.96	3	
283	43.06	2.50	1,116	99.79	6	
49	43.01	2.50	130	142.43	2	
974	47.10	2.50	720	127.29	24	
115	46.06	2.50	0	0.00	120	
3565	**42.81**	**2.50**	**11,666**	**38.07**	**169**	**133**

EU CR6 – IRB: Credit risk exposures by exposure class and PD range

		a	b	c	d	e
	PD band	Basis of measurement (on-balance sheet)	Basis of measurement (off-balance sheet)	Average CCF for off-balance-sheet exposures in %	Exposure value	Average PD in %
Retail – Secured by real estate, SME	0.00–<0.15	102	7	65.01	106	0.08
	0.15–<0.25	41	3	74.90	43	0.17
	0.25–<0.50	121	4	69.37	123	0.33
	0.50–<0.75	48	3	71.11	50	0.59
	0.75–<2.50	123	6	69.11	127	1.35
	2.50–<10.00	53	1	69.42	54	4.55
	10.00–<100.00	30	1	68.19	30	17.42
	100	0	0	0.00	0	100.00
Subtotal		**517**	**24**	**68.92**	**534**	**1.94**
Retail – Secured by real estate, non-SME	0.00–<0.15	1,220	20	77.20	1,236	0.06
	0.15–<0.25	400	2	84.34	401	0.17
	0.25–<0.50	676	7	86.93	682	0.32
	0.50–<0.75	135	2	88.47	136	0.59
	0.75–<2.50	292	2	92.96	294	1.33
	2.50–<10.00	99	2	94.83	101	3.83
	10.00–<100.00	38	0	91.38	38	17.92
	100	28	0	100.00	28	100.00
Subtotal		**2,888**	**36**	**82.20**	**2,918**	**1.63**
Retail – Qualifying revolving	0.00–<0.15	9	616	64.21	405	0.04
	0.15–<0.25	3	29	63.87	21	0.17
	0.25–<0.50	7	38	64.04	32	0.32
	0.50–<0.75	5	19	64.69	18	0.59
	0.75–<2.50	18	33	64.96	40	1.31
	2.50–<10.00	9	9	66.13	15	4.40
	10.00–<100.00	3	10	63.51	10	21.11
	100	2	0	99.86	2	100.00
Subtotal		**57**	**755**	**64.25**	**542**	**1.02**
Retail – Other, SME	0.00–<0.15	13	29	63.30	32	0.08
	0.15–<0.25	6	32	56.18	24	0.17
	0.25–<0.50	26	30	68.32	46	0.33
	0.50–<0.75	8	8	67.44	14	0.59
	0.75–<2.50	29	24	66.08	45	1.30
	2.50–<10.00	14	9	64.52	20	4.74
	10.00–<100.00	10	10	60.72	16	19.43
	100	0	0	50.00	0	100.00
Subtotal		**107**	**141**	**63.37**	**197**	**2.54**
Retail – Other, non-SME	0.00–<0.15	241	82	84.40	311	0.07
	0.15–<0.25	99	21	86.06	117	0.17
	0.25–<0.50	175	44	86.43	214	0.32
	0.50–<0.75	58	13	88.87	69	0.59
	0.75–<2.50	95	15	92.97	109	1.27
	2.50–<10.00	29	7	94.76	35	3.90
	10.00–<100.00	9	1	70.08	10	19.05
	100	18	1	99.90	19	100.00
Subtotal		**724**	**185**	**86.44**	**884**	**2.82**

in € m

f	g	h	i	j	k	l
Number of obligors	Average LGD in %	Average maturity	RWAs	RWA density in %	EL	Credit risk adjustments
879	33.22	2.50	6	5.40	0	
261	33.40	2.50	4	9.73	0	
750	33.66	2.50	20	15.85	0	
264	34.44	2.50	12	24.21	0	
677	35.11	2.50	54	42.20	1	
296	33.89	2.50	46	84.27	1	
208	33.60	2.50	43	143.88	2	
1	24.79	2.50	0	0.00	0	
3336	**33.99**	**2.50**	**184**	**34.50**	**3**	**–**
11281	30.14	2.50	62	5.04	0	
3892	30.26	2.50	46	11.57	0	
7421	28.92	2.50	116	17.07	1	
2308	22.94	2.50	29	21.16	0	
4336	20.51	2.50	94	32.05	1	
1308	24.85	2.50	74	73.62	1	
722	22.66	2.50	47	123.08	2	
419	34.29	2.50	16	54.87	10	
31687	**28.32**	**2.50**	**485**	**16.62**	**14**	**5**
110932	63.32	2.50	7	1.85	0	
5996	63.01	2.50	1	6.13	0	
8837	63.24	2.50	3	9.93	0	
5305	62.99	2.50	3	16.12	0	
14384	63.62	2.50	12	29.89	0	
6063	63.72	2.50	10	67.91	0	
4286	63.01	2.50	14	141.66	1	
614	76.59	2.50	1	27.34	1	
156417	**63.37**	**2.50**	**51**	**9.47**	**4**	**1**
1103	61.39	2.50	3	10.41	0	
293	64.89	2.50	5	19.25	0	
694	63.25	2.50	13	28.39	0	
307	62.05	2.50	6	39.31	0	
676	63.97	2.50	25	56.86	0	
441	59.78	2.50	14	70.62	1	
1292	60.87	2.50	17	106.32	2	
3	36.92	2.50	0	2.45	0	
4808	**62.67**	**2.50**	**83**	**42.37**	**3**	**0**
10128	63.75	2.50	38	12.38	0	
4011	61.23	2.50	28	23.84	0	
8270	58.04	2.50	71	33.42	0	
4565	50.21	2.50	29	41.74	0	
7166	46.94	2.50	59	54.36	1	
1891	51.22	2.50	27	77.55	1	
1126	52.66	2.50	12	116.59	1	
868	72.05	2.50	6	32.93	13	
38025	**58.45**	**2.50**	**271**	**30.72**	**17**	**13**

EU CR6 – IRB: Credit risk exposures by exposure class and PD range

		a	b	c	d	e
	PD band	**Basis of measurement (on-balance sheet)**	**Basis of measurement (off-balance sheet)**	**Average CCF for off-balance-sheet exposures in %**	**Exposure value**	**Average PD in %**
IRBA equity exposures – PD/LGD approach	0.00–<0.15	10	–	–	10	0.12
	0.15–<0.25	5	–	–	5	0.17
	0.25–<0.50	29	–	–	29	0.39
	0.50–<0.75	0	–	–	0	0.00
	0.75–<2.50	23	–	–	23	1.25
	2.50–<10.00	–	–	–	–	–
	10.00–<100.00	0	–	–	0	20.00
	100	0	–	–	0	100.00
Subtotal		**66**	**–**	**–**	**66**	**0.63**
IRBA equity exposures – simple risk weight approach		74	14	100.00	88	–
IRBA equity exposures – risk-weighted equities		7	–	–	7	–
Total		**100,416**	**28,265**	**60.42**	**117,130**	**0.94**

in € m

f	g	h	i	j	k	l
Number of obligors	Average LGD in %	Average maturity	RWAs	RWA density in %	EL	Credit risk adjustments
1	65.00	5.00	5	53.47	0	
1	65.00	5.00	4	95.99	0	
1	65.00	5.00	27	92.77	0	
0	0.00	0.00	0	0.00	0	
1	65.00	5.00	45	201.65	0	
–	–	–	–	–	–	
1	65.00	5.00	0	403.70	0	
1	65.00	5.00	0	437.50	0	
6	**65.00**	**5.00**	**82**	**124.15**	**1**	**–**
38	17.69	2.50	240	271.11	1	–
7	13.18	2.50	18	250.00	–	–
243889	**38.42**	**2.50**	**34,453**	**29.41**	**431**	**363**

The exposure-weighted average PD by region and exposure class is also shown as well as, additionally for the retail portfolio, the exposure-weighted average LGD.

Article 452 CRR – Average PD by country, FIRB

Exposure class	Ø PD in %
Central governments or central banks	
Africa	100.00
Asia	–
Australia and New Zealand	–
Europe	0.22
North America	0.01
Central and South America	10.00
Institutions	
Africa	3.95
Asia	0.37
Australia and New Zealand	0.03
Europe	0.07
North America	0.04
Central and South America	15.69
Corporates – Specialised lending exposures	
Africa	100.00
Asia	0.19
Australia and New Zealand	9.54
Europe	1.55
North America	0.46
Central and South America	0.92
Corporates – SME	
Africa	100.00
Asia	0.64
Australia and New Zealand	0.17
Europe	2.42
North America	0.30
Central and South America	–
Corporates – Other	
Africa	10.00
Asia	0.24
Australia and New Zealand	4.76
Europe	1.38
North America	0.79
Central and South America	100.00
Equity exposures	
Africa	–
Asia	–
Australia and New Zealand	–
Europe	0.63
North America	–
Central and South America	–

Article 452 CRR – Retail portfolio average PD/LGD by country, AIRB

Exposure class	Ø PD in %	Ø LGD in %
Retail – Secured by real estate, SME		
Africa	–	–
Asia	0.03	24.79
Australia and New Zealand	–	–
Europe	1.94	33.99
North America	0.03	24.79
Central and South America	–	–
Retail – Secured by real estate, non-SME		
Africa	0.67	26.68
Asia	0.53	31.23
Australia and New Zealand	1.34	37.18
Europe	1.63	28.33
North America	0.62	31.34
Central and South America	0.21	25.60
Retail – Qualifying revolving		
Africa	0.72	63.28
Asia	0.97	62.10
Australia and New Zealand	0.08	64.09
Europe	1.02	63.37
North America	0.96	64.15
Central and South America	0.07	61.35
Retail – Other, SME		
Africa	–	–
Asia	10.09	68.25
Australia and New Zealand	–	–
Europe	2.51	62.70
North America	19.94	25.18
Central and South America	–	–
Retail – Other, non-SME		
Africa	55.76	73.92
Asia	0.79	66.14
Australia and New Zealand	1.33	64.25
Europe	2.82	58.41
North America	0.30	65.86
Central and South America	77.94	80.06

The quality of the PD/LGD approach is demonstrated below through differentiated data per exposure class and PD band. The exposure classes shown are based on the following RWA coverage by IRB-recognised rating modules.

RWA coverage by exposure class

in %

Exposure class	RWA coverage by recognised IRB rating models
Central governments or central banks	99.85
Institutions	99.99
Corporates – Specialised lending exposures	100.00
Corporates – SME	100.00
Corporates – Other	93.19
Retail – Secured by real estate, SME	100.00
Retail – Secured by real estate, non-SME	97.33
Retail – Qualifying revolving	99.01
Retail – Secured by real estate, SME	100.00
Retail – Secured by real estate, non-SME	97.33
Retail – Other, SME	100.00
Retail – Other, non-SME	98.20
Equity exposures	40.24[1]

[1] Lower RWA coverage through use of the simple risk weight approach in addition to the PD/LGD approach

EU CR9 – FIRB: Back-testing of PD per exposure class

a	b	c	d	e	f	
					Number of obligors	
Exposure class	PD band	External rating equivalent[1]	Average PD in %	Average PD by obligors in %	Previous year	Current year
Central governments or central banks	0.00–<0.15	–	0.00	0.00	1,311	1,291
	0.15–<0.25	–	0.00	0.00	0	0
	0.25–<0.50	–	0.00	0.00	0	0
	0.50–<0.75	–	0.00	0.00	0	0
	0.75–<2.50	–	0.00	0.00	0	0
	2.50–<10.00	–	4.03	5.43	3	3
	10.00–<100.00	–	20.00	20.00	29	38
	100	–	100.00	100.00	2	1
Subtotal		**–**	**0.24**	**0.24**	**1,345**	**1,333**
Institutions	0.00–<0.15	–	0.05	0.05	287	295
	0.15–<0.25	–	0.17	0.17	30	19
	0.25–<0.50	–	0.39	0.34	22	21
	0.50–<0.75	–	0.59	0.59	6	4
	0.75–<2.50	–	1.29	1.57	30	20
	2.50–<10.00	–	0.00	0.00	4	17
	10.00–<100.00	–	19.82	19.59	45	40
	100	–	100.00	100.00	3	1
Subtotal		**–**	**0.30**	**0.31**	**427**	**417**

in € m

g	h	i
Defaulted obligors in the reporting period	Of which new obligors	Historical annual default rate in %[2]
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	**0**	**0.00**
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	1.53
0	0	0.00
1	0	2.72
0	0	0.00
1	**0**	**0.05**

