

CREDIT OPINION

7 October 2019

Update



Rate this Research

RATINGS

Landesbank Hessen-Thueringen GZ

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

Please see the <u>ratings section</u> 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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Japan	81-3-5408-4100
FMFA	44-20-7772-5454

Landesbank Hessen-Thueringen GZ

Update to credit analysis

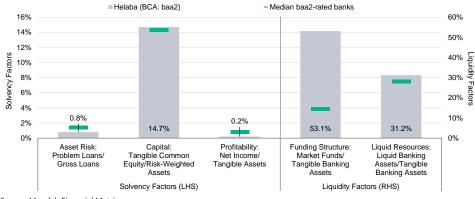
Summary

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

Helaba's issuer ratings reflect (1) its baa2 BCA; (2) its baa1 Adjusted BCA, incorporating one notch of uplift based on affiliate support from <u>Sparkassen-Finanzgruppe</u> (S-Group, Aa2 stable, a2¹); (3) the results of our Advanced Loss Given Failure (LGF) analysis, which provide three notches of rating uplift for senior unsecured debt; and (4) our assumptions of moderate support from the <u>Government of Germany</u> (Aaa stable²), resulting in one notch of rating uplift.

The baa2 BCA reflects Helaba's (1) sound risk-weighted capitalisation and its weak leverage ratio; (2) low volume of nonperforming loans, indicating strong asset quality; and (3) comfortable liquid resources. The BCA reflects the bank's asset-risk concentration related to substantial exposure to international commercial real estate (CRE) markets, its only modest profitability and a funding structure that relies on significant market funding access, partially balanced by stable sector funding and adequate liquidity.

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.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

Landesbank Hessen-Thueringen GZ (Consolidated Financials) [1]

	06-19 ²	12-18 ²	12-17 ²	12-16 ²	12-15 ²	CAGR/Avg. ³
Total Assets (EUR Billion)	206.3	157.3	151.8	156.8	163.4	6.9 ⁴
Total Assets (USD Billion)	234.9	179.8	182.3	165.4	177.5	8.3 ⁴
Tangible Common Equity (EUR Billion)	8.5	8.4	8.2	7.5	7.3	4.5 ⁴
Tangible Common Equity (USD Billion)	9.7	9.6	9.9	7.9	8.0	5.9 ⁴
Problem Loans / Gross Loans (%)	0.5	0.6	0.7	1.3	1.8	1.0 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	14.7	15.5	16.5	14.2	13.4	14.8 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	6.9	6.9	7.6	14.2	20.4	11.2 ⁵
Net Interest Margin (%)	0.6	0.7	0.7	0.8	0.8	0.7 ⁵
PPI / Average RWA (%)	0.8	0.7	1.0	1.5	1.7	1.1 ⁶
Net Income / Tangible Assets (%)	0.2	0.2	0.2	0.2	0.3	0.25
Cost / Income Ratio (%)	77.4	80.5	72.6	64.8	60.1	71.1 ⁵
Market Funds / Tangible Banking Assets (%)	52.1	53.1	52.2	54.2	55.3	53.4 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	33.8	31.2	32.9	33.2	36.5	33.5 ⁵
Gross Loans / Due to Customers (%)	165.2	202.2	188.5	198.8	195.3	190.0 ⁵

[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-Thueringen 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 the half-year 2019, the bank reported total consolidated assets of €206 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) AG³.

Weighted Macro Profile of Strong+

Helaba is increasingly active in Germany, which has an assigned Very Strong- Macro Profile. Helaba's Strong+ Macro Profile also captures its exposure to international corporate and CRE lending activities in countries with weaker Macro Profiles than Germany. A sustained improvement in the bank's Macro Profile may strengthen its financial profile, all other things being equal.

