

CREDIT OPINION

11 August 2023

Update



RATINGS

LfA Foerderbank Bayern

Domicile	Munich, Germany
Long Term CRR	Not Assigned
Long Term Debt	Aaa
Туре	Senior Unsecured - Dom Curr
Outlook	Not Assigned
Long Term Deposit	Not Assigned

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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LfA Foerderbank Bayern

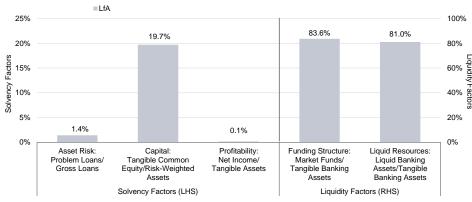
Update to credit analysis

Summary

LfA Foerderbank Bayern's (LfA) Aaa backed debt and deposit ratings are based on the guarantee framework provided by the Free State of Bavaria (Bavaria, Aaa stable¹), and the bank's ratings are aligned with that of Bavaria. The guarantee framework comprises an institutional liability (Anstaltslast) and a guarantor liability (Gewährträgerhaftung), as well as a full, explicit, unconditional, direct and irrevocable guarantee for the bank's existing and future obligations with respect to money borrowed, bonds issued and derivative transactions entered into by the bank.

LfA serves Bavaria's public-policy objectives with respect to general economic development, providing loans and other types of financing for small and medium-sized enterprises (SMEs) and start-ups. We recognise LfA's important role as Bavaria's public development bank focused on the economic development of the region; modest core operating performance, reflecting the bank's non-profit-maximising business model; and conservative risk profile, supported by adequate capitalisation and asset quality. However, because of the risk transfer to the guarantor, the bank's fundamentals have no bearing on the ratings.

Exhibit 1
Rating Scorecard - Key financial ratios



The key financial ratios are for information only. The ratios Asset Risk and Profitability are based on the 3 year average for the period 2020-2022.

Source: Moody's Financial Metrics

Credit strengths

- » Ownership support via an extensive guarantee framework
- » Earnings retention, which supports strong capitalisation
- » Large stock of liquid resources

Credit challenges

- » Earnings pressure resulting from a low-yield environment prior to 2022
- » Provisioning requirements in an increasingly difficult operating environment

Outlook

The outlook on LfA's ratings is stable, reflecting the stable outlook on the bank's owner and guarantor, Bavaria. The guarantor's outlook reflects our expectation that the regional government will maintain balanced financial accounts over the coming two years and maintain its commitment to reduce its debt.

Factors that could lead to an upgrade

LfA's ratings are at the highest level and therefore cannot be upgraded.

Factors that could lead to a downgrade

Downward pressure could be exerted on the ratings if the credit profile of the bank's guarantor, Bavaria, weakens; or the strong support mechanisms weaken or become disallowed, which is currently highly unlikely.

Key indicators

Exhibit 2
LfA Foerderbank Bayern (Consolidated Financials) [1]

	12-22 ²	12-21 ²	12-20 ²	12-19 ²	12-18 ²	CAGR/Avg.3
Total Assets (EUR Billion)	24.4	23.6	23.1	21.8	21.1	3.74
Total Assets (USD Billion)	26.0	26.7	28.3	24.5	24.1	2.04
Tangible Common Equity (EUR Billion)	1.8	1.8	1.8	1.8	1.7	1.04
Tangible Common Equity (USD Billion)	1.9	2.0	2.2	2.0	2.0	(0.7)4
Problem Loans / Gross Loans (%)	1.3	1.6	1.4	1.0	1.3	1.3 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	19.7	20.2	22.8	23.3	23.7	21.9 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	2.2	2.4	2.2	1.4	1.8	2.0 ⁵
Net Interest Margin (%)	0.4	0.4	0.5	0.5	0.5	0.45
PPI / Average RWA (%)	0.6	0.8	0.7	0.6	0.6	0.76
Net Income / Tangible Assets (%)	0.1	0.1	0.2	0.3	0.5	0.25
Cost / Income Ratio (%)	53.2	48.5	55.1	62.1	59.1	55.6 ⁵
Market Funds / Tangible Banking Assets (%)	83.6	82.6	81.9	80.9	79.7	81.7 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	81.0	83.1	82.7	82.2	82.2	82.25
Gross Loans / Due to Customers (%)	224.8	177.5	167.5	144.1	124.2	167.6 ⁵