EU CR9 – FIRB: Back-testing of PD per exposure class

a	b	c	d	e	f	
					Number of obligors	
Exposure class	PD band	External rating equivalent[1]	Average PD in %	Average PD by obligors in %	Previous year	Current year
Corporates – Specialised lending exposures	0.00–<0.15	–	0.08	0.08	489	418
	0.15–<0.25	–	0.17	0.17	151	143
	0.25–<0.50	–	0.32	0.33	216	271
	0.50–<0.75	–	0.59	0.59	84	68
	0.75–<2.50	–	1.13	1.11	112	112
	2.50–<10.00	–	4.09	3.88	16	19
	10.00–<100.00	–	13.95	14.78	24	15
	100	–	100.00	100.00	66	33
Subtotal		**–**	**3.03**	**3.03**	**1,158**	**1,079**
Corporates – SME	0.00–<0.15	–	0.09	0.09	505	550
	0.15–<0.25	–	0.17	0.17	349	362
	0.25–<0.50	–	0.33	0.33	760	821
	0.50–<0.75	–	0.59	0.59	364	341
	0.75–<2.50	–	1.19	1.22	583	606
	2.50–<10.00	–	3.42	3.76	126	104
	10.00–<100.00	–	16.71	18.75	329	351
	100	–	100.00	100.00	39	36
Subtotal		**–**	**2.80**	**2.86**	**3,055**	**3,171**
Corporates – Other	0.00–<0.15	–	0.07	0.08	1,031	1,153
	0.15–<0.25	–	0.17	0.17	326	295
	0.25–<0.50	–	0.31	0.32	593	529
	0.50–<0.75	–	0.59	0.59	164	167
	0.75–<2.50	–	1.20	1.18	322	283
	2.50–<10.00	–	4.14	4.09	60	49
	10.00–<100.00	–	18.04	19.14	1,024	974
	100	–	100.00	100.00	137	115
Subtotal		**–**	**2.64**	**2.69**	**3,657**	**3,565**
Equity investments	0.00–<0.15	–	0.10	0.10	1	0
	0.15–<0.25	–	0.17	0.17	0	1
	0.25–<0.50	–	0.37	0.37	1	0
	0.50–<0.75	–	0.00	0.00	0	0
	0.75–<2.50	–	0.00	0.00	1	1
	2.50–<10.00	–	0.00	0.00	0	0
	10.00–<100.00	–	0.00	0.00	0	1
	100	–	0.00	0.00	1	1
Subtotal		**–**	**0.24**	**0.24**	**4**	**4**
Total		**–**	**1.78**	**1.80**	**9,646**	**9,569**

[1] Only needs to be reported if Article 180 1f) CRR applied. This article is not applied at Helaba.
[2] The historical default rate is calculated for 4 years (since the introduction of the CRR) and is based on borrowers who were in the portfolio at the beginning of a calendar year.

in € m

g	h	i
Defaulted obligors in the reporting period	Of which new obligors	Historical annual default rate in %[2]
0	0	0.39
0	0	1.37
0	0	0.35
0	0	0.20
0	0	1.73
0	0	10.43
3	0	11.51
0	0	0.00
3	**0**	**0.87**
0	0	0.09
0	0	0.00
1	0	0.11
0	0	0.31
4	0	0.57
8	0	6.96
11	0	4.14
4	2	0.00
28	**2**	**0.64**
0	0	0.05
0	0	0.03
0	0	1.43
0	0	1.46
2	0	0.80
1	0	3.34
5	0	1.40
8	6	0.41
16	**6**	**0.45**
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	**0**	**0.00**
48	**8**	**0.40**

EU CR9 – AIRB: Back-testing of PD per exposure class

a	b	c	d	e	f	
					Number of obligors	
Exposure class	PD band	External rating equivalent[1]	Average PD in %	Average PD by obligors in %	Previous year	Current year
Retail – Secured by real estate, SME	0.00–<0.15	–	0.08	0.07	762	879
	0.15–<0.25	–	0.17	0.17	259	261
	0.25–<0.50	–	0.33	0.33	824	750
	0.50–<0.75	–	0.59	0.59	338	264
	0.75–<2.50	–	1.35	1.35	751	677
	2.50–<10.00	–	4.55	4.40	322	296
	10.00–<100.00	–	17.42	18.56	194	208
	100	–	100.00	100.00	1	1
Subtotal		**–**	**1.94**	**1.98**	**3,451**	**3,336**
Retail – Secured by real estate, non-SME	0.00–<0.15	–	0.06	0.06	11,582	11,281
	0.15–<0.25	–	0.17	0.17	4,118	3,892
	0.25–<0.50	–	0.32	0.31	7,873	7,421
	0.50–<0.75	–	0.59	0.59	2,602	2,308
	0.75–<2.50	–	1.33	1.29	4,564	4,336
	2.50–<10.00	–	3.83	3.93	1,374	1,308
	10.00–<100.00	–	17.92	19.64	840	722
	100	–	100.00	100.00	475	419
Subtotal		**–**	**1.63**	**1.64**	**33,428**	**31,687**
Retail – Qualifying revolving	0.00–<0.15	–	0.04	0.04	111,922	110,932
	0.15–<0.25	–	0.17	0.17	6,504	5,996
	0.25–<0.50	–	0.32	0.32	9,770	8,837
	0.50–<0.75	–	0.59	0.59	5,076	5,305
	0.75–<2.50	–	1.31	1.34	14,772	14,384
	2.50–<10.00	–	4.40	4.54	6,111	6,063
	10.00–<100.00	–	21.11	24.42	4,179	4,284
	100	–	100.00	100.00	397	616
Subtotal		**–**	**1.02**	**1.09**	**158,731**	**156,417**
Retail – Other, SME	0.00–<0.15	–	0.08	0.08	1,023	1,103
	0.15–<0.25	–	0.17	0.17	302	293
	0.25–<0.50	–	0.33	0.32	798	694
	0.50–<0.75	–	0.59	0.59	330	307
	0.75–<2.50	–	1.30	1.32	769	676
	2.50–<10.00	–	4.74	4.74	475	441
	10.00–<100.00	–	19.43	20.84	1,166	1,292
	100	–	100.00	100.00	0	3
Subtotal		**–**	**2.54**	**2.66**	**4,863**	**4,809**

in € m

g	h	i
Defaulted obligors in the reporting period	Of which new obligors	Historical annual default rate in %[2]
0	0	0.04
0	0	0.10
2	0	0.20
0	0	0.16
8	0	0.59
7	0	1.90
12	0	5.37
0	0	0.00
29	**0**	**0.71**
3	0	0.01
9	0	0.06
16	0	0.18
15	0	0.34
53	0	0.92
30	0	2.15
81	1	7.63
2	1	0.00
209	**2**	**0.34**
34	0	0.03
9	0	0.13
23	4	0.22
17	1	0.38
197	40	0.99
167	20	2.30
179	27	3.54
109	99	0.00
735	**191**	**0.25**
0	0	0.00
0	0	0.06
3	1	0.26
1	0	0.36
8	1	0.77
19	1	3.09
44	2	3.70
0	0	0.00
75	**5**	**0.89**

EU CR9 – AIRB: Back-testing of PD per exposure class

a	b	c	d	e	f	
					Number of obligors	
Exposure class	PD band	External rating equivalent[1]	Average PD in %	Average PD by obligors in %	Previous year	Current year
Retail – Other, non-SME	0.00–<0.15	–	0.07	0.07	11,099	10,128
	0.15–<0.25	–	0.17	0.17	4,309	4,011
	0.25–<0.50	–	0.32	0.33	8,925	8,270
	0.50–<0.75	–	0.59	0.59	4,088	4,565
	0.75–<2.50	–	1.27	1.24	6,607	7,166
	2.50–<10.00	–	3.90	4.23	1,670	1,891
	10.00–<100.00	–	19.05	26.13	1,183	1,126
	100	–	100.00	100.00	840	868
Subtotal		**–**	**2.82**	**2.91**	**38,721**	**38,025**
Total		**–**	**1.84**	**1.88**	**239,194**	**234,274**

[1] Only needs to be reported if Article 180 1f) CRR applied. This article is not applied at Helaba.
[2] The historical default rate is calculated for 4 years (since the introduction of the CRR) and is based on borrowers who were in the portfolio at the beginning of a calendar year.

EU CR9 – AIRB: Back-testing of LGD per exposure class

in € m

Exposure class	LGD band	Average LGD	Collateral value	Expected loss	LGD for the last year	Historical LGD
Retail – Secured by real estate, SME	0.00–15.00	0.00	0	0	0.00	0.00
	15.00–30.00	25.29	304	2	0.00	2.30
	30.00–45.00	35.72	97	1	0.00	2.59
	45.00–60.00	51.28	14	0	0.00	13.30
	60.00–75.00	67.45	1	1	20.72	17.61
	75.00–90.00	0.00	0	0	0.00	0.00
	90.00–100.00	0.00	0	0	0.00	0.00
Retail – Secured by real estate, non-SME	0.00–15.00	14.54	216	1	0.00	0.00
	15.00–30.00	23.68	1.776	5	1.93	3.75
	30.00–45.00	35.39	430	4	0.90	3.60
	45.00–60.00	50.53	65	1	3.48	11.44
	60.00–75.00	66.28	6	2	10.91	15.37
	75.00–90.00	84.30	0	1	30.10	37.60
	90.00–100.00	90.32	0	1	79.27	79.27
Retail – Qualifying revolving	0.00–15.00	0.00	0	0	0.00	0.00
	15.00–30.00	24.83	0	0	0.00	0.00
	30.00–45.00	41.94	0	0	0.00	0.00
	45.00–60.00	52.10	0	0	51.18	50.65
	60.00–75.00	65.01	0	2	51.99	38.80
	75.00–90.00	82.82	0	1	32.69	32.61
	90.00–100.00	90.39	0	0	86.29	86.29

in € m

g	h	i
Defaulted obligors in the reporting period	Of which new obligors	Historical annual default rate in %[2]
2	0	0.03
5	0	0.15
17	1	0.29
9	0	0.40
68	4	0.88
46	2	3.45
148	6	13.06
51	44	0.00
346	**57**	**0.53**
1394	**255**	**0.42**

EU CR9 – AIRB: Back-testing of LGD per exposure class

in € m

Exposure class	LGD band	Average LGD	Collateral value	Expected loss	LGD for the last year	Historical LGD
Retail – Other, SME	0.00–15.00	0.00	0	0	0.00	0.00
	15.00–30.00	25.19	8	0	0.10	7.78
	30.00–45.00	32.93	7	0	68.10	39.34
	45.00–60.00	55.63	1	0	41.17	50.06
	60.00–75.00	67.72	0	3	72.21	52.45
	75.00–90.00	0.00	0	0	0.00	0.00
	90.00–100.00	0.00	0	0	0.00	0.00
Retail – Other, non-SME	0.00–15.00	14.54	4	0	0.00	0.00
	15.00–30.00	21.46	10	0	0.00	12.77
	30.00–45.00	34.60	32	1	12.49	17.25
	45.00–60.00	55.18	0	1	53.47	32.14
	60.00–75.00	68.11	0	6	41.95	47.92
	75.00–90.00	84.60	0	6	66.84	58.78
	90.00–100.00	90.12	0	3	56.65	56.65
Total		**39.27**	**2.972**	**41**	**15.31**	**15.99**

EU CR9 – AIRB: Back-testing of CCF per exposure class

	31.12.2017		
Exposure class	Basis of measurement of off-balance-sheet exposures	Average CCF	Exposure value of off-balance-sheet exposures
Retail – Secured by real estate, SME	24	68.92	17
Retail – Secured by real estate, non-SME	36	82.20	29
Retail – Qualifying revolving	755	64.25	485
Retail – Other, SME	141	63.37	90
Retail – Other, non-SME	185	86.44	160
Total	**1,142**	**68.40**	**781**

The table below compares actual losses and expected losses for portfolios handled under the IRBA as at 31 December 2017 and as at the same date in the two previous years. Actual losses are defined as the sum of the utilisation of specific loan loss allowances and provisions, plus direct write-offs, less recoveries on loans and advances previously written off. The EL shown is the EL calculated in accordance with the stipulations of the IRB Approach for the portfolio of loans not in default (excluding securities and derivatives).

The actual losses and the expected loss fell between 31 December 2015 and 31 December 2016, although the actual losses still remain relatively high. These changes resulted primarily from the utilisation of specific loan loss allowances in ship finance in the "Corporates – Specialised lending exposures" exposure class. The EL diminished simultaneously as a result of the derecognition of transactions. Actual losses rose by approximately € 31 m from 31 December 2016 to 31 December 2017. As in the previous year, these changes resulted primarily from the utilisation of specific loan loss allowances in ship finance in the "Corporates – Specialised lending exposures" exposure class.

Article 452 CRR – Actual losses versus expected loss in lending business

in € m

	31.12.2017		31.12.2016		31.12.2015	
Exposure class	Losses	Expected loss	Losses	Expected loss	Losses	Expected loss
Central governments or central banks	0	0	0	0	0	1
Institutions	0	2	0	2	0	3
Corporates	276	117	245	104	314	150
thereof: Specialised lending exposures	204	58	182	61	134	80
thereof: SME	0	12	3	17	9	14
thereof: Other	72	46	60	26	171	56
Retail	2	14	2	16	6	17
thereof: Secured by real estate	0	6	1	8	1	9
thereof: SME	0	3	0	3	0	3
thereof: Qualifying revolving	0	2	0	2	1	2
thereof: Other	1	6	1	6	5	5
thereof: SME	0	3	0	2	0	2
Equity exposures	0	2	0	0	0	0
Total	**278**	**134**	**247**	**123**	**321**	**171**

in € m

	31.12.2016			31.12.2015		
	Basis of measurement of off-balance-sheet exposures	**Average CCF**	**Exposure value of off-balance-sheet exposures**	**Basis of measurement of off-balance-sheet exposures**	**Average CCF**	**Exposure value of off-balance-sheet exposures**
	31	61.14	19	31	67.44	21
	33	81.18	27	49	82.83	41
	769	63.35	487	773	67.88	525
	122	55.90	68	121	61.06	74
	197	86.09	169	189	85.63	162
	1,151	**66.90**	**770**	**1,163**	**70.68**	**822**

Equity Investments in the Banking Book

Helaba's equity investments portfolio contains both strategic and operating equity investments. Strategic equity investments here are corporate relationships established first and foremost not in pursuit of profit through the particular relationship in and of itself but rather for reasons of business policy or business area positioning or similar (with immediate financing concerns never a key factor). The strategic equity investments are broken down into primary and other strategic equity investments. All equity investments associated with lending and/or credit substitutes, in contrast, are classified as operating equity investments. This also applies in respect of equity investments held indirectly through subsidiaries.

