

## CREDIT OPINION

25 March 2020

Update

 Rate this Research

### RATINGS

#### Landesbank Hessen-Thuringen GZ

Domicile	Frankfurt am Main, Germany
Long Term CRR	Aa3
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Aa3
Type	Senior Unsecured - Dom Curr
Outlook	Stable
Long Term Deposit	Aa3
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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# Landesbank Hessen-Thuringen GZ

## Update to credit analysis

### Summary

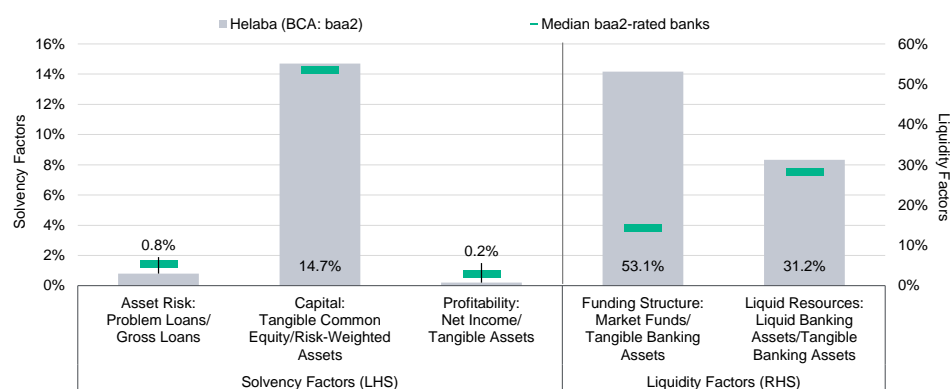
We assign Aa3(Stable)/P-1 deposit and issuer ratings and A2 junior senior unsecured ratings to [Landesbank Hessen-Thuringen GZ](#) (Helaba). We further assign a baa2 Baseline Credit Assessment (BCA), a baa1 Adjusted BCA and Aa3/P-1 Counterparty Risk Ratings (CRRs).

Landesbank Hessen-Thuringen GZ's (Helaba) deposit and senior unsecured debt ratings reflect its baa2 BCA, one notch rating uplift from its membership in the institutional protection scheme of [Sparkassen-Finanzgruppe](#) (S-Group, Aa2 negative, a2<sup>1</sup>), the application of our Advanced Loss Given Failure (LGF) analysis to its liabilities and one notch government support, given its membership in Sparkassen-Finanzgruppe.

The baa2 BCA reflects Helaba's strong capitalisation and asset quality; while the bank lending incorporates sizeable commercial real estate (CRE) concentration risks, Helaba's CRE portfolio has a sound history of low credit losses compared with its peers and through a full credit cycle. More constraining factors are the current economic shock due to the global spread of coronavirus, the bank's high leverage, modest profitability and a funding structure that relies on significant market funding access, which however is partially balanced by stable funding from the savings bank sector and comfortable liquid resources.

Exhibit 1

### Rating Scorecard - Key financial ratios



Source: Moody's Financial Metrics

## Credit strengths

- » Sound risk management, with an established track record
- » Solid capitalisation, which provides Helaba a certain buffer to withstand adverse economic developments
- » Good access to sector funds, which support its liquidity

## Credit challenges

- » High sector concentration in the cyclical CRE business, which remains a tail risk for asset quality
- » Low risk-weighted profitability, which provides a limited buffer in case of adverse developments
- » Dependence on confidence-sensitive market funding, which remains significant despite its access to sector funds

## Outlook

The outlook is stable, reflecting our view of the bank's (1) stable liability structure over the 12-18-month outlook horizon, which forms the basis for our Advanced LGF analysis; and (2) moderately changing financial profile and unchanged sector relationships, which lead to unchanged high affiliate support from S-Group.

## Factors that could lead to an upgrade

- » An upgrade of Helaba's ratings would be likely in the event of an upgrade of the bank's BCA. Because Helaba's senior unsecured and deposit ratings already benefit from the highest possible rating uplift of three notches, there is no upgrade potential from our LGF analysis.
- » Upward pressure on Helaba's baa2 BCA could arise if its Macro Profile improves on a sustained basis; or (1) there is a further reduction in Helaba's dependence on debt capital markets as a result of more funds being available from, and because of cooperation with, a larger number of savings banks; (2) stronger liquidity reserves; and (3) a combination of a pronounced and sustained improvement in the bank's capitalisation and a significant reduction in the bank's concentration risk, specifically with regard to CRE exposures.