^[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; LOCAL GAAP. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Profile

LfA Foerderbank Bayern (LfA) is a development bank of the federal state Bavaria and is wholly owned by the federal state. LfA's objectives are to support the general economic development of Bavaria and encourage employment. As of 31 December 2022, the

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Sources: Moody's Investors Service and company filings

bank reported an unconsolidated asset base of €24.4 billion. LfA provides financing products and services intended to improve the region's commercial and transport infrastructure, and to enhance its environmental protection. The bank's programmes are focused on SMEs and start-ups. Furthermore, LfA implements the development programmes of Bavaria and provides guarantees guided by the state or on behalf of the state.

The bank is headquartered in Munich and operates offices in the Bavarian cities of Nuremberg and Hof, employing 329 full-time equivalent staff. LfA holds a full banking licence and is regulated by the German Federal Financial Supervisory Authority (BaFin) and the Bundesbank.

LfA, among other German development banks², is excluded from the Single Supervisory Mechanism and the Single Resolution Mechanism, and minimum requirements for own funds and eligible liabilities (MREL) do not apply. Since 31 December 2020, following a change in the German banking act, LfA, among other German development banks, is no longer required to publish a disclosure report² and decided to discontinue the publication. The discontinuation results in reduced transparency of LfA's financials because details on regulatory disclosures are no longer publicly available.

For more information, please see our German Banking System Outlook.

Detailed credit considerations

Strong support and extensive guarantee framework

LfA benefits from an extensive support mechanism provided by its guarantor, Bavaria, which provides protection to investors. The guarantee framework comprises an institutional liability (Anstaltslast) and a guarantor liability (Gewährträgerhaftung), as well as a direct, explicit and unconditional guarantee for the bank's existing and future obligations with respect to money borrowed, bonds issued and derivative transactions entered into by the bank⁴.

The institutional liability describes the statutory responsibility of the guarantor. Bavaria needs to provide LfA with the financial means necessary to fulfill its public mandate and, therefore, to keep it functional for the duration of its existence. Additionally, the guarantor liability comprises a liability of the guarantor under public law that if LfA's assets are insufficient to cover the claims of its creditors, the guarantor will need to step in. Finally, a full, explicit, unconditional, direct and irrevocable guarantee obliges Bavaria to pay for LfA's outstanding liabilities on first demand, allowing for the timely payment of all obligations.

Recourse to ultimate borrower mitigates high concentration in banking industry

LfA's risk position is characterised by its highly concentrated interbank lending because a large share of promotional loans are granted through the banking sector (on-lending business), with commercial banks assuming the credit risk of the ultimate borrower ("house bank" principle). As of year-end 2022, loans to financial institutions accounted for 908% of the bank's tangible common equity (TCE), respectively 68% of LfA's total assets, or €16.5 billion. However, the on-lending business mitigates the concentration risks and significantly reduces the bank's capital requirements, because in case of a failure of a banking counterparty, LfA would benefit from its priority of claims over receivables from the ultimate borrowers, thereby providing an important layer of recourse to the bank⁵.

Besides using interbank lending, LfA also assumes direct credit risks, particularly if guided by regional government objectives. It either provides direct lending to the public sector or guarantees risks of house banks when these institutions are not prepared to assume higher risk levels, providing working capital guarantees for SMEs or participating in syndicated loans at the request of commercial banks (2022: €2.7 billion). As a result of LfA's partial focus on public-sector lending in its customer loan book, its asset quality is favourable, with the non-performing loan ratio below 2% since 2017.

As part of its special role, LfA's geographical concentration in Bavaria regularly exceeds 90% of its promotional loans. The relatively broad diversification of direct loans granted to various industry sectors only partially offsets this concentration. Furthermore, LfA is exposed to the credit risks of banks, companies and the public sector through its €3.8 billion high-quality, fixed-income securities portfolio. LfA makes very limited use of derivatives (only to hedge against interest rate and currency risks) and is not exposed to lower-rated European sovereigns through its securities holdings.