Companies to be fully consolidated or accounted for using the equity method in accordance with IFRS are included in the consolidated financial statements with their contributions in accordance with the accounting method shown in the Table of Consolidated Companies. Holdings in companies that are not consolidated are generally accounted for under IFRS at fair value, but may be recognised at cost, minus prior write-downs where applicable, in exceptional cases.

The recoverability of the equity investments portfolio as held is monitored continuously by the relevant front office units and all of Helaba's direct equity investments are subjected to a standard impairment test for the purposes of the annual financial statements, taking into account the principle of materiality. Risk classification for equity investments using a traffic signal method is carried out as part of this testing. Selected equity investments are remeasured twice a year, on 30 June and 31 December.

For regulatory purposes, an exposure value of € 1,531 m is reported in the "Equity investments" exposure class. Exposures reported under the exposure class "higher risk categories" are included in the section entitled Credit Risk.

Article 447 CRR – Type of equity investment instrument

in € m

	Exposure value, on balance sheet	Exposure value, off balance sheet
Exchange-traded equity exposures	41	0
Private equity exposures in sufficiently diversified portfolios	239	19
Other equity exposures	731	501
Total	**1,011**	**520**

In line with the relevant grandfathering provision, equity investments acquired prior to 31 December 2007 are treated in accordance with the CRSA regulations. The PD/LGD approach is generally used at Helaba for new equity investments acquired from 2008 onwards. The IRBA simple risk weight approach is used for these equity investments if no rating has been approved for IRBA purposes.

Total unrealised gains and losses amounted to € 43.6 m as at 31 December 2017. There were no latent remeasurement gains or losses or other amounts included in the original or additional own funds on the reporting date. For more detailed information on equity investment exposures, please refer to Note (30) et seq. and Note (42) et seq. of the Notes to the Consolidated Financial Statements in the **Annual Report**.

Counterparty credit risk (CCR)

The counterparty credit risk exposure resulting from derivatives amounted to € 7,894 m at 31 December 2017. This exposure is calculated using the mark-to-market method only.

EU CCR1 – Analysis of CCR exposure by approach (excluding exposures to CCPs) — in € m

		a	b	c	d	e	f	g
		Notional	**Replacement cost/ current market value[1]**	**Potential future credit exposure[1]**	**Effective expected positive exposure (EEPE)**	**Multiplier**	**Exposure value**	**RWAs**
1	Mark to market		11,786	1,810			7,337	1,032
2	Original exposure	–					–	–
3	Standardised method		–			–	–	–
4	Internal model method (for derivatives and SFTs)			–	–	–	–	–
5	Of which securities financing transactions (SFTs)			–	–	–	–	–
6	Of which derivatives and long settlement transactions			–	–	–	–	–
7	Of which from contractual cross-product netting			–	–	–	–	–
8	Financial collateral simple method (for SFTs)						–	–
9	Financial collateral comprehensive method (for SFTs)						–	–
10	VaR for SFTs						–	–
11	**Total**							**1,032**

[1] Shown for positive fair values

In the standardised approach, the distribution of the counterparty credit risk exposure (before/after credit risk mitigation) by exposure class and risk weight is as follows:

EU CCR3 – Standardised approach: CCR exposures by regulatory portfolio and risk (after credit risk mitigation) in € m

		Risk weight								
Exposure classes		**0 %**	**2 %**	**4 %**	**10 %**	**20 %**	**35 %**	**50 %**	**70 %**	**75 %**
1	Central governments or central banks	–	–	–	–	–	–	–	–	–
2	Regional governments or local authorities	–	–	–	–	–	–	–	–	–
3	Public-sector entities	–	–	–	–	–	–	–	–	–
4	Multilateral development banks	–	–	–	–	–	–	–	–	–
5	International organisations	–	–	–	–	–	–	–	–	–
6	Institutions	1,511	–	–	–	559	–	1	–	–
7	Corporates	0	–	–	–	–	0	–	–	–
8	Retail	–	–	–	–	–	–	–	–	2
	Exposures secured by real estate	–	–	–	–	–	–	–	–	–
	Exposures in default	–	–	–	–	–	–	–	–	–
	Higher risk categories	–	–	–	–	–	–	–	–	–
	Covered bonds	–	–	–	–	–	–	–	–	–
9	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–	–	–
	Collective investment undertakings (CIU)	–	–	–	–	–	–	–	–	–
	Equity exposures	–	–	–	–	–	–	–	–	–
10	Other exposures	–	–	–	–	–	–	–	–	–
11	**Total standardised approach exposure value after credit risk mitigation**	**1,511**	**0**	**0**	**0**	**559**	**0**	**1**	**0**	**2**

EU CCR3 – Standardised approach: CCR exposures by regulatory portfolio and risk (after credit risk mitigation) in € m

		Risk weight					
Forderungsklassen		**100 %**	**150 %**	**1250 %**	**Other**	**Total**	**Of which unrated**
1	Central governments or central banks	–	–	–	–	–	–
2	Regional governments or local authorities	–	–	–	–	–	–
3	Public-sector entities	–	–	–	–	–	–
4	Multilateral development banks	–	–	–	–	–	–
5	International organisations	–	–	–	–	–	–
6	Institutions	–	–	–	–	2,071	2
7	Corporates	26	–	–	–	26	26
8	Retail	0	–	–	–	2	2
	Exposures secured by real estate	–	–	–	–	–	–
	Exposures in default	–	–	–	–	–	–
	Higher risk categories	–	–	–	–	–	–
	Covered bonds	–	–	–	–	–	–
9	Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–
	Collective investment undertakings (CIU)	–	–	–	–	–	–
	Equity exposures	–	–	–	–	–	–
10	Other exposures	–	–	–	–	–	–
11	**Total standardised approach exposure value after credit risk mitigation**	**26**	**0**	**0**	**0**	**2,099**	**30**

The additional details in the following table are included to meet the requirement in Article 444 e) CRR for a comparative presentation of exposure values before and after credit risk mitigation.

Article 444 CRR – Standardised approach: CCR exposures by regulatory portfolio risk (before credit risk mitigation) in € m

	Risk weight								
Exposure classes	**0 %**	**2 %**	**4 %**	**10 %**	**20 %**	**35 %**	**50 %**	**70 %**	**75 %**
Central governments or central banks	–	–	–	–	–	–	–	–	–
Regional governments or local authorities	–	–	–	–	–	–	–	–	–
Public-sector entities	–	–	–	–	–	–	–	–	–
Multilateral development banks	–	–	–	–	–	–	–	–	–
International organisations	–	–	–	–	–	–	–	–	–
Institutions	863	–	–	–	559	–	37	–	–
Corporates	51	–	–	–	–	0	–	–	–
Retail	–	–	–	–	–	–	–	–	125
Exposures secured by real estate	–	–	–	–	–	–	–	–	–
Exposures in default	–	–	–	–	–	–	–	–	–
Higher risk categories	–	–	–	–	–	–	–	–	–
Covered bonds	–	–	–	–	–	–	–	–	–
Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–	–	–	–
Collective investment undertakings (CIU)	–	–	–	–	–	–	–	–	–
Equity exposures	–	–	–	–	–	–	–	–	–
Other exposures	–	–	–	–	–	–	–	–	–
Total standardised approach exposure value before credit risk mitigation	**914**	**0**	**0**	**0**	**559**	**0**	**37**	**0**	**125**

Article 444 CRR – Standardised approach: CCR exposures by regulatory portfolio risk (before credit risk mitigation) in € m

Exposure classes	Risk weight 100 %	150 %	1250 %	Other	Total	Of which unrated
Central governments or central banks	–	–	–	–	–	–
Regional governments or local authorities	–	–	–	–	–	–
Public-sector entities	–	–	–	–	–	–
Multilateral development banks	–	–	–	–	–	–
International organisations	–	–	–	–	–	–
Institutions	–	–	–	–	1,458	2
Corporates	81	–	–	–	132	132
Retail	0	–	–	–	125	125
Exposures secured by real estate	–	–	–	–	–	–
Exposures in default	–	–	–	–	–	–
Higher risk categories	–	–	–	–	–	–
Covered bonds	–	–	–	–	–	–
Exposures to institutions and corporates with a short-term credit rating	–	–	–	–	–	–
Collective investment undertakings (CIU)	–	–	–	–	–	–
Equity exposures	–	–	–	–	–	–
Other exposures	–	–	–	–	–	–
Total standardised approach exposure value before credit risk mitigation	**81**	**0**	**0**	**0**	**1,715**	**259**

The distribution of counterparty credit risk exposure in the IRB approach by exposure class and PD band is as follows:

EU CCR4 – FIRB approach: CCR exposures by portfolio and PD scale

		a	b	c	d
	PD band	Exposure value	Average PD in %	Number of obligors	Average LGD in %
Central governments or central banks	0.00–<0.15	2,876	0.00	115	45.00
	0.15–<0.25	–	–	–	–
	0.25–<0.50	–	–	–	–
	0.50–<0.75	–	–	–	–
	0.75–<2.50	–	–	–	–
	2.50–<10.00	–	–	–	–
	10.00–<100.00	–	–	–	–
	100.00 (Default)	–	–	–	–
Subtotal		**2,876**	**0.00**	**115**	**45.00**
Institutions	0.00–<0.15	1,337	0.07	61	45.00
	0.15–<0.25	35	0.17	4	45.00
	0.25–<0.50	0	0.26	1	45.00
	0.50–<0.75	–	–	–	–
	0.75–<2.50	–	–	–	–
	2.50–<10.00	–	–	–	–
	10.00–<100.00	–	–	–	–
	100.00 (Default)	–	–	–	–
Subtotal		**1,372**	**0.07**	**66**	**45.00**

in € m

e	f	g
Average maturity	RWAs	RWA density in %
2.50	0	0.00
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
2.50	**0**	**0.00**
2.50	324	24.22
2.50	0	1.01
2.50	0	53.54
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
2.50	**324**	**23.63**

EU CCR4 – FIRB approach: CCR exposures by portfolio and PD scale

		a	b	c	d
	PD band	Exposure value	Average PD in %	Number of obligors	Average LGD in %
Corporates – Specialised lending exposures	0.00–<0.15	391	0.07	107	43.89
	0.15–<0.25	38	0.17	30	44.65
	0.25–<0.50	258	0.37	90	43.55
	0.50–<0.75	6	0.59	11	45.00
	0.75–<2.50	92	1.18	22	37.31
	2.50–<10.00	44	3.98	3	45.00
	10.00–<100.00	0	20.00	2	42.40
	100.00 (Default)	–	–	–	–
Subtotal		**829**	**0.51**	**265**	**43.16**
Corporates – SME	0.00–<0.15	0	0.06	3	45.00
	0.15–<0.25	1	0.17	4	45.00
	0.25–<0.50	2	0.26	3	45.00
	0.50–<0.75	0	0.59	3	45.00
	0.75–<2.50	–	–	–	–
	2.50–<10.00	–	–	–	–
	10.00–<100.00	–	–	–	–
	100.00 (Default)	–	–	–	–
Subtotal		**3**	**0.23**	**13**	**45.00**
Corporates – Other	0.00–<0.15	555	0.08	152	44.36
	0.15–<0.25	48	0.17	33	45.00
	0.25–<0.50	83	0.30	58	44.16
	0.50–<0.75	5	0.59	6	45.00
	0.75–<2.50	12	1.41	22	43.76
	2.50–<10.00	4	2.96	4	45.00
	10.00–<100.00	7	20.00	1752	44.70
	100.00 (Default)	1	100.00	1	45.00
Subtotal		**715**	**0.47**	**2028**	**44.38**
IRBA equity exposures	**Subtotal**	**–**	**–**	**–**	**–**
Total		**5,794**	**0.15**	**2487**	**44.66**

EU CCR4 – AIRB approach: CCR exposures by portfolio and PD scale

		a	b	c	d
	PD band	Exposure value	Average PD in %	Number of obligors	Average LGD in %
Retail – Secured by real estate, SME	**Subtotal**	**–**	**–**	**–**	**–**
Retail – Secured by real estate, non-SME	**Subtotal**	**–**	**–**	**–**	**–**
Retail – Qualifying revolving	**Subtotal**	**–**	**–**	**–**	**–**
Retail – Other, SME	0.00–<0.15	–	–	–	–
	0.15–<0.25	–	–	–	–
	0.25–<0.50	–	–	–	–
	0.50–<0.75	–	–	–	–
	0.75–<2.50	–	–	–	–
	2.50–<10.00	–	–	–	–
	10.00–<100.00	0	20.00	1	64.25
	100.00 (Default)	–	–	–	–
Subtotal		**0**	**20.00**	**1**	**64.25**
Retail – Other, non-SME	**Subtotal**	**–**	**–**	**–**	**–**
Total		**0**	**20.00**	**1**	**64.25**

in € m

e	f	g
Average maturity	RWAs	RWA density in %
2.50	100	25.55
2.50	16	42.68
2.50	159	61.82
2.50	5	79.13
2.50	77	83.81
2.50	65	147.41
2.50	1	237.93
–	–	–
2.50	**423**	**51.00**
2.50	0	16.21
2.50	0	37.09
2.50	1	42.23
2.50	0	57.63
–	–	–
–	–	–
–	–	–
–	–	–
2.50	**1**	**40.42**
2.50	148	26.59
2.50	21	43.05
2.50	47	55.97
2.50	4	79.13
2.50	13	104.37
2.50	6	135.68
2.50	18	253.07
2.50	0	0.00
2.50	**255**	**35.70**
–	**–**	**–**
2.50	**1.004**	**17.32**

e	f	g
Average maturity	RWAs	RWA density in %
–	**–**	**–**
–	**–**	**–**
–	**–**	**–**
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
2.50	0	115.63
–	–	–
2.50	**0**	**115.63**
–	**–**	**–**
2.50	**0**	**115.63**

Helaba does use credit derivatives to protect counterparty credit risk exposures as part of its risk mitigation efforts, but such products account for only a small proportion of its overall collateral arrangements. There were no exposures collateralised with credit derivatives on the reporting date.