## Factors that could lead to a downgrade

- » A downgrade of Helaba's ratings could be triggered by the following: (1) a two-notch downgrade of the bank's BCA; (2) a change in the bank's ownership structure and a deterioration in the implied creditworthiness of S-Group; (3) weakening cross-sector support assumptions; or (4) if the volume of subordinated or other debt instruments that are designed to be loss-absorbing in resolution decreases substantially and beyond our expectations, compared with the bank's tangible banking assets.
- » Downward pressure on the bank's BCA could arise because of (1) a deterioration in the bank's financial strength, especially if followed by an unexpected and sustained weakening in its capital adequacy metrics; (2) a material deterioration in the bank's asset quality; or (3) a significant decline in the bank's liquidity reserves, combined with higher dependence on market funding.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Landesbank Hessen-Thuringen GZ (Consolidated Financials) [1]

	06-19 <sup>2</sup>	12-18 <sup>2</sup>	12-17 <sup>2</sup>	12-16 <sup>2</sup>	12-15 <sup>2</sup>	CAGR/Avg. <sup>3</sup>
Total Assets (EUR Billion)	206.3	157.3	151.8	156.8	163.4	6.9 <sup>4</sup>
Total Assets (USD Billion)	234.9	179.8	182.3	165.4	177.5	8.3 <sup>4</sup>
Tangible Common Equity (EUR Billion)	8.5	8.4	8.2	7.5	7.3	4.5 <sup>4</sup>
Tangible Common Equity (USD Billion)	9.7	9.6	9.9	7.9	8.0	5.9 <sup>4</sup>
Problem Loans / Gross Loans (%)	0.5	0.6	0.7	1.3	1.8	1.0 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	14.7	15.5	16.5	14.2	13.4	14.8 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	6.9	6.9	7.6	14.2	20.4	11.2 <sup>5</sup>
Net Interest Margin (%)	0.6	0.7	0.7	0.8	0.8	0.7 <sup>5</sup>
PPI / Average RWA (%)	0.8	0.7	1.0	1.5	1.7	1.1 <sup>6</sup>
Net Income / Tangible Assets (%)	0.2	0.2	0.2	0.2	0.3	0.2 <sup>5</sup>
Cost / Income Ratio (%)	77.4	80.5	72.6	64.8	60.1	71.1 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	52.1	53.1	52.2	54.2	55.3	53.4 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	33.8	31.2	32.9	33.2	36.5	33.5 <sup>5</sup>
Gross Loans / Due to Customers (%)	165.2	202.2	188.5	198.8	195.3	190.0 <sup>5</sup>

[1]All figures and ratios are adjusted using Moody's standard adjustments. [2]Basel III - fully-loaded or transitional phase-in; IFRS. [3]May include rounding differences due to scale of reported amounts. [4]Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime. [5]Simple average of periods presented for the latest accounting regime. [6]Simple average of Basel III periods presented.

Source: Moody's Investors Service; Company Filings

## Profile

Landesbank Hessen-Thuringen GZ (Helaba) is a German universal bank, with a regional focus on its core centres in the German federal states of Hesse, Thuringia, North Rhine-Westphalia and Brandenburg. The bank operates as a central bank for the savings banks in the aforementioned four federal states and, thus, covers around 40% of all savings banks in Germany. As of 30 September 2019, the bank reported total consolidated assets of €222 billion and had around 6,100 employees.

Helaba provides a range of wholesale and retail banking services to corporate and private clients, institutional customers, and central, regional and local public authorities, as well as municipal corporations. The bank distributes its products and services from its twin head offices in Frankfurt am Main and Erfurt; its branch offices in Germany, France, Sweden, the UK and the US; and its representative offices in Brasil, Spain, Russia, China and Singapore. In Switzerland (Zurich), Helaba is represented through its subsidiary Frankfurter Bankgesellschaft (Schweiz) AG<sup>2</sup>.

## Weighted Macro Profile of Strong+

Despite our lowering of Germany's [Macro Profile](#) to Strong+ in 2019, and the bank's focus on this market, Helaba's assigned Weighted Macro Profile remained unchanged at Strong+. This is further reflective of the Helaba's already existing exposure to international corporate and CRE lending activities.

## Recent developments

[Global economy continues to slide as coronavirus outbreak worsens](#). The full extent of the economic downswing will be unclear for some time but global recession risks have risen. In Europe, the coronavirus outbreak adds to late-cycle risks for European banks. Under Moody's [baseline scenario](#), the direct negative credit impact on the European banking sector would be limited. A prolonged outbreak, however, would have a more severe outcome, weighing on the banks' [asset quality and profitability](#). We expect fiscal policy measures, as already announced by a variety of euro-area governments to mitigate the economic contraction caused by the outbreak.

In March 2020, the European Central Bank (ECB) [announced a series of measures](#) to help the European Union economies weather the widening effects of the coronavirus pandemic, temporarily increasing banks' liquidity provision as well as lowering regulatory capital and liquidity requirements. As part of these temporary measures, the ECB increased its targeted long-term refinancing operations ([TLTRO III](#)) under more favourable terms as well as its financial asset purchase program, while refraining from lowering interest rates further. The temporary suspension of buffer requirements for regulatory capital and the liquidity coverage ratio (LCR) provides banks

with greater flexibility and additional leeway to absorb weakening borrower creditworthiness and satisfy additional corporate liquidity needs. Overall, the package is intended to support the banks ability to provide loans to corporates and small and mid-sized businesses suffering from the effects of the coronavirus outbreak. We believe that the ECB's measures will provide a limited relief for banks and their borrowers and it will require meaningful fiscal policy measure by the European Union and its member states to soften higher default rates in banks' lending books.