In its role <u>as a development bank</u>, LfA is responsible for the execution of the measures of the federal state of Bavaria, e.g. COVID-19 related support measures in 2022-2021. For example it offered loans and guarantees for the Bavarian companies hurt by the

coronavirus pandemic in 2020. In return LfA received a counter-guarantee covering up to €12 billion from the federal state in 2020. In 2022, LfA allocated only €0.1 billion of new lending volume related to the pandemic to companies and non-profit organisations in Bavaria, overall keeping the new lending volume stable at €2.6 billion compared with €2.6 billion in 2021.

At the beginning of the second quarter of 2023 LfA communicated that the new lending volume declined significantly in the first three months of the year (-34% compared with that in Q1 2022). According to LfA's management, the slump is a one-off and results from the currently cautious approach of SMEs pertaining to investments. Furthermore, the previous year's promotional lending volume was extraordinarily high, following the resumed growth after most pandemic related restrictions have ended.

Exhibit 3

LfA's assets are highly concentrated in the banking sector

As of year-end 2022, in total of €24.4 billion

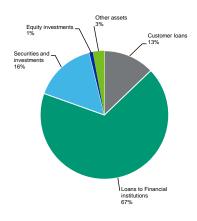
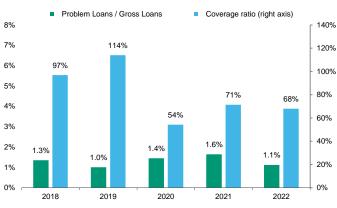


Exhibit 4
Evolution of LfA's problem loan and coverage ratios



Sources: Company and Moody's Investors Service

Sources: Company reports and Moody's Investors Service

Earnings retention supports strong capitalisation

LfA is strongly capitalised. The bank's transitional Common Equity Tier 1 (CET1) capital ratio was 19.5% as of year-end 2022, though slightly down from 20.0% as of year-end 2021^Z, driven mainly by a 3% increase in risk-weighted assets (RWA) to €9.2 billion year over year, while the bank's CET1 capital remained stable at €1.8 billion during the same period.

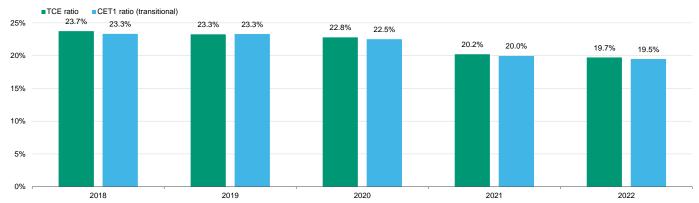
LfA's total capital ratio of 20.6% (2021: 21.5%) additionally includes fully taxed, undisclosed reserves of €380.7 million (in accordance with section 340f of the German Commercial Code), which provide further loss-absorbing capacity, because they could be released through the income statement or added to core capital at any time. The decline in total capital was also driven by RWA growth, while Tier 2 capital decreased slightly because of the regulatory phase-out of some instruments in 2022.

In addition to its already strong capitalisation, LfA retained 25%, or €5 million, of its net income in 2022, which further supports the bank's loss-absorbing capacity. In line with the LfA Act, the remaining 75%, or €14.8 million, will be distributed to its owner, the federal state Bavaria, but will flow back to LfA immediately to finance new lending activities within its public mandate.

LfA's risk density⁸, measured as RWA/tangible assets, of 38% as of year-end 2022, is only slightly lower than that of commercial banks, indicating only marginally lower average risk of assets for LfA than those for traditional commercial banks. At the same time, its regulatory leverage ratio was comfortable at 12.5% as of year-end 2022, up from 12.4% as of year-end 2021. As a result of changes in the European Union's Capital Requirements Regulation 2 (CRR2), LfA's regulatory leverage ratio improved since June 2021 because exposures to public-sector lending and promotional loans are now excluded from the risk exposure base for development banks.

Exhibit 5

LfA's capital ratios are strong



TCE = Tangible common equity (Moody's calculation). CET1 = Common Equity Tier 1. Starting 2020, RWA are based on solo accounts for LfA because of the omission of the disclosure report.

