MOODY'S INVESTORS SERVICE

CREDIT OPINION

7 July 2022

Update

Send Your Feedback

RATINGS

DekaBank Deutsche Girozentrale

| Domicile | Frankfurt am Main, Germany |
|-------------------|-------------------------------------------|
| Long Term CRR | Aa2 |
| Туре | LT Counterparty Risk Rating - Fgn Curr |
| Outlook | Not Assigned |
| Long Term Debt | Aa2 |
| Туре | Senior Unsecured - Dom Curr |
| Outlook | Stable |
| Long Term Deposit | Aa2 |
| 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.

Contacts

Bernhard Held, CFA +49.69.70730.973 VP-Sr Credit Officer bernhard.held@moodys.com

Alexander Hendricks, +49.69.70730.779 CFA

Associate Managing Director alexander.hendricks@moodys.com

» Contacts continued on last page

DekaBank Deutsche Girozentrale

Update following assignment of ESG scores

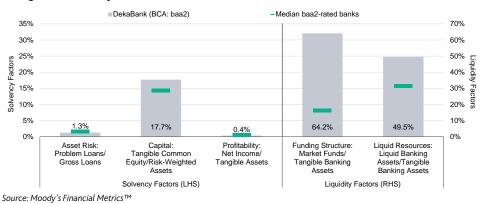
Summary

DekaBank Deutsche Girozentrale's (DekaBank) Aa2 deposit and senior unsecured debt ratings reflect the bank's baa2 Baseline Credit Assessment (BCA); two notches of rating uplift from its membership in the institutional protection scheme of <u>Sparkassen-Finanzgruppe</u> (S-Finanzgruppe, Aa2 stable, a2¹); the application of our Advanced Loss Given Failure (LGF) analysis to its liabilities, which indicates an extremely low loss given failure and results in three notches of rating uplift; and a one-notch rating uplift from government support, given its membership in the systemically relevant S-Finanzgruppe.

DekaBank's baa2 BCA reflects the bank's business model and status as the securities service provider for S-Finanzgruppe, which results in a high share of fee income. Despite this, DekaBank has a significant loan exposure, including from commercial real estate (CRE). The BCA also reflects the bank's strong capitalisation and sufficient profitability, which mitigate the asset risk stemming from its concentrated lending book. At the same time, the BCA incorporates the bank's high reliance on market funding, which is balanced by its access to an ample funding pool provided through excess deposits of S-Finanzgruppe's member banks.

Exhibit 1

Rating scorecard - Key financial ratios



Credit strengths

- » High share of recurring fee income, supported by a strong domestic savings rate
- » Sound capitalisation
- » Status as a core institution of S-Finanzgruppe

Credit challenges

- » Concentrated credit risk exposures in asset-based lending areas
- » Dependence on wholesale funding
- » Economic risks weigh on capital market performance and could lead to higher problem loans

Outlook

The stable rating outlook reflects our view that DekaBank will continue to maintain a stable solvency and liquidity profile, and that the bank's liability structure provides for continued strong protection for senior creditors through loss-absorbing liabilities.

Factors that could lead to an upgrade

- » An upgrade of DekaBank's ratings could result from an upgrade of its BCA. An upgrade of the BCA could, however, be offset by reduced affiliate support uplift.
- » DekaBank's BCA could be upgraded in the event of broad-based and significant improvement in solvency factors, in combination with a pronounced reduction in its market funding reliance.
- » Upward pressure from our Advanced LGF analysis could only arise for instruments ranking lower than senior unsecured debt, and only if DekaBank significantly increases its volume of subordinated instruments.

Factors that could lead to a downgrade

- » A downgrade of DekaBank's ratings could be triggered by a downgrade of the bank's Adjusted BCA or by a reduction in the rating uplift resulting from our Advanced LGF analysis.
- » DekaBank's BCA could be strained in case of a higher reliance on or a weaker quality of market funding. In addition, DekaBank's BCA could be downgraded if additional risks emerge from its commercial banking activities; the bank fails to maintain capital ratios at strong levels; or profitability declines substantially. A downgrade of the BCA could, however, be offset by additional affiliate support uplift.
- » DekaBank's ratings could also be downgraded should there be a significant decrease in the bank's stock of loss-absorbing liabilities, which may lead to fewer notches of rating uplift from our Advanced LGF analysis.