The following table shows exposures in the banking book that mitigate credit risk. As at 31 December 2017, there were no credit derivative transactions in connection with intermediation activities as specified in Article 439 h) CRR.

EU CCR6 – Overview of credit derivatives exposures

in € m

	a	b	c
	Credit derivative hedges		
Own portfolio	**Protection bought**	**Protection sold**	**Other credit derivatives**
Notionals			
Single-name credit default swaps (CDS)	–	–	–
Index credit default swaps (CDS)	–	–	–
Total return swaps	–	–	–
Credit options	–	–	–
Other credit derivatives	–	–	–
Total notionals	**–**	**–**	**10,000**
Fair values			
Positive fair value (asset)	**–**	**–**	**0**
Negative fair value (liability)	**–**	**–**	**0**

Capital is allocated internally to default risks from derivatives in accordance with the capital allocation process explained in the section "Own Funds and Own Funds Structure". Derivative exposures with each counterparty are limited as part of the internal counterparty-specific default risk containment and monitoring processes. Since the beginning of 2017, risk exposures for derivatives on a transaction-by-transaction basis have been determined using an internal derivatives measurement method. Helaba does not avail itself of the possibility of taking into account interactions/correlation effects between the risk types as a way of mitigating risk.

Since October 2012, Helaba has cleared its OTC interest rate derivatives business through LCH.Clearnet in London. Since July 2017, CDS transactions have been cleared through a clearing member of ICI Europe. The requirements arising from the European Market Infrastructure Regulation (EMIR) are therefore being satisfied. In order to expand business activities with customers and counterparties, Helaba has also been a clearing member for OTC interest rate derivatives at Eurex since September 2017.

The following table shows Helaba's exposures to central counterparties (CCPs).

EU CCR8 – Exposures to CCPs

in € m

		a	b
		Exposure value	RWAs
1	**Exposures to qualified CCPs (total)**		**111**
2	Exposures for trades with qualified CCPs (excluding initial margin and default fund contributions), of which	557	111
3	(i) OTC derivatives	513	103
4	(ii) Exchange-traded derivatives	42	8
5	(iii) Securities financing transactions (SFTs)	2	0
6	(iv) Contractual cross-product netting	–	–
7	Insolvency-protected (segregated) initial margin	7	
8	Not insolvency-protected (not segregated) initial margin	–	–
9	Prefunded default fund contributions[1]	41	–
10	Alternative calculation of own funds requirements for exposures		–
11	**Exposures to non-qualified CCPs (total)**		**–**
12	Exposures for trades with non-qualified CCPs (excluding initial margin and default fund contributions), of which	–	–
13	(i) OTC derivatives	–	–
14	(ii) Exchange-traded derivatives	–	–
15	(iii) Securities financing transactions (SFTs)	–	–
16	(iv) Contractual cross-product netting	–	–
17	Insolvency-protected (segregated) initial margin	–	
18	Not insolvency-protected (not segregated) initial margin	–	–
19	Prefunded default fund contributions	–	–
20	Unfunded default fund contributions	–	–

[1] Through application of Article 310 CRR the prefunded default fund contribution does not require capital backing

The net exposure is calculated daily for each individual counterparty and compared with the accepted value of the collateral provided. Collateral netting is conducted taking into account the exemptions and minimum transfer amounts that have been contractually defined subject to the creditworthiness of the counterparty. Exposures are protected with cash collateral. The relevant collateral amounts are calculated automatically in an application system that obtains the contract parameters from a contract database and the necessary market values directly from the trading system in which they are maintained.

Processes and procedures are detailed in full in a Collateral Policy. The Helaba Best Practice contains the standard clauses approved at Helaba for collateral agreements (eligible collateral, haircuts, etc.).

EU CCR5-A – Impact of netting and collateral held on exposure values

in € m

		a	b	c	d	e
		Positive fair value before netting	Effects of netting	Positive fair value after netting	Collateral held	Positive fair value after netting and collateral held (net credit exposure)
1	Derivatives and long settlement transactions	14,109	8,051	6,058	2,022	4,036
2	Securities financing transactions	–	–	–	–	–
3	Contractual cross-product netting	–	–	–	–	–
4	**Total**	**14,109**	**8,051**	**6,058**	**2,022**	**4,036**

EU CCR5-B – Composition of collateral for exposures to CCR

in € m

	a	b	c	d	e	f
	Collateral used in derivatives and long settlement transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral			
	Insolvency-protected (segregated)	Not insolvency-protected (not segregated)	Insolvency-protected (segregated)	Not insolvency-protected (not segregated)	Fair value of collateral received	Fair value of posted collateral
Cash contribution in €	1,994	–	–	3,277	–	–
Cash contribution in other currencies	135	–	–	–	–	–
Debt securities, central governments, Germany	–	–	–	–	–	–
Debt securities, central governments, other countries	–	–	–	–	–	–
Debt securities, central governments, other public authorities	–	–	–	–	–	–
Debt securities, corporates	–	–	–	–	–	–
Equity securities, corporates	–	–	–	–	–	–
Other	–	–	–	–	–	–
Total	**2,129**	**–**	**–**	**3,277**	**–**	**–**

The additional amount of collateral to be provided by Helaba in the event of a possible rating downgrade is simulated at regular intervals on the basis of the contract parameters. If the amount concerned is found to be significant in terms of Helaba's liquidity management, it can then be included accordingly in bank-wide liquidity risk scenarios. Currently, however, the amounts involved, which are associated primarily with a reduction in the minimum transfer amounts (MTA) for Helaba, remain negligible.

Own funds requirements for credit valuation adjustment (CVA) risk are calculated in accordance with Article 381 CRR. This article defines credit valuation adjustment as an adjustment to the mid-market valuation of the portfolio of transactions with a counterparty. This adjustment reflects the current market value of the credit risk of the counterparty to the institution, but does not reflect the current market value of the credit risk of the institution to the counterparty.

EU CCR2 – CVA capital charge

in € m

		a	b
		Exposure value	RWAs
1	CVA risk subject to the advanced method	–	–
2	(i) VaR component (including the multiplier)		–
3	(ii) SVaR component (including the multiplier)		–
4	CVA risk subject to the standardised method	1,190	759
EU4	CVA risk based on the original exposure method	–	–
5	Total CVA risk	1,190	759

Securitisations

Objectives and scale of securitisation exposures and functions performed

Helaba engages in securitisation business primarily in order to provide attractive finance options for its target customers. It does not purchase asset-backed securities outside of its target customer business. Helaba has yet to securitise any of its own assets, meaning that it has so far performed the functions of investor and sponsor (own special purpose vehicles OPUSALPHA, OPUSDELTA and OPUSLAMBDA) but not that of originator. In its securitisation business, Helaba invests primarily in credit products, provides liquidity facilities for its own special purpose vehicles and purchases assets from target customers. It assumes no risks in connection with securitisation activities outside of the risk types indicated in the "Risk Strategy and Risk Management" section. No implicit support as defined in Article 248 CRR has been provided.

Methods used to calculate the risk-weighted exposure amounts including types of securitisation exposure

The approaches employed by Helaba in order to ensure compliance with regulatory own funds requirements in respect of securitisation transactions are set out below. Also shown are the asset types included in the securitisation portfolio under each of the approaches at 31 December 2017.

Article 449 CRR – Approaches used for securitisation transactions

Approach	Securitisation approach	Asset type
CRSA	Ratings-based approach	Residential real estate
	Risk concentration rate with average risk weight	Handelsforderungen Consumer credit Other
	Qualifying liquidity facilities	Currently not applicable
	Second-loss or better ABCP positions	Currently not applicable
IRB	Ratings-based approach	Commercial real estate Residential real estate Other
	Internal Assessment Approach (IAA)	Trade receivables Lease receivables Loans to corporates
	Inferred rating	Currently not applicable
	Supervisory Formula Approach (SFA)	Commercial real estate Trade receivables Lease receivables Loans to corporates Other

Except for securitisation exposures at FSP, securitisations with underlying assets from the retail sector were handled using CRSA variants as at 31 December 2017. For all other securitisation transactions, the IRB Approach risk weight is determined using the applicable methods insofar as they fall within the scope of application. Helaba does not avail itself of the fallback solution for qualifying liquidity facilities that is permitted under the CRR.

Helaba uses the following rating agencies, which were recognised by BaFin for risk weighting in connection with bank regulation in June 2007:

- Standard & Poor's
- Moody's Investors Service
- Fitch Ratings

These rating agencies are used for all of the asset types referred to above.

Processes employed to monitor changes in securitisation exposures and their recoverability

A defined process documented in the internal procedural instruction system ensures that all relevant data and documents of significance – especially such data and documents relating to the monitoring of how changes in the securitised assets affect the recoverability of the securitisation exposures – are procured, analysed and evaluated promptly on a continuous basis both prior to any investment in a securitisation and for existing exposures.

The front office unit concerned is in principle responsible for procuring the necessary data and additional information, which is then assessed by the organisational unit responsible for credit processing. The office whose approval is required under the standard process verifies the adequacy of the analysis and evaluation in the course of deciding whether or not to approve the transaction.

Should data and additional information of significance for the analysis and evaluation of the securitisation be unavailable, new investments may not be made and existing exposures may not be maintained. The data and additional information procured, the assessment results and, where applicable, the decisions made and/or measures adopted in the context of the assessment are documented with a full audit trail in the credit file.

The same process applies analogously to resecuritisation exposures.

Quantitative disclosures concerning securitisation exposures

The tables below show the total volume of the Helaba Group's securitisation exposures (in its role as investor and sponsor) in the banking book and in the trading book broken down by underlying asset type and risk weight band. As at 31 December 2017, there were no resecuritisation exposures in the portfolio.

Article 449 CRR – Total volume of securitisation exposures by asset type

in € m

			Securitisations							
			Commercial real estate	Residential real estate	Current trade receivables	Lease receivables	Loans to corporates	Consumer credit	Other	Total
Own special purpose vehicles	Banking book	On balance sheet	–	–	765	367	178	–	350	1,660
		Off balance sheet	–	–	217	358	252	–	58	885
	Trading book	Derivatives	–	–	0	–	4	–	–	4
Liquidity lines for ABCP programmes/EETC financing for third-party special purpose vehicles	Banking book	Off balance sheet	–	–	–	65	156	–	–	221
Other securitisation exposures in respect of third-party special purpose vehicles	Banking book	On balance sheet	164	–	2,129	48	657	344	230	3,572
		Off balance sheet	5	–	335	17	0	43	17	418
	Trading book	Derivatives	0	–	–	–	4	–	–	4
Securities	Banking book	On balance sheet	–	29	–	–	–	–	19	48
Total			**169**	**29**	**3,446**	**856**	**1,251**	**387**	**674**	**6,812**

Article 449 CRR – Total volume of retained or purchased securitisation exposures by risk weight band | in € m

Risikogewichtsbänder		Securitisations: Total volume	Securitisations: Own funds requirement, SA	Securitisations: Own funds requirement, IRB
≤ 10 %	Banking book	4,094	0	22
	Trading book	8	–	0
> 10 % to < 20 %	Banking book	662	–	8
	Trading book	–	–	–
≥ 20 % to < 50 %	Banking book	512	–	10
	Trading book	–	–	–
≥ 50 % to < 100 %	Banking book	1,190	68	6
	Trading book	0	–	0
≥ 100 % to 850 %	Banking book	312	15	47
	Trading book	–	–	–
> 850 % to < 1.250 %	Banking book	–	–	–
	Trading book	–	–	–
1.250 % / Capital deduction	Banking book	34	0	18
	Trading book	–	–	–
Total		**6,812**	**83**	**111**

Material changes in the securitisation exposures as compared with the previous year are the result of new business with target customers and amortisation in respect of securities.

Helaba acts as sponsor for the securitisation special purpose vehicles OPUSALPHA, OPUSDELTA and OPUSLAMBDA. The portfolio of OPUSALPHA, a special purpose vehicle for a hybrid ABCP programme, consists partly of receivables that have been purchased by customers and partly of asset-backed securities. OPUSDELTA is a credit-financed special purpose vehicle through which receivables from goods and services are securitised. OPUSLAMBDA is a special purpose vehicle used for a financing arrangement within the Sparkassen-Finanzgruppe.

The table below shows the nature and extent of Helaba's securitisation exposures in respect of its own special purpose vehicles as investor or sponsor. All of the exposures apart from interest rate and currency swaps are banking book exposures.

Article 449 CRR – Total volume of securitisation exposures in respect of own special purpose vehicles | in € m

			Securitisations: Commercial real estate	Securitisations: Residential real estate	Securitisations: Current trade receivables	Securitisations: Lease receivables	Securitisations: Loans to corporates	Securitisations: Consumer credit	Securitisations: Other	Total
Sponsor	Banking book	On balance sheet	–	–	765	367	178	–	350	1,660
		Off balance sheet	–	–	217	358	252	–	58	885
	Trading book	Derivatives	–	–	0	–	4	–	–	4
Gesamt			**–**	**–**	**982**	**725**	**434**	**–**	**408**	**2,549**

Internal assessment models (IAA)

Helaba has two internal assessment models, both of which are based on the related methodology of rating agency Standard & Poor's.