Sources: Company reports and Moody's Investors Service

Earnings pressure from legacy low-yield environment and development bank public mandate

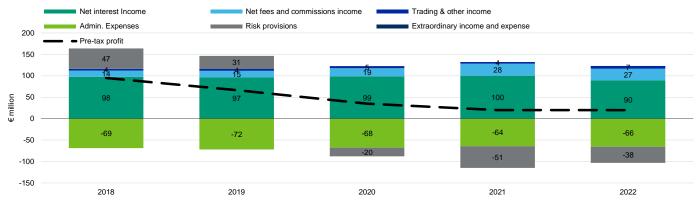
LfA's profitability performance in 2022 still reflects the low interest rate environment in recent years. The bank's net revenue is predominantly based on interest income (2022: 73%), while fees and commissions from guarantees and other risk assumptions play a minor role.

High operating efficiency, as reflected by a 53% cost-to-income ratio in 2022 (2021: 48%), and low credit costs are essential for the success of the bank's business model because LfA's public mandate limits its revenue generation to relatively low-margin, subsidized promotional development activities. Because profit maximisation is not part of the bank's mandate, the underlying profitability over the cycle is commensurate with its low-risk profile and should ensure gradual capital generation in line with LfA's growth. Based on the recent increase in interest rates in the euro area, we expect the bank's underlying earnings generation capacity to improve again because increasing rates support the net interest margin after a decreasing trend prior to 2022.

In 2022, the bank reported a decrease in its net interest income to €89.5 million (2021: €100.3 million) and in fee and commission income to €27.0 million (2021: €27.9 million), despite the resurgence of interest rates in the second half of 2022. Operating expenses increased by 2.4% to €65.5 million in 2022 from €64 million in 2021. Lower loan loss provisions supported the net interest result. The bank booked €37.7 million of loan loss provisions in 2022, down from €50.8 million a year earlier. Overall, this allowed the bank to report net profit (before the contribution to the bank's 340g reserve) of €19.8 million in 2022, which has not changed as compared to the previous year (2021: €19.8 million; 2020: €34.9 million).

Exhibit 6

LfA's profit is strained because of the low interest rate environment



Sources: Company reports and Moody's Financial Metrics

Guarantee framework mitigates refinancing risks resulting from high reliance on capital market funding

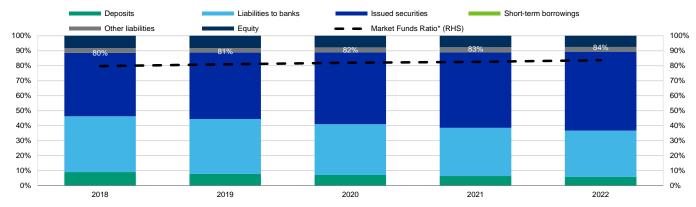
LfA relies heavily on market funding and depends on regular market access for not only the new business it underwrites, but also for its existing business, as reflected by a market funds ratio of 84% as of year-end 2022. However, the bank's strong position as a quasi-subsovereign prime issuer has so far ensured uninterrupted access to domestic and international capital markets at very attractive rates.

The risk of market access interruption is sufficiently mitigated by LfA's portfolio of €3.3 billion liquid fixed-income securities, as well as the bank's ability to access the European Central Bank (ECB) for repo transactions.

LfA's funding strategy includes federal development resources from Germany's largest development bank, <u>Kreditanstalt für</u> <u>Wiederaufbau</u> (Aaa stable/Aaa stable²), which accounts for €6.3 billion of LfA's liabilities. The bank's capital market funding requirements, which are typically around €2.0 billion per year, increased to €2.6 billion in 2022 from €2.5 billion in 2021. For 2023 LfA targets to refinance €2.5-3 billion. Access to interbank and ECB's facilities help cover temporary funding requirements.