Germany announced a large stimulus package that complements the European Central Bank's (ECB) supportive policy actions. The German government launched emergency corporate lending guarantee programs and expanded short-time work subsidies and investments. The measures add to Germany's already expansionary fiscal policy stance and to automatic stabilizers that support household incomes when unemployment increases. These policy measures will soften the negative economic effects of the coronavirus outbreak, but might [not fully mitigate the credit-negative operational effect from the coronavirus](#).

In February, 2020, Helaba announced a package, streamlining its organisational structure and to free up resources to support further growth, stabilize profits and to invest into enhanced IT systems and into digitalisation. Measures include a reduction of personnel by around 380-400, while implementing more efficient processes. It is complementary to further measures already announced in 2019. The bank has been facing profitability and efficiency pressures, exacerbated by the low interest rate environment that is likely to persist.

## Detailed credit considerations

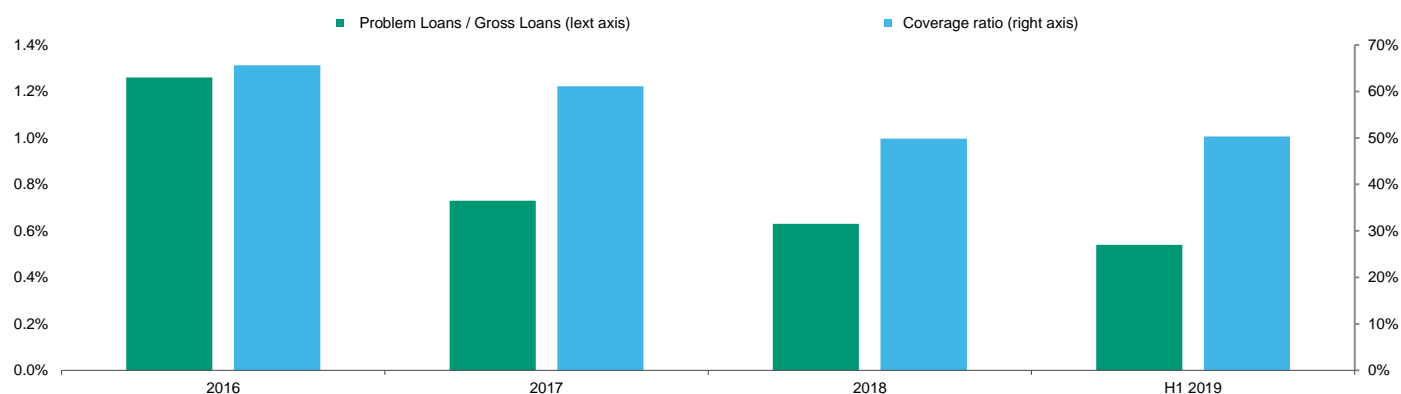
### Sound risk management partially mitigates the bank's high exposure to cyclical CRE risks

We assign Helaba a baa1 Asset Risk score, five notches below the aa2 initial score<sup>3</sup>, taking into account the bank's total loan exposure to the cyclical CRE sector. Furthermore, we consider the bank's exposure to market risk as a driver for the adjustment.

Helaba's CRE exposure remains a key driver for Helaba's asset risk, amounting to €33.3 billion as of half-year 2019, compared with €34.9 billion as of year-end 2018, resulting in considerable concentration risk, especially compared with the group's reported Common Equity Tier 1 (CET1) capital of €8.4 billion as of 30 September 2019. Despite for the bank's sizeable concentration risks, Helaba's CRE portfolio has a sound history of low credit losses compared with those of its peers. These low credit losses are because of Helaba's focus on (1) prime locations; and (2) properties with a high level of prearranged rental agreements, combined with limited ticket sizes, which provide risk diversification. The group's corporate finance loan book is well diversified and includes (1) equal-sized lending activities with multinational corporates; (2) asset-based lending focused on transport; and (3) structured and project finance, as well as leasing.

Exhibit 3

### Helaba successfully reduced its amount of problem loans



Problem loan ratio in accordance with Moody's definition.

Sources: Company reports, Moody's Investors Service

The bank reported a slightly improved problem loan ratio of 0.46% as of 30 September 2019 (half-year 2019: 0.54%, year-end 2018: 0.63%), and its risk-related charges remain at very low levels, reflecting a benign point in the credit cycle and the bank's solid risk management. The takeover of Dexia Kommunalbank in 2019 does not to materially change the asset-risk profile, though the public-sector lending portfolio will increase by roughly €12 billion, adding another significant, but lower risk, sector concentration. We expect,

however, that the coronavirus outbreak will have a direct impact on banks' asset quality and we could reassess our current assessment of this factor depending on the breath and severity of the shock and the potential deterioration in credit quality.