The scope of application encompasses securitisations and purchases of a company's receivables from the sale of products or the provision of services ("trade") and also other securitisations and purchases of loans and lease receivables (including transactions with a small proportion of outstanding receivables).

The model used to assess trade receivables looks initially at the risks arising from the underlying portfolio and the transaction-specific payment guarantee structures. The portfolio default risks are calculated here by a method analogous to that used by Standard & Poor's. The risk associated with the payment guarantee structures and major individual borrowers and credit insurance arrangements is estimated, moreover, and the commingling risk and dilution risk are considered via expert appraisals.

The model used for loans and lease receivables analyses the risks of the portfolio and transaction-specific payment guarantee structures and also the seller risk, which is essentially dominated by the servicer risk. The portfolio default risks are determined on the basis of monthly or annual default rates using the corresponding Standard & Poor's stress factors. The risk associated with the payment guarantee structures and major individual borrowers is also analysed. The seller risk is determined by means of a flat-rate estimate of the servicer risk in combination with the rating of the seller.

The regulatory capital charge is calculated with reference to the internal assessment approach if the transaction belongs to an ABCP programme and the underlying asset type is subject to the IRB approach. The internal assessment models are also applied in the context of the internal lending process. This applies to transactions in ABCP programmes and non-ABCP programmes in which the underlying asset type is subject to the Standardised Approach at Helaba. In the case of transactions that do not belong to an ABCP programme and in which the underlying asset type is subject at Helaba to the IRBA, the one-year loss disregarding credit enhancements can be determined using the internal assessment model for use in calculating KIRB. The regulatory own funds requirement is then ascertained under the SFA.

Helaba has implemented the mechanisms detailed below in relation to the use of the internal assessment model and the verification of its suitability.

Helaba implements the rating method with the same IT environment used for its other internal rating systems, so here too compliance with all process-related requirements, such as the application of the double verification principle, is assured.

- Initial processing is handled by the front office unit in the case of new business involving complex financing arrangements and by Credit Risk Management (CRM) in the case of business with existing customers and more straightforward financing arrangements.
- Responsibility for follow-up processing in the case of new business rests with whichever of CRM and the front office unit did not perform initial processing. CRM always handles follow-up processing in the case of business with existing customers.
- The subsequent technical release of the rating in LB-Rating simultaneously determines the default rating grade and is always performed by CRM.

The independent validation unit within Risk Controlling performs and documents a validation of the two internal assessment models using the proprietary validation concept annually in order to verify their suitability. This process includes a comparison of the current Helaba methodology with the related publications from Standard & Poor's as well as discussions with the Group's own analysts. The results are subject to review by Internal Audit.

The internal assessment model for trade receivables assigns the portfolio risk for this asset type with reference to the relevant stress factors published by Standard & Poor's. Similarly, the internal assessment model for loans and lease receivables makes use of the relevant set of stress factors published in respect of receivables from automobile loans and automobile leasing as well as equipment leasing.

Market Risk

Standardised method

Although the Helaba Group uses the internal model to calculate the regulatory own funds requirements for general interest rate risk, it relies on the standardised method to calculate the RWAs and the own funds requirements for its other market risks in the trading book.

EU MR1 – Market risk in accordance with the standardised method — in € m

		a	b
		RWAs	Capital requirement
	Simple products		
1	Interest rate risk (general and specific)	1,023	82
2	Equity risk (general and specific)	11	1
3	Currency risk	273	22
4	Commodity risk	8	1
	Options		
5	Simplified approach	–	–
6	Delta-plus method	–	–
7	Scenario approach	22	2
8	Securitisation (specific risk)	–	–
9	**Total**	**1,338**	**107**

Internal model

All market risks are quantified every day using a money-at-risk (MaR) method backed up by stress tests and sensitivity analyses. The MaR specifies 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.

Helaba calculates the regulatory own funds required for the general interest rate risk (€ 116 m at 31 December 2017) using an internal model in accordance with the CRR for Helaba Bank. 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 supervisor.

EU MR2-A – Market risk in internal models approach

in € m

	a	b
	RWAs	Capital requirement
1 **VaR** (the higher of a) and b))	**480**	**38**
a) Previous day's VaR (Article 365 (1) CRR (VaRt-1))		13
b) Average of the daily VaR on each of the preceding 60 business days (Article 365 (1) CRR) (VaRavg) x multiplication factor (mc) in accordance with Article 366 CRR		38
2 **sVaR** (the higher of a) and b))	**968**	**77**
a) Latest sVaR (Article 365 (2) CRR (sVaRt-1))		27
b) Average of the daily sVaR on each of the preceding 60 business days (Article 365 (2) CRR) (sVaRavg) x multiplication factor (ms) in accordance with Article 366 CRR		77
3 **IRC** Incremental risk charge – IRC (the higher of a) and b))	**–**	**–**
a) Most recent IRC value (additional default and migration risks, calculated in accordance with Articles 370 and 371 CRR)		–
b) Average of the IRC value over the preceding 12 weeks		–
4 **Internal model for correlation trading activities** (highest of a), b) and c))	**–**	**–**
a) Most recent risk measure number for the correlation trading portfolio (Article 377 CRR)		–
b) Average of the risk measure number for the correlation trading portfolio over the preceding 12 weeks		–
c) 8 % of the own funds requirement in the standardised approach for the most recent risk measure number for the correlation trading portfolio (Article 338 (4) CRR)		–
5 **Other**		**–**

The linear interest rate risk is measured on the basis of a variance-covariance approach, while the interest rate option risk is calculated using a Monte Carlo simulation. Country- and rating-dependent government, financials and corporate yield curves are also used alongside swap and Pfandbrief curves for evaluation purposes in the context of linear risk measurement. Both risk measurement systems are based on the same statistical parametrisation laid down by the banking supervisor (one-tailed confidence level of 99 %, holding period of ten trading days, historical observation period of one year), which is used for both regulatory purposes and internal management. Historically observed values (with equal weightings) are factored into the calculation of the statistical parameters, which are updated monthly. A mixed approach comprising relative and absolute changes is used to model the risk factors. The ten-day MaR is calculated directly, i.e. without applying any scaling. Helaba also uses the same methodology to determine a stressed MaR (money-at-risk in a crisis scenario). The stressed MaR reflects the risk from the present exposure using risk parameters (volatilities, correlations) from the most significant one-year stress period in the past – currently those from the crisis in the eurozone in 2012. The table below shows the trading book interest rate risks for Helaba Bank for financial year 2017.

EU MR3 – IMA values for trading portfolios

in € m

		a
VaR (10 day 99 %)		
1	Maximum value	29.3
2	Average value	16.7
3	Minimum value	11.0
4	Value on reporting date	12.6
Stressed VaR, sVaR (10 day 99 %)		
5	Maximum value	31.7
6	Average value	21.9
7	Minimum value	13.8
8	Value on reporting date	27.0
Incremental risk charge, IRC (99.9 %)		
9	Maximum value	–
10	Average value	–
11	Minimum value	–
12	Value on reporting date	–
Internal model for correlation trading activities		
13	Maximum value	–
14	Average value	–
15	Minimum value	–
16	Value on reporting date	–

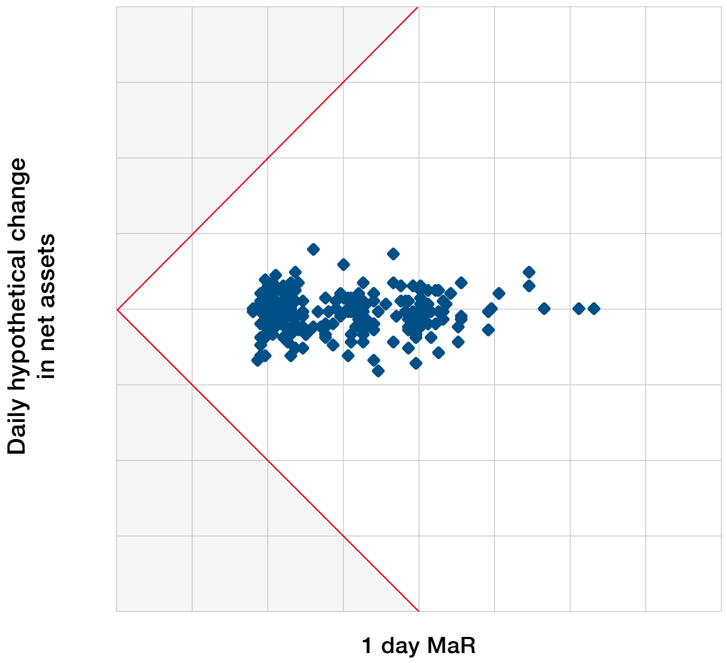
The year-on-year decline in the MaR in 2017 was primarily attributable to a modification of the model in the second quarter approved by the banking supervisor. In addition to improving the modelling of trends in interest rates in the environment of low interest rates, this modification also broadened the yield curve universe. The change in the stressed MaR in 2017 resulted from a switch in the periods used for the crisis scenario, which in turn was caused by the modification of the model.

Back-testing and validation

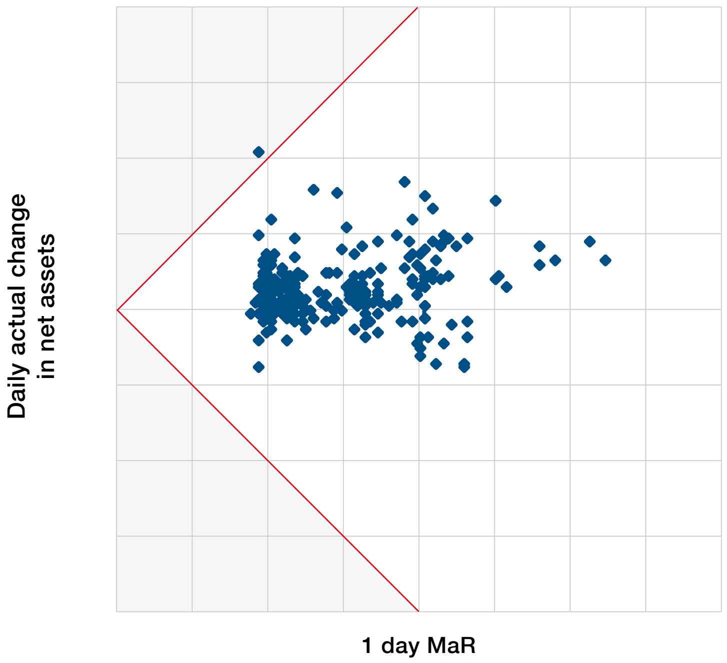
Clean and dirty back-testing is carried out daily to review the predictive quality of the risk models. The data used in these procedures is verified to ensure it is of the requisite quality. The procedures involve determining the MaR figure for a holding period of one trading day with a one-tailed confidence level of 99 % and a historical observation period of one year. This forecast risk amount is then compared against the hypothetical (clean) and actual (dirty) change in net assets. The hypothetical change in net assets 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. This figure only takes into account valuation-related effects that can be attributed to interest rate risk. The actual change in value also takes into account effects from portfolio changes and valuation effects not attributable to interest rate risk. Any case in which the decrease in the net value of the trading book exceeds the potential risk figure constitutes a back-testing outlier.

The regulatory back-testing of Helaba's internal model for general interest rate risk, which consists of the model components MaRC² and ELLI, produced no negative outliers in 2017. The following charts show the results from clean and dirty back-testing for the entire internal model approved by the banking supervisor (figures in € m).

EU MR4 – Clean back-testing of the internal model



EU MR4 – Dirty back-testing of the internal model



The appropriateness of the internal market risk model is continuously reviewed during the course of regular operations and also annually in a comprehensive model validation process. Ad hoc validations are additionally carried out, if required. The annual and any ad hoc model validations are the responsibility of an independent unit that is separate from model development. The validations comprise qualitative and quantitative analyses of key aspects of the model. These procedures include analyses of the data, parameters and key assumptions used in the model. Changes to models resulting from the model validation process are implemented in accordance with a model change policy that has been submitted to the banking supervisor. The main findings from the model validation process are reported to the Risk Committee.

Stress tests

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 measurement routine. Various portfolios are remeasured regularly under the assumption of extreme market scenarios. Unless specific banking regulatory provisions apply, the portfolios selected for stress testing and the frequency of the stress tests depend on the level of exposure (materiality) and the existence of any risk concentrations. 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 inverse stress tests and stress tests across risk types conducted in the course of Helaba's calculation of risk-bearing capacity.

Measurement of trading book exposures

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 Helaba 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 Helaba and subject to a regular review.

In the case of financial instruments for which there are no prices on an active market on the reference date or in respect of which no prices for comparable financial instruments on active markets can be determined, the fair value is determined using generally accepted standard 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.

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 measurement uncertainty resulting from the use of a model-based valuation technique. 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. The credit value adjustment (CVA) reflects the imputed loss risk to which Helaba believes it is exposed in respect of its counterparty, based on a positive fair value from Helaba'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). The exposure over time is estimated using a Monte Carlo simulation. A debit value adjustment (DVA) mirrors the CVA and is defined as that imputed part of a negative fair value (from Helaba's perspective) 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.

The inclusion of adjustments takes into account the requirements for prudent valuation.

The valuation 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 verification is carried out to ensure that the inputs used for measuring the financial instruments are in line with the market. Risk Controlling is responsible for this process, which is referred to as independent price verification.