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.

Key indicators

Exhibit 2

DekaBank Deutsche Girozentrale (Consolidated Financials) [1]

| | 12-21 ² | 12-20 ² | 12-19 ² | 12-18 ² | 12-17 ² | CAGR/Avg. ³ |
|------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------------------|
| Total Assets (EUR Billion) | 88.8 | 85.5 | 97.2 | 100.4 | 93.8 | (1.4)4 |
| Total Assets (USD Billion) | 100.6 | 104.6 | 109.2 | 114.8 | 112.6 | (2.8)4 |
| Tangible Common Equity (EUR Billion) | 5.5 | 4.9 | 4.8 | 4.7 | 4.6 | 4.54 |
| Tangible Common Equity (USD Billion) | 6.2 | 6.0 | 5.3 | 5.4 | 5.5 | 3.04 |
| Problem Loans / Gross Loans (%) | 1.1 | 2.0 | 0.7 | 0.6 | 2.1 | 1.35 |
| Tangible Common Equity / Risk Weighted Assets (%) | 17.7 | 15.6 | 14.8 | 16.2 | 18.4 | 16.5 ⁶ |
| Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%) | 5.9 | 10.0 | 3.8 | 3.3 | 9.2 | 6.45 |
| Net Interest Margin (%) | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 ⁵ |
| PPI / Average RWA (%) | 2.5 | 1.7 | 1.4 | 1.6 | 2.1 | 1.9 ⁶ |
| Net Income / Tangible Assets (%) | 0.6 | 0.2 | 0.2 | 0.2 | 0.3 | 0.35 |
| Cost / Income Ratio (%) | 61.9 | 66.8 | 74.1 | 72.9 | 68.2 | 68.85 |
| Market Funds / Tangible Banking Assets (%) | 64.2 | 66.7 | 69.3 | 68.6 | 63.4 | 66.4 ⁵ |
| Liquid Banking Assets / Tangible Banking Assets (%) | 49.5 | 51.7 | 49.9 | 54.6 | 46.9 | 50.5 ⁵ |
| Gross Loans / Due to Customers (%) | 142.9 | 129.5 | 136.2 | 105.4 | 78.0 | 118.4 ⁵ |
| Gross Loans / Due to Customers (%) | 142.9 | 129.5 | 136.2 | 105.4 | 78.0 | 118. |

[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 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.

Sources: Moody's Investors Service and company filings

Profile

DekaBank Deutsche Girozentrale is the securities service provider (Wertpapierhaus) for Sparkassen-Finanzgruppe (S-Finanzgruppe). On a combined basis, S-Finanzgruppe accounts for more than a third of the German banking system. As of 31 December 2021, DekaBank reported consolidated balance-sheet assets of €88.9 billion, while its total customer assets, comprising off-balance sheet assets under management and structured notes, amounted to €395 billion (€196 billion from retail customers and €199 billion from institutional customers).

DekaBank provides its private and institutional clients with a range of fund-based products, covering all major asset classes. It also offers real estate funds and financing; lending; capital market-related trading and sales services; treasury facilities, including liquidity, asset and liability management; and funding. As of 31 December 2021, DekaBank employed 4,854 employees (4,243 on a full-time equivalent basis), mainly operating from its headquarters in Frankfurt am Main and its most important foreign office in Luxembourg.

DekaBank was established on 1 January 1999 following the merger of DekaBank GmbH and Deutsche Girozentrale — Deutsche Kommunalbank. Since June 2011, the bank has been fully owned by the German Sparkassen (savings banks) through two joint shareholders: Deutsche Sparkassen-und Giroverband ö.K. (DSGV ö.K., the German Savings Banks Association) and Deka Erwerbsgesellschaft mbH & Co. KG.

For more information, please see DekaBank's Issuer Profile.

DekaBank's weighted macro profile is Strong (+)

DekaBank's main exposures are located in Europe: 50.5% of total gross loans as of 31 December 2021 were located in its home market of <u>Germany</u> (Aaa stable), 26% in other euro area countries (of this, 10.9% in <u>Luxembourg</u> (Aaa stable) and 5.9% in <u>France</u> (Aa2 stable)), 7.5% in the <u>United Kingdom</u> (Aa3 stable), and the remaining 16% in other countries. Weighting by DekaBank's exposures results in a Strong (+) macro profile, on par with the Strong (+) <u>macro profile</u> of Germany.