Given its role as a central institution for a large part of the German savings banks, the bank continues to run a significant derivatives book, mainly driven by the hedging needs for savings banks, the former Dexia Kommunalbank's portfolio, but also offering further services to its corporate customers. The potential swings in the related evaluations are reflected in our adjustment.

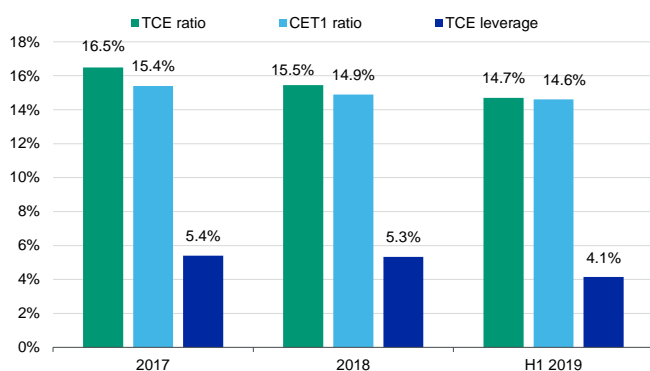
### Capitalisation provides a solid loss-absorption buffer

We position Helaba's Capital score at a2, one notch below the a1 initial score, driven by leverage, which was at 4.0% as of 30 September 2019, and reflects our expectation regarding the potential negative impact of the upcoming regulatory changes. The score also reflects the expected increase in the bank's risk-weighted assets, as the implementation of upcoming regulatory changes might lead to a downward trend from its presently strong capital ratios, given the bank's yet limited capital generation capacity.

However, a somewhat balancing factor will be the run-down of the Dexia Kommunalbank portfolio, which should reduce the bank's leverage over time to more sustainable levels. As of year-end 2018, the bank's regulatory balance sheet leverage ratio stood at 4.4% (down from 4.9% as of year-end 2017).

Exhibit 4

#### Helaba's solid levels of capital

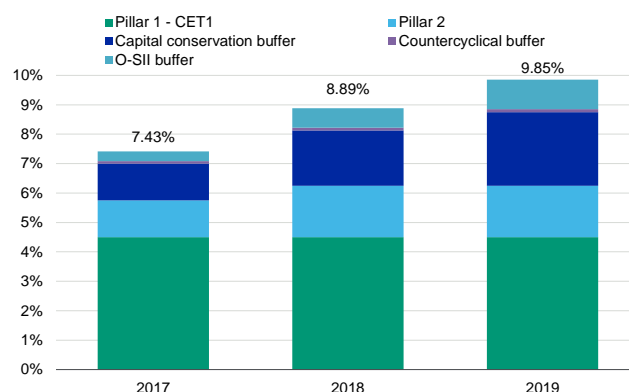


TCE = Tangible common equity (Moody's calculation), CET1 = Common Equity Tier 1 (fully loaded since 2018).

Sources: Company reports, Moody's Investors Service

Exhibit 5

#### Helaba's CET1 capital requirements in detail



Source: Company reports

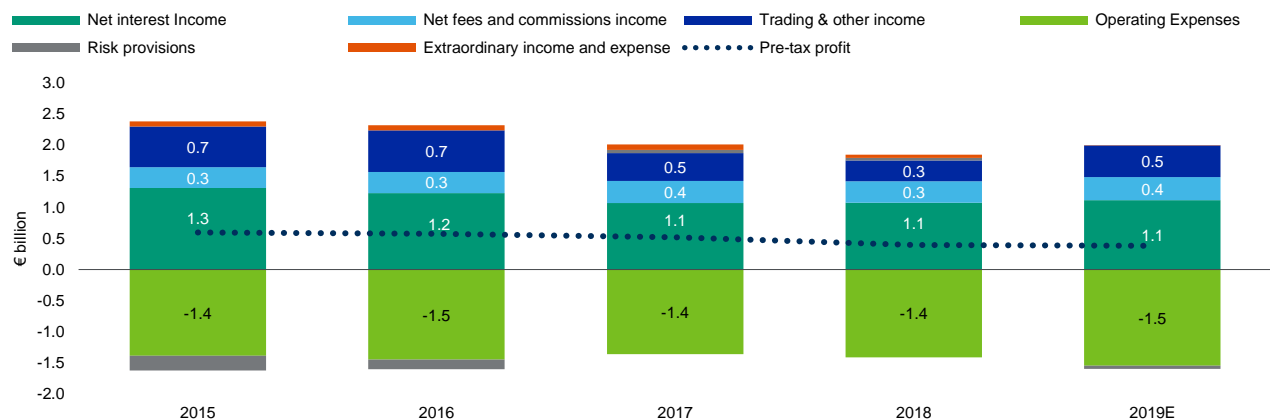
The bank's tangible common equity did fall to 14.7% as of half-year 2019, from 14.7% as of half-year 2019 and 15.5% in 2018. The decline in 2018 was driven by the effect of the implementation of IFRS 9 and some lending growth. Further, Helaba reported transitional Basel III CET1 and total capital ratios of 13.8% and 18.7%, respectively, as of 30 September 2019 (compared with 14.9% and 20.6%, as of year-end 2018). The ratios declined from 15.4% and 21.8% as of year-end 2017. However, the bank's regulatory capital ratios remain significantly above the required CET1 ratio of 9.85%, which the regulator determined following the Supervisory Review and Evaluation Process.