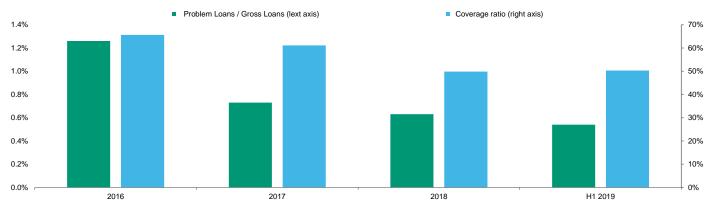
Detailed credit considerations

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 score⁴, 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 €8.5 billion as of half-year 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 0.5% as of half-year 2019 (2018: 0.6%, 2017: 0.73%), 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.

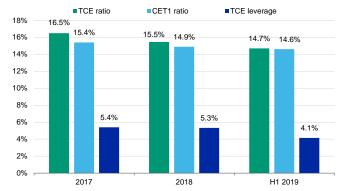
Given its role as a central institution for a large part of the German savings banks, the bank continues to run a significant derivatives book, mainly driven by the hedging needs for savings banks, the former Dexia Kommunalbank's portfolio, but also offering further services to its corporate customers. 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 4.1% as of half-year 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. Currently, the bank's regulatory balance sheet leverage ratio stands at 4.4% (down from 4.9% as of year-end 2017).

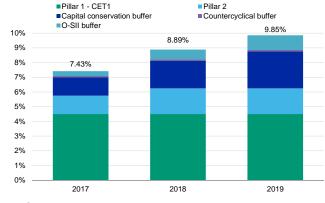
Exhibit 4
Helaba's solid levels of capital



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

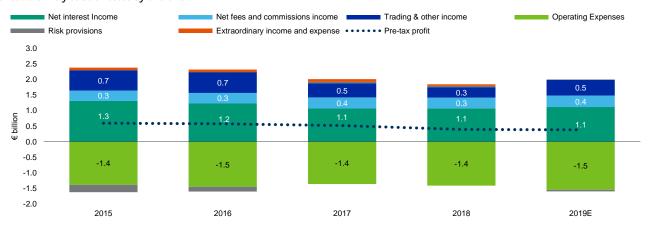
The bank's tangible common equity did fall to 14.7% as of half-year 2019, from 15.5% in 2018 and 16.5% in 2017. The decline in 2018 was driven by the effect of the implementation of IFRS 9 and some lending growth. Further, Helaba reported transitional Basel III CET1 and total capital ratios of 14.6% and 19.7%, respectively, as of half-year 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.

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

For the half-year 2019, Helaba reported an improved pretax profit of €325 million. The bank's net interest income increased to €557 million, after the acquisitions, while fee and commission income increased to €186 million. Key driver for the higher pretax profit, however, were one offs related to the acquisitions, totaling €153 million. Admin expenses rose to €772 million and, after years of positive earnings contributions from the risk situation, loan-loss provisions of €34 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 half-year 2019 the bank's refinancing structure consisted of €36.5 billion in due from financial institutions, €68 billion in deposits (including promissory notes) and €54 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

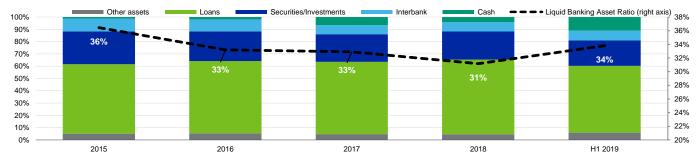
Funding requirements are likely to remain stable over the foreseeable future, given the bank's broadly matched funding profile for its medium- and long-term lending business. The bank typically issues €12 billion-€17 billion in medium- and long-term debt instruments per year (2019 planned: €16.0 billion, 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 €23.0 billion in cash as of half-year 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 year-end 2018, and based on an outstanding issuance of €15.0 billion, the over-collateralisation of Helaba's public-sector cover pool stood at 38% 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

Environmental risks can be defined as environmental hazards encompassing the impacts 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 regulation or other regulatory restrictions, including the related transition risks like policy, legal, technology and market shifts, that could impair the evaluation of assets are an important factor. In our Environmental risk heatmap, we scored 84 sectors according to their overall exposure to environmental risks. The banking sector has a low exposure in our view. In line with our general evaluation for banks, Helaba has an overall low exposure to Environmental risks. For further information, please refer to our Environmental risk heatmaps.