Articles 104 and 105 CRR are taken into account in the measurement of trading book positions.

Limitation of market risks

Helaba employs a uniform limit structure to limit market risks. The process through which limits are allocated involves the Risk and Credit Committee of the Supervisory Board as well as the Bank's internal committees. The cumulative limit defined for market risk, which is proposed by the Board of Managing Directors on the basis of the Bank's risk-bearing capacity, must be approved by the Supervisory Board's Risk and Credit Committee.

Acting through the Asset/Liability Management Committee, the Board of Managing Directors allocates limits to the risk-relevant divisions and to the various types of market risk within the scope of the overall limit for market risk. 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 risk.

Interest Rate Risk in the Banking Book

The interest rate risks in Helaba's banking book consist mainly of positions taken by Asset/Liability Management, which is responsible for funding and for the management of the interest rate and liquidity risks in the banking book, and the net balance of non-interest-bearing funds. Helaba employs the MaR approach used for the trading book for the daily mapping of the interest rate risks in the banking book. Contractual agreements and the interest rates fixed for positions or products are generally taken into account. However variable-rate products at FSP, such as savings and sight deposits, are not subject to a specified fixed interest rate or fixed capital commitment period, so fictional maturities determined with a moving averages model are used for containment activities in respect of the relevant interest rate risk.

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 shocks. The computation examines the effects of a change of ±200 basis points in interest rates in line with the requirements of the banking supervisor. Such an interest rate shock would have caused a negative change in the value of the banking book for the Helaba Group at year-end 2017 of € 277 m; the lion's share of it from a loss of € 258 m on euro exposures. The remaining loss of € 19 m would have been attributable to foreign currencies, with the US dollar accounting for € 8 m, the Canadian dollar € 5 m, the Swiss franc € 4 m and the Swedish krona € 1 m. With a view to improving clarity in the presentation of figures, the listing of individual currencies is limited to those that individually account for at least 5 % and those that are necessary to cover at least 95 % of the total foreign currency share. Helaba determines the effect of interest shocks in accordance with the requirements of BaFin Circular 11/2011. The impact from an interest rate shock is also determined in accordance with the EBA guidelines on the management of interest rate risk arising from non-trading activities (EBA/GL/2015/08).

Operational Risk

Principles of risk containment

In accordance with regulatory requirements, Helaba has adopted an integrated approach for managing operational risk. This approach is used to identify, manage and monitor operational risk.

At Helaba, the containment of operational risk is segregated from the monitoring of this risk on both a solid-line and dotted-line basis. Risk management is accordingly a local responsibility discharged by Helaba's individual units, which are supported in this task by central containment units. Central responsibility for operational risk monitoring rests with the Risk Controlling unit.

Tools

Helaba uses the standardised method to calculate the adequacy of its own funds for regulatory purposes.

Operational risks are contained and monitored using a risk management system that identifies, records and presents risks and losses in a structured manner. This makes it possible to compare and cross-check risks and loss data systematically and contain them with appropriate measures.

Operational risks are classified systematically with reference to Helaba's proprietary risk model, which is based on the Basel event categories. The view of risk used for internal risk assessment purposes is thus fully congruent with that of the regulator. The quantification methodology is based on a modelling approach that encompasses internal and external losses plus risk scenarios created by the business units and plausibility-checked by the Risk Controlling unit.

Technical assistance to help facilitate the management of operational risk is provided in the form of a web-based application that supports local data access and a central database along with a central application for risk reporting.

Operational risks are avoided or limited using insurance arrangements that cover specific losses up to agreed maximum limits and also by means of established measures in internal processes and other workflows.

Asset Encumbrance

Encumbered assets are broadly speaking all of those assets to which the institution would not have unrestricted access in the event of a possible insolvency. Assets that are pledged, for example, or that serve as collateral for other transactions are always considered to be encumbered assets.

The disclosure requirements were published in December 2017 in Commission Delegated Regulation (EU) 2017/2295. Although these rules were not yet binding on the reporting date, the following description is nevertheless based on the new requirements. This does not include the additional disclosure requirements specified in Article 2. The quarterly figures in the reporting year have been used as the basis for determining the median values.

Helaba's funding strategy aims for a diversified funding mix. In 2017, asset encumbrance was mainly a factor in connection with Pfandbrief issuance and development business, as was also the case in previous years. The excess cover in the cover funds above and beyond the applicable legal requirements ensures substantial room for manoeuvre with issues. The median level of the cover funds was € 35.2 bn and accounted for around two thirds of asset encumbrance in the Group. Retained Pfandbriefe arose from market-making and had a median volume of € 0.1 bn. They were not used for funding purposes or in connection with other asset encumbrance and led to a pro rata reduction in the figure reported for encumbered assets.

Encumbrance is also relevant in the context of derivative and repo transactions. Helaba generally only enters into such transactions under standard market master agreements/collateral agreements. In this case, there are only small differences between assets pledged or transferred as collateral and the underlying sources of encumbrance, caused mainly by standard measurement markdowns. Within the Helaba Group, the transactions referred to above are concentrated at Helaba Bank and are primarily denominated in euros. Again, there were no significant year-on-year changes in 2017.

The carrying amount of unencumbered assets also includes a small amount relating to items that could only be subject to limited encumbrance. These items primarily consist of the positive fair values of derivatives, intangible assets and deferred taxes.

Article 443 CRR – Assets

in € m

	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets of reporting institution	**52,665**		**109,268**	
Equity instruments			2,012	2,012
Debt securities	7,062	7,062	21,446	21,380
Thereof: Covered bonds	463	463	5,001	5,004
Thereof: Asset-backed securities			61	61
Thereof: Issued by governments	2,715	2,715	5,666	5,660
Thereof: Issued by financial institutions	4,145	4,144	15,618	15,531
Thereof: Issued by non-financial institutions	54	54	163	213
Other assets	45,129		86,376	
Thereof: Cover pool assets	35,243			

Article 443 CRR – Collateral received

in € m

	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
Collateral received by reporting institution	**320**	**6,297**
Callable loans		
Equity instruments		
Debt securities	213	6,297
Thereof: Covered bonds	17	1,603
Thereof: Asset-backed securities		
Thereof: Issued by governments	59	3,467
Thereof: Issued by financial institutions	154	2,769
Thereof: Issued by non-financial institutions		24
Loans and advances other than callable loans	150	
Other collateral received		
Own debt securities issued other than own covered bonds and ABSs		347
Own covered bonds, and ABSs issued but not yet pledged as collateral		110
ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	53,474	

Article 443 CRR – Sources of encumbrance

in € m

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and encumbered ABSs
Carrying amount of selected financial liabilities	**50,446**	**52,519**
Thereof: Cover pool assets	29,262	35,243

Annex

Key Features of the Capital Instruments

This overview ("Key Features of the Capital Instruments") has been prepared by Landesbank Hessen-Thüringen Girozentrale solely for the purpose of compliance with the disclosure requirements set out in "COMMISSION IMPLEMENTING REGULATION (EU) No 1423/2013 of 20 December 2013 laying down implementing technical standards with regard to disclosure of own funds requirements for institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council".

The publication of this specific data constitutes neither an offer nor a recommendation to purchase securities or other instruments.

Key Features of the Capital Instruments		Instrument 1	Instrument 2	Instrument 3
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	n. a.	n. a.	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Common Equity Tier 1	Common Equity Tier 1	Additional Tier 1
5	Post-transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Share capital (amount excluding capital reserves)	Capital reserves	Silent participation
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	589	1,920	24
9	Par value of instrument (issue currency, in € m)	589	1,920	25
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	589	1,920	25
9a	Issue price	n. a.	n. a.	100.00 %
9b	Redemption price	n. a.	n. a.	n. a.
10	Accounting classification	Paid-up share capital	Paid-up share capital	Liability – amortised cost
11	Original issue date	01.07.1992 / 01.01.2001 / 01.07.2012	30.12.1998 / 06.12.2011 / 09.12.2011	03.12.01
12	Perpetual or dated	Perpetual	Perpetual	Perpetual
13	Original maturity date	No maturity	No maturity	No maturity
14	Issuer call subject to prior supervisory approval	No	No	Yes
15	Optional call date and redemption amount	n. a.	n. a.	31.12.2024 / Carrying amount as at call date (repayment after financial statements adopted)
16	Subsequent call dates, if applicable	n. a.	n. a.	31.12. every 10 yrs. 2-yr. notice period
	Coupons/dividends			
17	Fixed or floating dividend/coupon	n. a.	n. a.	Floating
18	Coupon rate and any related index	n. a.	n. a.	2.4990% / EUR swap interest rate
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary	Partially discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	n. a.	n. a.	Yes
31	If write-down: write-down trigger(s)	Absorption of share of loss as CET1 instrument	Absorption of share of loss as CET1 instrument	Net loss for the year
32	If write-down: full or partial	Full or partial	Full or partial	Full or partial
33	If write-down: permanent / temporary / n.a.	Absorption of share of loss as CET1 instrument	Absorption of share of loss as CET1 instrument	Temporary
34	If temporary write-down: reversal mechanism	n. a.	n. a.	Write-up from net income from year (in proportion to the other instruments concerned of the same class)
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks ahead of all others in absorption of share of loss	Ranks ahead of all others in absorption of share of loss	Ranks behind subordinated liabilities (i.e. satisfied after all creditors)
36	Non-compliant transitioned features	No	No	Yes
37	If yes, specify non-compliant features	n. a.	n. a.	See feature 20a

[1] No portions of the issue have been reclassified to a lower level.

Key Features of the Capital Instruments		Instrument 4	Instrument 5	Instrument 6
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen via Main Capital Funding Limited Partnership
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	DE000A0E4657
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Additional Tier 1	Additional Tier 1	Additional Tier 1
5	Post-transitional CRR rules	Tier 2	Ineligible	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Silent participation	Silent participation	Silent participation – packaged in bearer bond –
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	145	120	250
9	Par value of instrument (issue currency, in € m)	145	130	250
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	145	130	250
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	n. a.	n. a.	n. a.
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	14.12.01	14.12.01	02.06.05
12	Perpetual or dated	Perpetual	Perpetual	Perpetual
13	Original maturity date	No maturity	No maturity	No maturity
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	31.12.2024 / Carrying amount as at call date (repayment after financial statements adopted)	31.12.2024 / Carrying amount as at call date (repayment after financial statements adopted)	31.12.2020 / Nominal amount
16	Subsequent call dates, if applicable	31.12. every 10 yrs. 2-yr. notice period	31.12. every 10 yrs. 2-yr. notice period	31.12. each yr. 2-yr. notice period only if carrying amount = nom. amount
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Floating	Floating	Fixed
18	Coupon rate and any related index	2.4990% / EUR swap interest rate	2.3490 % / EUR swap interest rate	5.5000 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Partially discretionary	Partially discretionary	Partially discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	Yes	Yes	Yes
31	If write-down: write-down trigger(s)	Net loss for the year	Net loss for the year	Indirect – net loss for the year
32	If write-down: full or partial	Full or partial	Full or partial	Full or partial
33	If write-down: permanent / temporary / n.a.	Temporary	Temporary	Temporary
34	If temporary write-down: reversal mechanism	Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Indirect – write-up from net income from year (in proportion to the other instruments concerned of the same class)
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind subordinated liabilities (i.e. satisfied after all creditors)	Ranks behind subordinated liabilities (i.e. satisfied after all creditors)	Ranks behind subordinated liabilities (i.e. satisfied after all creditors)
36	Non-compliant transitioned features	Yes	Yes	Yes
37	If yes, specify non-compliant features	See feature 20a	See feature 20a	See feature 20a

[1] No portions of the issue have been reclassified to a lower level.