### Risk-weighted profitability is low and declining

We assign Helaba a Profitability score of b1, in line with the initial score, reflecting the persistent earnings pressure. Central bank measures in reaction to a further spread of the coronavirus could, however, exacerbate further the profitability pressure that many European banks are under, particularly when combined with higher credit risk spreads, reduced bond and equity issuance and stock market falls.

Helaba's performance metrics will remain modest, as the low-yield environment will continue to strain the bank's interest income. While the bank partially reduced its interest income dependence via a higher share of fee and commission income over time, higher loan-loss provisions, driven by the turn of the economic cycle, a sticky cost base, and volatile capital market results, challenge the bank's efforts to improve its profitability. While Helaba announced recently cuts in personnel to contain costs, investment needs into digitalisation / IT systems provide further challenges.

Exhibit 6

**Helaba's earnings are under pressure****2019 result is likely to be affected by one-offs**

Sources: Company reports, Moody's Investors Service estimates

As of 30 September 2019, Helaba reported an improved pretax profit of €349 million. The bank's net interest income increased to €850 million, after the acquisitions, while fee and commission income increased to €287 million. Admin expenses rose to €1.1 billion and, after years of positive earnings contributions from the risk situation, loan-loss provisions of €57 million indicate a turnaround in the credit cycle.

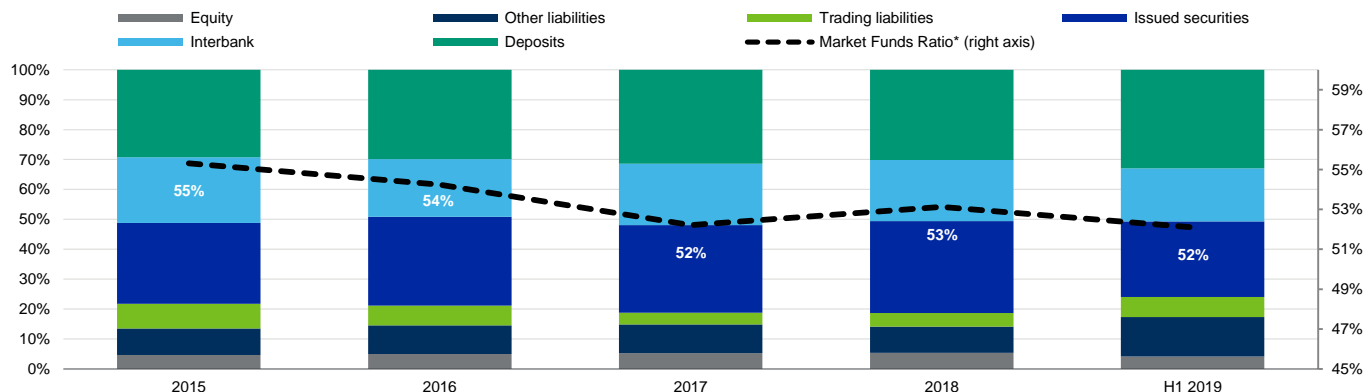
In 2018, Helaba reported a pretax profit of €443 million (IFRS), down 1% from year-end 2017. The bank's net interest income remained at the same level of €1.1 billion as a year ago. The decrease of net interest income from loans and advances was compensated by higher one-off income and treasury shares. Helaba derived income from the net reversal of loan-loss provisions of €45 million (€56 million in 2017), along with higher other operating income (up to €317 million from €115 million), which was driven by the income from investment property and disposal of some investment and real estate assets. More volatile profit contributors, such as customer-driven trading income (€32 million compared with €268 million for 2017), strained the results further, mostly because of widening of credit spreads, while fair-value changes on financial instruments and derivatives were higher (€13 million compared with a positive contribution of -€136 million in the previous year). The administrative costs grew 7% up to €1.44 billion, driven by higher personnel costs.

**Funding from savings banks mitigates wholesale funding dependence**

Our assigned Funding Structure score of ba2 stands four notches above the initial b3 score, driven by good access to sector funding, reducing reliance on confidence-sensitive funding sources. A significant portion of Helaba's issued unsecured wholesale debt has been placed with savings banks and their retail clients.

Helaba depends on confidence-sensitive wholesale funding for a part of its lending business and is a net lender in the interbank market. The bank's proven and recurring access to the excess liquidity of the regional savings banks and good access to debt capital markets, even in times of stress, are balancing factors. As of 30 September 2019 the bank's refinancing structure consisted of €38.1 billion in due from financial institutions, €68 billion in deposits (including promissory notes) and €58 billion of securities, thereof around €24 billion in covered bonds.