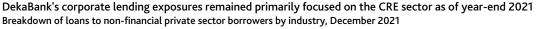
Detailed credit considerations

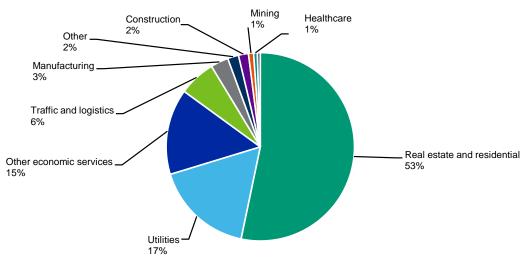
Following a temporary spike, problem loans resumed the multi-year downward trend

We assign a baa2 Asset Risk score, five notches below the aa3 initial score, reflecting DekaBank's credit risks from concentrated lending positions and market risk profile. Because of its role as the securities service provider of S-Finanzgruppe, DekaBank's business risks are only partly driven by credit risks from its lending activities. Changes in the market value of underlying investments of the bank's fund management business have a direct impact on the magnitude of fee income derived and, for some products, may result in changes in provisioning needs resulting from contingent liabilities. Asset managers, including DekaBank, are exposed to operational and reputational risks, which can increasingly stem from potential breaches of data security and customer privacy.

DekaBank's corporate lending exposures are strongly focused on CRE, as Exhibit 3 shows. DekaBank's outstanding CRE loan volume increased to €8.6 billion in December 2021 from €7.8 billion as of year-end 2020. In addition to CRE lending, DekaBank has further indirect exposure to commercial property markets through its €2.7 billion lending book (December 2020: €2.5 billion) as of 31 December 2021 to its in-house mutual property funds. DekaBank's combined CRE lending segment is backed 8% by retail and 4% by hotel properties, both of which have been hit by structural changes accelerated during the coronavirus pandemic. However, the moderate portfolio shares of these subsegments compare favourably with those of its CRE lender peers.

Exhibit 3

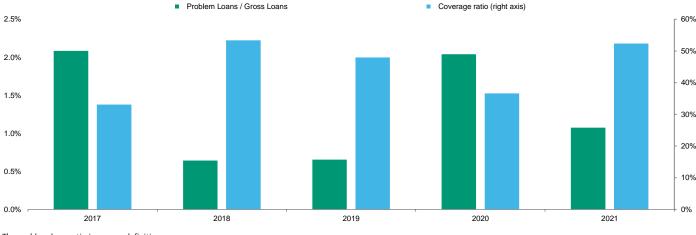




Sources: Pillar 3 disclosure report and Moody's Investors Service

As of 31 December 2021, DekaBank's problem loan ratio improved strongly to 1.1% of gross loans from 2.0% as of December 2020. During 2020, the coronavirus pandemic had triggered a spike in problem loans, in particular in DekaBank's transport finance segment, which included €2.9 billion of aircraft financing gross loans as of December 2020 and was managed down by €0.5 billion in 2021. Whereas DekaBank's direct exposure to Russia and Ukraine is not significant, the economic second-round effects from the conflict, including higher inflation and steeper risks to growth, could add to the bank's asset risks. Nonperforming loans (NPLs) declined in 2021

Exhibit 4



The problem loan ratio is per our definition. Sources: Company and Moody's Investors Service

sources. Company and moody's investors service

Apart from counterparty (credit) risk, DekaBank is exposed to considerable market risk related to investments and derivative positions. Accordingly, potential dislocations in capital markets that are more severe than those seen in H1 2020 represent tail risks for the bank's securities lending business. For certain fund-based retirement savings products, DekaBank provides capital guarantees to investors. As of 31 December 2021, the bank set aside €47.7 million in provisions (2020: €51.7 million) for potential liabilities in case fund returns for covering investor capital fall short.