Instrument 7	Instrument 8	Instrument 9	Instrument 10	Instrument 11
Landesbank Hessen-Thüringen via Main Capital Funding II Limited Partnership	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
DE000A0G18M4	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Additional Tier 1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2
Tier 2	Ineligible	Ineligible	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Silent participation – packaged in bearer bond –	Silent participation	Silent participation	Profit participation rights without certificate	Profit participation rights without certificate
250	19	108	0	0
250	39	114	35	25
EUR	EUR	EUR	EUR	EUR
250	39	114	35	25
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
n. a.	n. a.	n. a.	n. a.	n. a.
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
01.12.06	01.12.97	05.12.97	16.05.06	15.05.06
Perpetual	Perpetual	Perpetual	Dated	Dated
No maturity	No maturity	No maturity	31.12.17	31.12.17
Yes	Yes	Yes	Yes	Yes
31.12.2020 / Nominal amount	31.12.2021 / Carrying amount as at call date (repayment 6 months later)	31.12.2021 / Carrying amount as at call date (repayment 6 months later)	n. a.	n. a.
31.12. each yr. 2-yr. notice period only if carrying amount = nom. amount	31.12. each yr. 3-yr. notice period	31.12. each yr. 3-yr. notice period	n. a.	n. a.
Fixed	Floating	Floating	Fixed	Fixed
5.7500 %	2.3200 % / FAZ bond index	2.0700 % / FAZ bond index	5.1475 %	5.1475 %
No	No	No	No	No
Partially discretionary	Partially discretionary	Partially discretionary	Partially discretionary	Partially discretionary
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Cumulative	Cumulative	Cumulative	Cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Yes	Yes	Yes	Yes	Yes
Indirect – net loss for the year	Net loss for the year	Net loss for the year	Net accumulated loss	Net accumulated loss
Full or partial	Full or partial	Full or partial	Full or partial	Full or partial
Temporary	Temporary	Temporary	Temporary	Temporary
Indirect – write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned)	Write-up from net income from year (in proportion to the other instruments concerned)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)
Ranks behind subordinated liabilities (i.e. satisfied after all creditors)	Ranks behind subordinated liabilities (i.e. satisfied after all creditors)	Ranks behind subordinated liabilities (i.e. satisfied after all creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
Yes	Yes	Yes	No	No
See feature 20a	See feature 20a	See feature 20a	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 12	Instrument 13	Instrument 14
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Profit participation rights without certificate	Profit participation rights without certificate	Profit participation rights without certificate
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	6	1	16
9	Par value of instrument (issue currency, in € m)	30	5	20
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	30	5	20
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	n. a.	n. a.	n. a.
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	10.05.06	11.05.06	12.05.06
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	31.12.18	31.12.18	31.12.21
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	5.1500 %	5.1800 %	5.3000 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Partially discretionary	Partially discretionary	Partially discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Cumulative	Cumulative	Cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	Yes	Yes	Yes
31	If write-down: write-down trigger(s)	Net accumulated loss	Net accumulated loss	Net accumulated loss
32	If write-down: full or partial	Full or partial	Full or partial	Full or partial
33	If write-down: permanent / temporary / n.a.	Temporary	Temporary	Temporary
34	If temporary write-down: reversal mechanism	Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 15	Instrument 16	Instrument 17	Instrument 18	Instrument 19
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	DE000HLB88G7
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Profit participation rights without certificate	Profit participation rights without certificate	Profit participation rights without certificate	Profit participation rights without certificate	Profit-participation certificate
8	24	1	20	16
10	30	1	100	20
EUR	EUR	EUR	EUR	EUR
10	30	1	100	20
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
n. a.	n. a.	n. a.	n. a.	n. a.
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
29.05.06	01.06.06	12.06.06	09.10.06	12.06.06
Dated	Dated	Dated	Dated	Dated
31.12.21	31.12.21	31.12.21	31.12.18	31.12.21
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
5.1225 %	5.1750 %	5.2100 %	4.8325 %	5.2200 %
No	No	No	No	No
Partially discretionary	Partially discretionary	Partially discretionary	Partially discretionary	Partially discretionary
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Cumulative	Cumulative	Cumulative	Cumulative	Cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Yes	Yes	Yes	Yes	Yes
Net accumulated loss	Net accumulated loss	Net accumulated loss	Net accumulated loss	Net accumulated loss
Full or partial	Full or partial	Full or partial	Full or partial	Full or partial
Temporary	Temporary	Temporary	Temporary	Temporary
Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)	Write-up from net income from year (in proportion to the other instruments concerned of the same class)
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 20	Instrument 21	Instrument 22
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	ES0257763005	XS0128218327
3	Law applicable to the instrument	German law	Spanish law (subordinated: German law)	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated bond	Subordinated bond
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	9	6	52
9	Par value of instrument (issue currency, in € m)	10	12.000	52
	Issue currency	EUR	ESP	EUR
	Par value of instrument (EUR equivalent, in € m)	10	72	52
9a	Issue price	100.00 %	98.53 %	99.79 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	19.09.06	29.05.98	23.04.01
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	19.09.22	29.05.18	23.04.41
14	Issuer call subject to prior supervisory approval	No	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Floating
18	Coupon rate and any related index	4.4425 %	5.6000 %	0.0642 % / Euribor
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 23	Instrument 24	Instrument 25	Instrument 26	Instrument 27
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
XS0128429619	XS0128429619	XS0132805762	XS0130374183	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated bond	Subordinated bond	Subordinated bond	Subordinated bond	Subordinated bond
20	30	15	30	30
20	30	15	30	30
EUR	EUR	EUR	EUR	EUR
20	30	15	30	30
99.68 %	99.84 %	100.05 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
03.05.01	14.05.01	18.07.01	01.06.01	10.07.13
Dated	Dated	Dated	Dated	Dated
03.05.41	03.05.41	18.07.31	01.06.31	10.07.23
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Floating	Floating	Floating	Fixed	Fixed
0.0540 % / Euribor	0.0540 % / Euribor	0.1790 % / Euribor	6.2500 %	4.2600 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

Key Features of the Capital Instruments		Instrument 28	Instrument 29	Instrument 30
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	15	10	20
9	Par value of instrument (issue currency, in € m)	15	10	20
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	15	10	20
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	12.07.13	11.07.13	15.07.13
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	12.02.25	11.07.28	15.07.27
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	4.3200 %	4.6800 %	4.6300 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 31	Instrument 32	Instrument 33	Instrument 34	Instrument 35
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
5	5	5	5	23
5	5	5	5	23
EUR	EUR	EUR	EUR	EUR
5	5	5	5	23
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11.07.13	15.07.13	12.07.13	11.07.13	17.07.13
Dated	Dated	Dated	Dated	Dated
11.07.23	15.07.26	12.07.24	11.07.23	17.07.23
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
4.2500 %	4.5300 %	4.3500 %	4.2400 %	4.1200 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 36	Instrument 37	Instrument 38
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	10	8
9	Par value of instrument (issue currency, in € m)	5	10	8
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	10	8
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	17.07.13	12.07.13	15.07.13
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	17.07.23	12.07.23	17.07.23
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	4.1800 %	4.2000 %	4.1800 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 39	Instrument 40	Instrument 41	Instrument 42	Instrument 43
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
14	82	6	2	9
14	82	6	2	9
EUR	EUR	EUR	EUR	EUR
14	82	6	2	9
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
23.07.13	19.07.13	17.07.13	24.07.13	24.07.13
Dated	Dated	Dated	Dated	Dated
22.07.33	19.07.23	17.07.28	24.07.26	24.07.23
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
4.7000 %	4.2000 %	4.6000 %	4.4000 %	4.1000 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 44	Instrument 45	Instrument 46
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	10	6	19
9	Par value of instrument (issue currency, in € m)	10	6	20
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	10	6	20
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	25.07.13	31.07.13	31.07.13
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	25.07.23	31.07.28	31.07.28
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	4.1300 %	4.5900 %	4.6300 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 47	Instrument 48	Instrument 49	Instrument 50	Instrument 51
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	DE000HLB0WG6	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated bond	Subordinated loan	Subordinated loan
3	75	25	15	20
3	75	25	15	20
EUR	EUR	EUR	EUR	EUR
3	75	25	15	20
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
29.07.13	31.07.13	14.08.13	05.08.13	02.08.13
Dated	Dated	Dated	Dated	Dated
31.07.23	31.07.23	14.08.23	05.08.33	02.08.23
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
4.2300 %	4.2500 %	4.2600 %	4.7300 %	4.2650 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 52	Instrument 53	Instrument 54
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	DE000HLB0WH4	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated bond	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	25	10
9	Par value of instrument (issue currency, in € m)	5	25	10
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	25	10
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	02.08.13	15.08.13	09.08.13
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	02.08.30	15.08.23	09.08.23
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	4.7500 %	4.2300 %	4.2800 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 55	Instrument 56	Instrument 57	Instrument 58	Instrument 59
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	DE000HLB0WJ0	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated bond	Subordinated loan	Subordinated loan	Subordinated loan
10	5	4	10	5
10	5	5	10	5
EUR	EUR	EUR	EUR	EUR
10	5	5	10	5
100.00 %	100.00 %	100.00 %	99,92 %	99,78 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – fair value option	Liability – amortised cost	Liability – amortised cost
29.08.13	04.09.13	05.09.13	23.09.13	26.09.13
Dated	Dated	Dated	Dated	Dated
29.08.23	04.09.23	05.09.33	22.09.23	26.09.23
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Currently fixed, subsequently floating	Fixed	Fixed
4.4200 %	4.4200 %	5.0000 % / EUR swap interest rate	4.4300 %	4.4000 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 60	Instrument 61	Instrument 62
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	10	2
9	Par value of instrument (issue currency, in € m)	5	10	2
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	10	2
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	04.10.13	04.10.13	09.10.13
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	04.10.23	04.10.23	09.10.23
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	4.3500 %	4.3400 %	4.4000 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 63	Instrument 64	Instrument 65	Instrument 66	Instrument 67
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	DE000HLB02N4	DE000HLB0WK8	DE000HLB0WL6
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated bond	Subordinated bond	Subordinated bond
10	6	208	5	5
10	6	215	5	5
EUR	EUR	EUR	EUR	EUR
10	6	215	5	5
100.00 %	100.00 %	98.06 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
09.10.13	28.10.13	06.11.13	01.11.13	01.11.13
Dated	Dated	Dated	Dated	Dated
09.10.23	28.10.24	06.11.23	01.11.23	01.11.23
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Floating	Fixed
4.3700 %	4.4150 %	4.0000 %	1.9740 % / Euribor	4.3000 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

Key Features of the Capital Instruments		Instrument 68	Instrument 69	Instrument 70
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	1	5
9	Par value of instrument (issue currency, in € m)	5	1	5
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	1	5
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	04.11.13	05.11.13	06.11.13
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	04.11.33	05.11.24	06.11.23
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	4.8750 %	4.4150 %	4.1900 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 71	Instrument 72	Instrument 73	Instrument 74	Instrument 75
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
1	5	5	5	10
1	5	5	5	10
EUR	EUR	EUR	EUR	EUR
1	5	5	5	10
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
13.11.13	28.11.13	11.12.13	11.12.13	17.01.14
Dated	Dated	Dated	Dated	Dated
13.11.23	28.11.23	11.12.23	11.12.23	17.01.24
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
4.2700 %	4.2100 %	4.2850 %	4.2650 %	4.3400 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

Key Features of the Capital Instruments		Instrument 76	Instrument 77	Instrument 78
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	30	7	39
9	Par value of instrument (issue currency, in € m)	30	7	39
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	30	7	39
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	23.01.14	06.02.14	06.02.14
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	23.01.34	06.02.26	06.02.34
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	4.6300 %	4.1000 %	4.4700 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 79	Instrument 80	Instrument 81	Instrument 82	Instrument 83
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
5	11	5	11	20
5	10	5	10	20
EUR	EUR	EUR	EUR	EUR
5	10	5	10	20
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – fair value option	Liability – amortised cost	Liability – fair value option	Liability – amortised cost
12.02.14	06.03.14	11.03.14	13.03.14	21.03.14
Dated	Dated	Dated	Dated	Dated
12.02.29	06.03.34	11.03.24	13.03.34	21.12.29
Yes	Yes	Yes	Yes	Yes
n. a.	06.03.2024 / Nominal amount	n. a.	13.03.2024 / Nominal amount	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
4.3400 %	4.6800 %	3.8800 %	4.7000 %	4.3000 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 84	Instrument 85	Instrument 86
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	25	10	1
9	Par value of instrument (issue currency, in € m)	25	10	1
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	25	10	1
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	15.04.14	09.05.14	13.05.14
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	15.04.24	09.05.34	13.05.24
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	3.6300 %	4.2300 %	3.6350 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 87	Instrument 88	Instrument 89	Instrument 90	Instrument 91
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
DE000HLB4L07	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	DE000HLB4L15	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated bond	Subordinated loan	Subordinated loan	Subordinated bond	Subordinated loan
20	8	25	10	3
20	8	25	10	3
EUR	EUR	EUR	EUR	EUR
20	8	25	10	3
100.00 %	100.00 %	100.00 %	100,04 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
23.05.14	03.06.14	05.06.14	10.06.14	12.06.14
Dated	Dated	Dated	Dated	Dated
23.05.24	03.06.24	05.06.24	10.06.24	12.06.34
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Floating	Fixed	Fixed	Fixed	Fixed
1.6270 % / Euribor	3.3100 %	3.3500 %	3.3000 %	4.0100 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

Key Features of the Capital Instruments		Instrument 92	Instrument 93	Instrument 94
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	19	30	3
9	Par value of instrument (issue currency, in € m)	20	30	3
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	20	30	3
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – fair value option	Liability – amortised cost	Liability – amortised cost
11	Original issue date	01.08.14	25.08.14	26.08.14
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	01.08.24	01.07.25	26.08.24
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Floating	Fixed	Fixed
18	Coupon rate and any related index	1.8327 % / EUR swap interest rate	3.0000 %	2.9050 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 95	Instrument 96	Instrument 97	Instrument 98	Instrument 99
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
5	30	5	15	20
5	30	5	15	20
EUR	EUR	EUR	EUR	EUR
5	30	5	15	20
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
27.08.14	03.09.14	10.09.14	19.09.14	02.10.14
Dated	Dated	Dated	Dated	Dated
27.08.29	03.09.29	10.09.26	19.09.33	02.10.34
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
3.2650 %	3.1500 %	3.0300 %	3.5600 %	3.4550 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

Key Features of the Capital Instruments		Instrument 100	Instrument 101	Instrument 102
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	2	5
9	Par value of instrument (issue currency, in € m)	5	2	5
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	2	5
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	02.10.14	29.10.14	11.11.14
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	02.10.24	29.10.24	11.11.24
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	2.8100 %	2.7000 %	2.7150 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 103	Instrument 104	Instrument 105	Instrument 106	Instrument 107
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
DE000HLB1V32	DE000HLB1KN5	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	DE000HLB12L7
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated bond	Subordinated bond	Subordinated loan	Subordinated loan	Subordinated bond
50	97	3	5	15
50	100	3	5	15
EUR	EUR	EUR	EUR	EUR
50	100	3	5	15
100.00 %	97.97 %	100.00 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
18.11.14	19.11.14	12.12.14	30.01.15	03.02.15
Dated	Dated	Dated	Dated	Dated
18.11.24	19.11.24	12.06.25	30.01.25	03.02.25
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
2.6900 %	2.5000 %	2.6200 %	2.3700 %	2.3700 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 108	Instrument 109	Instrument 110
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	3	5
9	Par value of instrument (issue currency, in € m)	5	3	5
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	3	5
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	24.02.15	10.03.15	30.03.15
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	24.02.25	10.03.25	30.03.27
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	2.3750 %	2.3700 %	2.3100 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

	Instrument 111	Instrument 112	Instrument 113	Instrument 114	Instrument 115
	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
	German law	German law	German law	German law	German law
	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
	Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
	5	20	5	14	10
	5	20	5	14	10
	EUR	EUR	EUR	EUR	EUR
	5	20	5	14	10
	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
	01.04.15	10.04.15	14.04.15	15.04.15	21.05.15
	Dated	Dated	Dated	Dated	Dated
	01.04.30	10.04.25	14.04.26	15.04.25	21.05.35
	Yes	Yes	Yes	Yes	Yes
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	Fixed	Fixed	Fixed	Fixed	Fixed
	2.4000 %	2.2050 %	2.2200 %	2.1950 %	3.0000 %
	No	No	No	No	No
	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
	No	No	No	No	No
	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	No	No	No	No	No
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
	No	No	No	No	No
	n. a.	n. a.	n. a.	n. a.	n. a.