Exhibit 7

**Helaba's mixed dependence on savings banks and wholesale market funding****Composition of market funding sources**

\*Market funds ratio = market funds/tangible banking assets.

Sources: Company reports, Moody's Investors Service

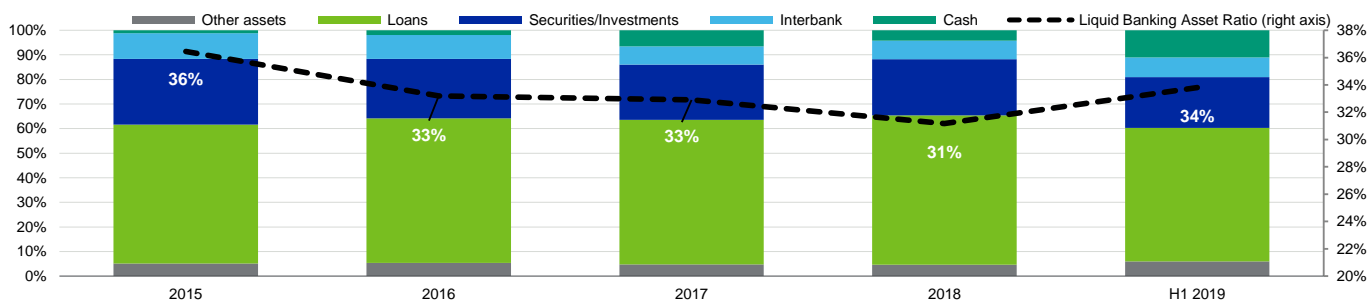
Funding requirements are likely to remain stable over the foreseeable future, given the bank's broadly matched funding profile for its medium- and long-term lending business. The bank typically issues €12 billion–€17 billion in medium- and long-term debt instruments per year (2019 planned: €16.0 billion, 2018: €13.1 billion), placed with a broad and diversified investor base. Covered bonds will account for €7 billion of the planned issuance in 2019, with senior unsecured bonds accounting for €9 billion.

**Strong liquidity provides a buffer**

The assigned a3 Liquid Resources score is one notch below the initial a2 score, which reflects our consideration of asset encumbrance, intragroup restrictions and the quality of liquid assets.

The bank's strong liquid resources consisted of €19.6 billion in cash as of 30 September 2019, a €24.6 billion securities portfolio and €17.0 billion in liquid trading assets. Given the close link with the savings bank sector, we deduct exposures to the sector as intragroup and further take into account Helaba's encumbered liquid assets in our evaluation.

Exhibit 8

**Helaba's substantial amounts of liquid resources****Composition of liquid assets**

\*Liquid banking assets ratio = liquid assets/tangible banking assets.

Sources: Company reports, Moody's Investors Service

Moreover, additional liquidity could be generated through the issuance of covered bonds. As of 30 September 2019, and based on an outstanding issuance of €28.2 billion, the over-collateralisation of [Helaba's public-sector cover pool](#) stood at 21% on an unstressed present value basis. Helaba has, therefore, leeway for using its existing cover pool to generate fresh liquidity through the issuance of covered bonds.

## Environmental, social and governance considerations

The global banking sector has been classified as “Low” risk in our [environmental risk heat map](#)<sup>4</sup> and as “Moderate” risk in our [social risk heat map](#).<sup>5</sup> In line with our general view for the banking sector, Helaba has an overall low exposure to Environmental risks and moderate for social risks.

Governance<sup>6</sup> is highly relevant for Helaba, as it is to all banks, but more specifically because of the complexity of its multi-country operations. However, we do not have any particular governance concern for Helaba, and we do not apply any corporate behaviour adjustment to the bank. Nonetheless, corporate governance remains a key credit consideration and continues to be a subject of our ongoing monitoring.



## Support and structural considerations

### Affiliate support

Helaba benefits from cross-sector support from S-Group, which reduces the probability of default. Therefore, support would be available to stabilise a distressed member bank and not just to compensate for losses in resolution. The unchanged high support assumption assigned to Helaba reflects the bank's prominent service function for the sector, majority ownership by S-Group members and cross-liability scheme. As a result, cross-sector support provides one notch of rating uplift to Helaba's debt, deposits and subordinated instrument ratings.

### Loss Given Failure (LGF) analysis

Helaba is subject to the EU Bank Recovery and Resolution Directive (BRRD), which we consider an operational resolution regime. Therefore, we apply our Advanced LGF analysis, where we consider the risks faced by the different debt and deposit classes across the liability structure should the bank enter resolution.