Exhibit 7

LfA's funding profile is driven mainly by market funding



*Market funds ratio = market funds/tangible banking assets. Sources: Company reports and Moody's Investors Service

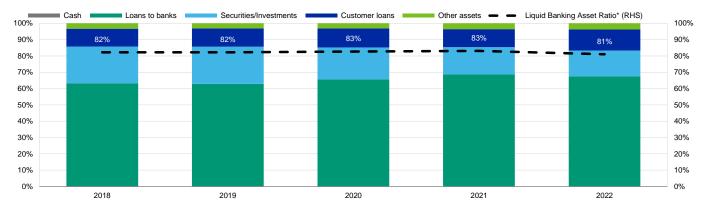
Large stock of liquid resources

LfA's liquid resources ratio was strong at 81.0% as of year-end 2022 (2021: 83.1%). Apart from its securities portfolio of €3.3 billion as of year-end 2022, the ratio includes €3.8 million in cash and €16.5 billion of interbank lending. However, the share of interbank lending, which is passed through the banks of the ultimate customers, is not readily available to cover LfA's liquidity needs. If we were to exclude promotional pass-through lending reported in interbank lending, the liquid resources ratio would be lower, but still remain strong.

Moreover, the liquidity coverage ratio of 318% as of year-end 2022 reflects LfA's sound liquidity management.

Exhibit 8

LfA's liquid resources mainly consist of interbank loans and liquid securities



^{*}Liquid banking assets ratio = liquid assets/tangible banking assets. Sources: Company reports and Moody's Investors Service

ESG considerations

In line with our general view of the banking sector, LfA has low exposure to environmental risks (see our <u>environmental risk heat map 10</u> for further information). As part of its business model, LfA offers promotional lending products, focusing on investments that will improve energy efficiency and protect resources.

For social risks, we also place LfA in line with our general view of the banking sector, which indicates moderate exposure (see our <u>social risk heat map¹¹</u>). This includes considerations in relation to the rapid and widening spread of the pandemic because of the substantial implications for public health and safety, and the deteriorating global economic outlook, which is creating a severe and extensive credit shock across many sectors, regions and markets. In case of LfA, the development bank is responsible for distributing the federal state's pandemic-related measures to the customers. It provides promotional lending only through the house bank of the customers. Hence, social risks for LfA are even more limited than for traditional commercial banks.

Corporate governance¹² is highly relevant for LfA, as it is to all participants 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 LfA, we do not have any particular governance concerns. Nonetheless, corporate governance remains a key credit consideration and requires ongoing monitoring.

Methodology

The principal methodology used in rating LfA was our Government-Related Issuers Methodology, published in February 2020.

Ratings

Exhibit 9

Category	Moody's Rating			
LFA FOERDERBANK BAYERN				
Outlook	Stable			
Bkd Bank Deposits	Aaa/P-1			
Bkd Senior Unsecured -Dom Curr	Aaa			
Source: Moody's Investors Service				

Endnotes

- 1 The rating shown is the Free State of Bavaria's long-term issuer rating and outlook.
- 2 Art. 2 Abs. 5 Nr. 5 Capital Requirements Directive (CRD) V, and national law through Risikoreduzierungsgesetz (RiG).
- 3 Pursuant to Section 2 Para. 9i Kreditwesengesetz (KWG).
- 4 The legal support mechanisms were agreed upon with the European Commission and enshrined in the specific law governing LfA (Act on LfA, dated 20 June 2001).
- 5 German development banks typically adopt a low-risk approach in their lending operations when they lend to the ultimate borrower's house bank, which is typically a small regional institution from the cooperative or savings bank sectors, or possibly a commercial bank in Germany. The house bank, in turn, passes on the loans to the ultimate borrower. By not funding the loans itself, the house bank avoids refinancing risks, but takes on the primary credit risk and pledges the claims to the development bank. In the event of failure of the house bank, the development bank would benefit from its priority of claims over receivables from the ultimate borrower, thereby providing another important layer of recourse to the bank.
- 6 As of December 2022 the guarantee was reduced to €1.48 billion reflecting the volume actually granted and effectively closing the programme.
- 7 Both the ratios are based on solo accounts of LfA.
- 8 According to the credit risk standardised approach.
- 9 The ratings shown are Kreditanstalt für Wiederaufbau's deposit rating and outlook, and senior unsecured rating and outlook.
- 10 Environmental risks can be defined as environmental hazards encompassing the impact of air pollution, soil or water pollution, water shortages, and natural and human-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, which could impair the evaluation of assets, are an important factor. Certain banks could face a higher risk from concentrated lending to individual sectors or operations exposed to the aforementioned risks.
- 11 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 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 further social risks. 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.
- 12 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 Baseline Credit Assessment.

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