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 is partly mitigated by sizeable technology investments and banks' long track record of handling sensitive client data. Fines and reputational damage due to product misselling or other types of misconduct is 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 cost, aging population concerns in several countries impacting demand for financial services or socially driven policy agendas that may translate into regulation that affects banks' revenue base. Overall, we consider banks to face moderate social risks.

Corporate governance is a well-established key driver for banks and related risks are typically included in our evaluation of the 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. Governance is highly relevant for Helaba, as it is to all players in the banking industry. Corporate governance weaknesses can lead to a deterioration in a company's credit quality, while governance strengths can benefit its credit profile. Governance risks are largely internal rather than externally driven, and for Helaba we do not have any particular governance concern. Nonetheless, corporate governance remains a key credit consideration and requires 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 revised insolvency legislation in Germany that became effective on 21 July 2018 and is now consistent with that in most other EU countries, where statutes do not provide full preference to deposits over senior unsecured debt. However, in our Advanced LGF analysis, we now consider not only the results of both the formal legal position (pari passu or de jure scenario), to which we assign a 75% probability, but also an alternative liability ranking, reflecting the resolution authority's discretion to prefer deposits over senior unsecured debt (full depositor preference or de facto scenario), to which we assign a 25% probability.

We further assume residual tangible common equity of 3% and losses post-failure of 8% of tangible banking assets, a 25% run-off in junior wholesale deposits and a 5% run-off in preferred deposits. These ratios are in line with our standard assumptions. In addition, we assume that 26% of the deposit base can actually be considered junior and qualify as bail-in-able under the BRRD.

- » 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** rating methodology, published in August 2018.

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.

FINANCIAL INSTITUTIONS MOODY'S INVESTORS SERVICE

Rating methodology and scorecard factors

Exhibit 9

Landesbank Hessen-Thueringen GZ

Macro Factors						
Weighted Macro Profile Strong +	100%					
Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	0.8%	aa2	$\leftarrow \rightarrow$	baa1	Sector concentration	Market risk
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	14.7%	a1	$\leftarrow \rightarrow$	a2	Nominal leverage	Risk-weighted capitalisation
Profitability Net Income / Tangible Assets	0.2%	b1	\longleftrightarrow	b1	Return on assets	Expected trend
Combined Solvency Score		a2	. ,	baa2		·
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	53.1%	b3	\longleftrightarrow	ba2	Extent of market funding reliance	Market funding quality
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	31.2%	a2	$\leftarrow \rightarrow$	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		

Balance Sheet	in-scope (EUR Million)	% in-scope	at-failure (EUR Million)	% at-failure
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
otal Tangible Banking Assets	-	-	-	-

Debt Class	De Jure waterfall De Facto waterfall Notch		tching LGF		Assigned	Additional Preliminary				
		dinati	Instrument on volume + o subordinatior	rdination	De Jure	De Facto	Notching Guidance vs. Adjusted		Notching	Rating Assessment
Countries and Diel Dating							BCA			-1
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

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Category	Moody's Rating
LANDESBANK HESSEN-THUERINGEN GZ	
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
MAIN CAPITAL FUNDING II LIMITED PARTNERSHIP	
Pref. Stock Non-cumulative	Ba1 (hyb)
MAIN CAPITAL FUNDING LIMITED PARTNERSHIP	
Pref. Stock Non-cumulative	Ba1 (hyb)
Source: Moody's Investors Service	

Endnotes

- $\underline{\mathbf{1}}~$ The rating shown is S-Group's corporate family rating, outlook and BCA.
- 2 The rating shown is the Government of Germany's issuer rating and outlook.
- 3 For further details, please refer to Helaba's company profile and the German Banking System Profile.
- $\underline{\mathbf{4}}\;$ The initial score is referred to as the Macro-Adjusted score in our Bank Scorecard.

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