Our Advanced LGF analysis follows the insolvency legislation in Germany. In line with our standard assumptions, we assume a residual TCE of 3%, as well as asset losses of 8% of tangible banking assets in a failure scenario. We also assume a 25% runoff of junior wholesale deposits and a 5% runoff in preferred deposits. Moreover, we assign a 25% probability to junior deposits being preferred to senior unsecured debt. We apply a standard assumption for European banks that 26% of deposits are junior.

- » For deposits and senior unsecured debt, as well as CRR liabilities, our LGF analysis indicates an extremely low loss given failure, providing three notches uplift from the baa1 Adjusted BCA.
- » For junior senior unsecured debt, our LGF analysis indicates a very low loss given failure, providing for two notches uplift above Helaba's baa1 Adjusted BCA. The two-notch uplift currently assigned is sensitive to the downside, given the subordination and volume available for this liability class.
- » Our LGF analysis indicates a high loss given failure for subordinated debt classes, leading us to position the instrument's ratings one notch below the bank's baa1 Adjusted BCA. Subordinated debt instruments do not benefit from any government support.
- » Helaba's silent participations (non-cumulative preferred securities), issued by Main Capital Funding Limited Partnership and Main Capital Funding II Limited Partnership, are rated Ba1(hyb), three notches below the bank's Adjusted BCA, reflective of the instruments' net loss triggers.

### Government support considerations

Following the introduction of the BRRD, we have lowered our expectations about the degree of support the government might provide to a bank in Germany in the event of need. Because of S-Group's size on a consolidated basis, we consider it systemically relevant and, therefore, attribute a moderate probability of German government support for all members of the sector, in line with support assumptions for other systemically relevant banking groups in Europe. We, therefore, still include one notch of government support uplift in our CRRs, senior unsecured debt and deposit ratings of S-Group member banks that are incorporated in Germany, including Helaba. For junior debt, we continue to believe that the likelihood of government support is low and these ratings do not include any related uplift.

### Counterparty Risk Ratings (CRRs)

CRRs are opinions of the ability of entities to honour the uncollateralised portion of non-debt counterparty financial liabilities (CRR liabilities) and also reflect the expected financial losses in the event such liabilities are not honoured. CRRs are distinct from ratings assigned to senior unsecured debt instruments and from issuer ratings because they reflect that, in a resolution, CRR liabilities might benefit from preferential treatment compared with senior unsecured debt. Examples of CRR liabilities include the uncollateralised portion of payables arising from derivatives transactions and the uncollateralised portion of liabilities under sale and repurchase agreements.

**Helaba's CRRs are positioned at Aa3/P-1**

The CRRs, before government support, are positioned three notches above the bank's baa1 Adjusted BCA, reflecting the extremely low loss given failure from the high volume of instruments that are subordinated to CRR liabilities. Helaba's CRRs also benefit from one notch of rating uplift based on government support, in line with our assumptions on deposits and senior unsecured debt.

**Counterparty Risk (CR) Assessment**

CR Assessments are opinions of how counterparty obligations are likely to be treated if a bank fails and are distinct from debt and deposit ratings in that they (1) consider only the risk of default rather than both the likelihood of default and the expected financial loss suffered in the event of default, and (2) apply to counterparty obligations and contractual commitments rather than debt or deposit instruments. The CR Assessment is an opinion of the counterparty risk related to a bank's covered bonds, contractual performance obligations (servicing), derivatives (for example, swaps), letters of credit, guarantees and liquidity facilities.

**Helaba's CR Assessments are positioned at Aa3(cr)/P-1(cr)**

For Helaba, our LGF analysis indicates an extremely low loss given failure for the CR Assessment, leading us to position its Preliminary Rating Assessment three notches above the Adjusted BCA.

**Methodology and scorecard**

The principal methodology we use in rating Helaba was the [Banks](#) methodology published in November 2019.

**About Moody's Bank Scorecard**

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgement. When read in conjunction with our research, a fulsome presentation of our judgement is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