Key Features of the Capital Instruments		Instrument 116	Instrument 117	Instrument 118
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	DE000HLB09P4	DE000HLB13N1	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated bond	Subordinated bond	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	10	44	5
9	Par value of instrument (issue currency, in € m)	10	45	5
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	10	45	5
9a	Issue price	99.53 %	98.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	16.06.15	24.06.15	30.06.15
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	16.06.25	24.06.25	30.06.25
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	2.7500 %	2.0000 %	2.8600 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

	Instrument 119	Instrument 120	Instrument 121	Instrument 122	Instrument 123
	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
	German law	German law	German law	German law	German law
	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
	Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
	47	5	12	10	5
	47	5	12	10	5
	EUR	EUR	EUR	EUR	EUR
	47	5	12	10	5
	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
	14.07.15	14.07.15	14.07.15	15.07.15	15.07.15
	Dated	Dated	Dated	Dated	Dated
	14.07.25	14.07.31	14.07.25	15.07.30	14.07.28
	Yes	Yes	Yes	Yes	Yes
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	Fixed	Fixed	Fixed	Fixed	Fixed
	3.0650 %	3.5000 %	3.1800 %	3.4500 %	3.5500 %
	No	No	No	No	No
	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
	No	No	No	No	No
	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	No	No	No	No	No
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	n. a.	n. a.	n. a.	n. a.	n. a.
	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
	No	No	No	No	No
	n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 124	Instrument 125	Instrument 126
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	DE000HLB0908
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated bond
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	2	3	5
9	Par value of instrument (issue currency, in € m)	2	3	6
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	2	3	6
9a	Issue price	100.00 %	100.00 %	99.92 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	15.07.15	16.07.15	21.07.15
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	15.07.26	16.07.25	21.07.25
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	3.3700 %	3.2000 %	3.2000 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 127	Instrument 128	Instrument 129	Instrument 130	Instrument 131
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
10	12	10	2	10
10	13	10	2	10
EUR	EUR	EUR	EUR	EUR
10	13	10	2	10
100.00 %	99.99 %	100.00 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
21.07.15	24.07.15	24.07.15	28.07.15	31.07.15
Dated	Dated	Dated	Dated	Dated
21.07.25	24.07.25	24.07.25	28.07.25	31.07.30
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
3.1200 %	3.0900 %	3.0850 %	3.0250 %	3.4000 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 132	Instrument 133	Instrument 134
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	12	2	5
9	Par value of instrument (issue currency, in € m)	12	2	5
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	12	2	5
9a	Issue price	100.00 %	99.80 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	31.07.15	03.08.15	05.08.15
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	31.07.25	03.08.27	05.08.30
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	3.0400 %	3.1900 %	3.3800 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 135	Instrument 136	Instrument 137	Instrument 138	Instrument 139
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
2	7	2	1	10
2	7	2	1	10
EUR	EUR	EUR	EUR	EUR
2	7	2	1	10
99.82 %	99.42 %	99.80 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
06.08.15	12.08.15	11.08.15	11.08.15	12.08.15
Dated	Dated	Dated	Dated	Dated
06.08.30	12.08.30	12.08.30	11.08.25	12.08.25
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
3.2750 %	3.3400 %	3.3750 %	3.0300 %	3.0250 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

Key Features of the Capital Instruments		Instrument 140	Instrument 141	Instrument 142
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	DE000HLB1AH8	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated bond	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	5	5
9	Par value of instrument (issue currency, in € m)	5	5	5
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	5	5
9a	Issue price	99.79 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	25.08.15	02.09.15	02.09.15
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	25.08.25	02.09.30	02.09.30
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	2.9200 %	3.3400 %	3.3300 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 143	Instrument 144	Instrument 145	Instrument 146	Instrument 147
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
DE000HLB1AJ4	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated bond	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
5	12	1	3	3
5	13	1	3	3
EUR	EUR	EUR	EUR	EUR
5	13	1	3	3
99.53 %	99.91 %	97.82 %	100.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
08.09.15	08.09.15	23.09.15	24.09.15	29.09.15
Dated	Dated	Dated	Dated	Dated
08.09.25	08.09.26	23.09.25	24.09.29	29.09.25
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
3.0300 %	3.1900 %	2.7500 %	3.3400 %	3.1700 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 148	Instrument 149	Instrument 150
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	67	10
9	Par value of instrument (issue currency, in € m)	5	67	10
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	67	10
9a	Issue price	100.00 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	29.09.15	01.10.15	01.10.15
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	29.09.25	01.10.25	01.10.35
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	3.1600 %	3.1500 %	3.7240 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 151	Instrument 152	Instrument 153	Instrument 154	Instrument 155
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
XS1306576726	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated bond	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
40	5	4	1	10
40	5	4	1	10
EUR	EUR	EUR	EUR	EUR
40	5	4	1	10
100.00 %	99.75 %	100.00 %	99.70 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
21.10.15	14.10.15	16.10.15	21.10.15	23.10.15
Dated	Dated	Dated	Dated	Dated
21.10.30	14.10.30	16.10.25	21.10.30	23.10.25
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Floating	Fixed	Fixed	Fixed	Floating
1.5960 % / Euribor	3.5300 %	3.1700 %	3.4700 %	1.8770 % / Euribor
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

Key Features of the Capital Instruments		Instrument 156	Instrument 157	Instrument 158
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated loan
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	5	16	15
9	Par value of instrument (issue currency, in € m)	5	17	15
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	5	17	15
9a	Issue price	99.13 %	100.00 %	100.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	28.10.15	02.11.15	04.11.15
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	28.10.30	31.10.25	04.11.25
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Floating
18	Coupon rate and any related index	3.4000 %	3.0400 %	1.8710 % / Euribor
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

Instrument 159	Instrument 160	Instrument 161	Instrument 162	Instrument 163
Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference
German law	German law	German law	German law	German law
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
Group & solo	Group & solo	Group & solo	Group & solo	Group & solo
Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan	Subordinated loan
1	2	5	0	10
1	2	5	1	10
EUR	EUR	EUR	EUR	EUR
1	2	5	1	10
100.00 %	100.00 %	99.49 %	99.00 %	100.00 %
100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – fair value option
10.11.15	10.11.15	17.11.15	18.11.15	19.11.15
Dated	Dated	Dated	Dated	Dated
10.11.25	10.11.25	17.11.25	18.11.25	19.11.25
Yes	Yes	Yes	Yes	Yes
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Fixed	Fixed	Fixed	Fixed	Fixed
3.1350 %	3.1400 %	3.0500 %	3.0000 %	3.1000 %
No	No	No	No	No
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No	No	No	No	No
Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
n. a.	n. a.	n. a.	n. a.	n. a.
Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
No	No	No	No	No
n. a.	n. a.	n. a.	n. a.	n. a.

	Key Features of the Capital Instruments	Instrument 164	Instrument 165	Instrument 166
1	Issuer	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR	Landesbank Hessen-Thüringen Girozentrale, AöR
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Bilateral agreement with no third-party reference	Bilateral agreement with no third-party reference	DE000HLB2DM0
3	Law applicable to the instrument	German law	German law	German law
	Regulatory treatment			
4	CRR transitional provisions[1]	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group&solo levels	Group & solo	Group & solo	Group & solo
7	Instrument type	Subordinated loan	Subordinated loan	Subordinated bond
8	Amount eligible as regulatory own funds (in € m, as at most recent reporting date)	10	3	162
9	Par value of instrument (issue currency, in € m)	10	3	166
	Issue currency	EUR	EUR	EUR
	Par value of instrument (EUR equivalent, in € m)	10	3	166
9a	Issue price	100.00 %	100.00 %	99.00 %
9b	Redemption price	100.00 %	100.00 %	100.00 %
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original issue date	02.12.15	02.12.15	18.11.15
12	Perpetual or dated	Dated	Dated	Dated
13	Original maturity date	02.12.25	02.12.25	18.11.25
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes
15	Optional call date and redemption amount	n. a.	n. a.	n. a.
16	Subsequent call dates, if applicable	n. a.	n. a.	n. a.
	Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed	Fixed
18	Coupon rate and any related index	3.0250 %	3.0400 %	3.0000 %
19	Existence of a dividend stopper	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory
21	Existence of a step up or other incentive to redeem	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible: conversion trigger(s)	n. a.	n. a.	n. a.
25	If convertible: full or partial	n. a.	n. a.	n. a.
26	If convertible: conversion rate	n. a.	n. a.	n. a.
27	If convertible: conversion obligatory or optional	n. a.	n. a.	n. a.
28	If convertible: instrument type to be converted into	n. a.	n. a.	n. a.
29	If convertible: issuer of instrument to be converted into	n. a.	n. a.	n. a.
30	Write-down features	No	No	No
31	If write-down: write-down trigger(s)	n. a.	n. a.	n. a.
32	If write-down: full or partial	n. a.	n. a.	n. a.
33	If write-down: permanent / temporary / n.a.	n. a.	n. a.	n. a.
34	If temporary write-down: reversal mechanism	n. a.	n. a.	n. a.
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)	Ranks behind non-subordinated liabilities (i.e. satisfied after all senior unsecured creditors)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	n. a.	n. a.	n. a.

[1] No portions of the issue have been reclassified to a lower level.

List of Abbreviations

Abbreviation	Definition
ABCP	Asset-backed commercial paper
ABS	Asset-backed securities
AfS	Available for sale (IFRS category)
AIRB	Advanced IRB
AT1	Additional Tier 1 capital
BaFin	German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht)
BCBS	Basel Committee on Banking Supervision
CCF	Credit conversion factor
CCP	Central counterparty
CET1	Common Equity Tier 1 capital
CRD	Capital Requirements Directive (CRD IV)
CRM	Credit Risk Management
CRR	Capital Requirements Regulation
CRSA	Credit Risk Standardised Approach
CVA	Credit valuation adjustment
DRV	German Master Agreement
DSGV	German Savings Banks Association
DVA	Debit value adjustment
EBA	European Banking Authority
EL	Expected loss
ELLI	Risk measurement system (interest rate option risk)
EMIR	European Market Infrastructure Regulation
Euribor	Euro Interbank Offered Rate
EZB	European Central Bank
FBA	Funding benefit adjustment
FCA	Funding cost adjustment
FIRB	Foundation IRB
FSP	Frankfurter Sparkasse
FVA	Funding valuation adjustment
HGB	German Commercial Code (Handelsgesetzbuch)
IAA	Internal Assessment Approach for Securitisations
IAS	International Accounting Standards
ILAAP	Internal Liquidity Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IM	Internal models for market risk
IRB	Internal Ratings-Based (Approach) (FIRB/AIRB)
ISDA	International Swaps and Derivatives Association

Abbreviation	Definition
KIRB	The capital charge for the underlying portfolio had it not been securitised, including the expected loss
KKR	Customer Compact Rating (Kunden Kompakt Rating)
KWG	German Banking Act (Kreditwesengesetz)
LBR/LB Rating	Landesbanken Rating
LBS	Landesbausparkasse
LCR	Liquidity Coverage Ratio
LeDIS	Legal Database Information System
LGD	Loss Given Default
MAC-Clause	Material adverse change clause
MaR/VaR	Money-at-risk
$MaRC^2$	Risk measurement system (linear interest rate risk)
MaRisk	German Minimum Requirements for Risk Management
MaSan	German Minimum Requirements for the Design of Recovery Plans
MTA	Minimum transfer amounts
NSFR	Net Stable Funding Ratio
O-SIIs	Other systemically important institutions
OGA	Collective investment undertakings (CRSA exposure class)
OTC	Over-the-counter
PD	Probability of default
RSGV	Rheinischer Sparkassen- und Giroverband
RSU	Rating Service Unit GmbH & Co. KG
RW	Risk weight
RWA	Risk-weighted assets
SA	Standardised Approach (market risk)
SAG	German Recovery and Resolution Act
SFA	Supervisory Formula Approach
SFTs	Securities financing transactions
SME	Small and medium-sized enterprises
SolvV	German Solvency Regulation
SPV	Special purpose vehicle
S-Rating	Sparkassen Rating- und Risikosysteme GmbH
STA	Standardised Approach (operational risks)
SVWL	Sparkassenverband Westfalen-Lippe
T1	Tier 1 capital (T1 = CET1 + AT1)
T2	Tier 2 capital
TC	Total capital (TC = T1 + T2)

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