## Rating methodology and scorecard factors

Exhibit 9

### Landesbank Hessen-Thuringen GZ

<b>Macro Factors</b>										
<b>Weighted Macro Profile</b>		<b>Strong +</b>		<b>100%</b>						
<b>Factor</b>	<b>Historic Ratio</b>	<b>Initial Score</b>	<b>Expected Trend</b>	<b>Assigned Score</b>	<b>Key driver #1</b>	<b>Key driver #2</b>				
Solvency										
Asset Risk										
Problem Loans / Gross Loans	0.8%	aa2	↔	baa1	Sector concentration	Market risk				
Capital										
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	14.7%	a1	↔	a2	Nominal leverage	Risk-weighted capitalisation				
Profitability										
Net Income / Tangible Assets	0.2%	b1	↔	b1	Return on assets	Expected trend				
Combined Solvency Score		a2		baa2						
Liquidity										
Funding Structure										
Market Funds / Tangible Banking Assets	53.1%	b3	↔	ba2	Extent of market funding reliance	Market funding quality				
Liquid Resources										
Liquid Banking Assets / Tangible Banking Assets	31.2%	a2	↔	a3	Stock of liquid assets	Asset encumbrance				
Combined Liquidity Score		ba2		baa3						
Financial Profile										
				baa2						
Qualitative Adjustments				Adjustment						
Business Diversification				0						
Opacity and Complexity				0						
Corporate Behavior				0						
Total Qualitative Adjustments				0						
Sovereign or Affiliate constraint				Aaa						
Scorecard Calculated BCA range				baa1 - baa3						
Assigned BCA				baa2						
Affiliate Support notching				1						
Adjusted BCA				baa1						
<b>Debt Class</b>	<b>De Jure waterfall</b>		<b>De Facto waterfall</b>		<b>Notching</b>		<b>LGF</b>	<b>Assigned</b>	<b>Additional</b>	<b>Preliminary</b>
	<b>Instrument</b>	<b>Sub-volume + ordination</b>	<b>Instrument</b>	<b>Sub-volume + ordination</b>	<b>De Jure</b>	<b>De Facto</b>	<b>Notching Guidance vs. Adjusted BCA</b>	<b>LGF notching</b>	<b>Notching</b>	<b>Rating Assessment</b>
Counterparty Risk Rating	-	-	-	-	-	-	-	3	0	a1
Counterparty Risk Assessment	-	-	-	-	-	-	-	3	0	a1 (cr)
Deposits	-	-	-	-	-	-	-	3	0	a1
Senior unsecured bank debt	-	-	-	-	-	-	-	3	0	a1
Junior senior unsecured bank debt	-	-	-	-	-	-	-	2	0	a2
Dated subordinated bank debt	-	-	-	-	-	-	-	-1	0	baa2

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Rating	3	0	a1	1	Aa3	Aa3
Counterparty Risk Assessment	3	0	a1 (cr)	1	Aa3(cr)	
Deposits	3	0	a1	1	Aa3	Aa3
Senior unsecured bank debt	3	0	a1	1	Aa3	
Junior senior unsecured bank debt	2	0	a2	0	A2	
Dated subordinated bank debt	-1	0	baa2	0	Baa2	

[1]Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Investors Service

## Ratings

Exhibit 10

Category	Moody's Rating
<b>LANDESBANK HESSEN-THUERINGEN GZ</b>	
Outlook	Stable
Counterparty Risk Rating	Aa3/P-1
Bank Deposits	Aa3/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	baa1
Counterparty Risk Assessment	Aa3(cr)/P-1(cr)
Issuer Rating -Dom Curr	Aa3
Senior Unsecured -Dom Curr	Aa3
Junior Senior Unsecured -Dom Curr	A2
Junior Senior Unsecured MTN -Dom Curr	(P)A2
Subordinate -Dom Curr	Baa2
Commercial Paper -Dom Curr	P-1
<b>MAIN CAPITAL FUNDING II LIMITED PARTNERSHIP</b>	
Pref. Stock Non-cumulative	Ba1 (hyb)
<b>MAIN CAPITAL FUNDING LIMITED PARTNERSHIP</b>	
Pref. Stock Non-cumulative	Ba1 (hyb)

Source: Moody's Investors Service

## Endnotes

- The rating shown is S-Group's corporate family rating, outlook and BCA.
- For further details, please refer to Helaba's [company profile](#) and the [German Banking System Profile](#).
- The initial score is referred to as the Macro-Adjusted score in our Bank Scorecard.
- Environmental risks can be defined as environmental hazards encompassing the impact of air pollution, soil/water pollution, water shortages, and natural and man-made hazards (physical risks). Additionally, regulatory or policy risks, like the impact of carbon regulations or other regulatory restrictions, including the related transition risks like policy, legal, technology and market shifts, which could impair the evaluation of assets, are important factors. Certain banks could face a higher risk from concentrated lending to individual sectors or operations exposed to the aforementioned risks.
- Social risk considerations represent a broad spectrum, including customer relations, human capital, demographic and societal trends, health and safety, and responsible production. The most relevant social risks for banks arise from the way they interact with their customers. Social risks are particularly high in the area of data security and customer privacy, which are partly mitigated by sizeable technology investments and banks' long track record of handling sensitive client data. Fines and reputational damage because of product mis-selling or other types of misconduct are a further social risk. Societal trends are also relevant in a number of areas, such as shifting customer preferences towards digital banking services increasing information technology costs, ageing population concerns in several countries affecting demand for financial services or socially driven policy agendas that may translate into regulations that affect banks' revenue bases.
- Corporate governance is a well-established key driver for banks and related risks are typically included in our evaluation of banks' financial profile. Further factors like specific corporate behaviour, key-person risk, insider and related-party risk, strategy and management risk factors and dividend policy may be captured in individual adjustments to the BCA, if deemed applicable. Corporate governance weaknesses can lead to a deterioration in a company's credit quality, while governance strengths can benefit its credit profile. When credit quality deteriorates because of poor governance, such as breakdown in controls resulting in financial misconduct, it can take a long time to recover. Governance risks are also largely internal rather than externally driven.

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