Capitalisation remains sound and benefits from earnings retention

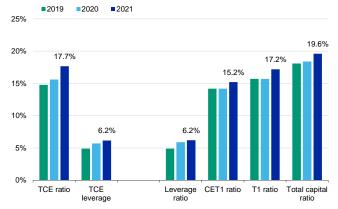
We assign a Capital score of a2, three notches below the aa2 initial score. We expect a moderate decline in capital ratios over the course of 2022, and our adjustment also incorporates our expectation of future growth in risk-weighted assets (RWA) led by tighter regulatory measures.

Starting in 2023, the <u>introduction of a countercyclical buffer requirement</u>, equivalent to 0.75% of domestic RWA, will add to DekaBank's regulatory capital requirements. In addition, the bank's multi-family housing exposures will attract a 2% (of RWA) sector-specific systemic risk buffer add-on. DekaBank, however, has been managing its capital ratios significantly above regulatory requirements, and its tangible common equity (TCE) ratio, measured as TCE/RWA, increased to 17.7% as of December 2021 from 15.6% as of year-end 2020. The increase was supported by strong profit in 2021, as well as by a strong decline in market RWA after these had been pushed up in 2020 by elevated market volatility. A \leq 4 billion slump in market RWA neutralised the increase in credit RWA during 2021. The bank's TCE leverage also improved significantly to 6.2% as of 31 December 2021 from 5.6% as of the year-end 2020. DekaBank reported a 15.2% regulatory Common Equity Tier 1 (CET1) capital ratio as of December 2021, which improved to 16.6% as of 31 March 2022 after the appropriation of the prior year's profit. The regulatory capital ratio nevertheless remains below the 17.7% TCE ratio mainly as a result of regulatory deductions (\leq 260 million) and prudential filters (\leq 145 million) applied to CET1 capital.

DekaBank used internal models to calculate credit risk weights of €41 billion out of its €78 billion of net risk positions as of 31 December 2021, mainly in relation to its corporate lending book. The risk weights for the remaining €37 billion are calculated using the standardised approach. Regulatory changes because of the phase-in of Basel IV requirements will limit the benefits of internal models, which will increase the bank's RWA over the medium term. A moderate weakening of capital ratios might result from certain legal risks, mainly stemming from investigations into past transactions in German stocks near the dividend payment dates. As of 31 December 2021, DekaBank's minimum capital requirements determined by the Supervisory and Review Process (SREP) were 10.0% on a CET1 basis and 12.3% on a total capital basis. DekaBank comfortably exceeded these levels at all times.

Exhibit 5

DekaBank's CET1 and TCE ratio development

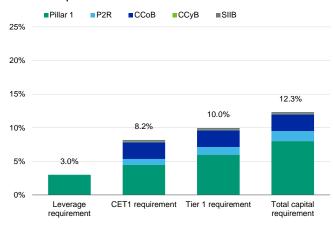


TCE = Tangible Common Equity (our calculation); CET1 = Common Equity Tier 1 (fully loaded); T1 = Tier 1 capital.

Sources: Company and Moody's Investors Service

Exhibit 6

DekaBank's year-end 2021 capital ratios are well above the minimum requirements



CCoB = Capital conservation buffer; CCyB = Countercyclical capital buffer; SIB = Systemically important institutions buffer. Source: Company

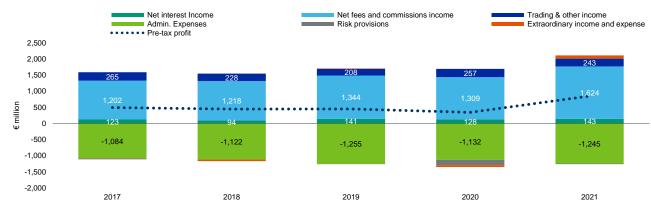
High share of stable fee income provides an earnings buffer

We assign a Profitability score of ba2, at the level of the initial score, reflecting DekaBank's stable earnings in a difficult economic and volatile capital market environment, and our expectation that the bank will maintain in 2022 the positive momentum of its improved 2021 results.

Fee income from its strong and profitable asset management franchise has proved to be an important buffer for credit and marketrelated losses, even as a shift toward passive investments could hurt the bank's asset-based margin in the long term. As the preferred retail asset manager of the savings banks sector and a leading provider of institutional investment funds, DekaBank's net fee and commission income accounted for 81% of net revenue as of 31 December 2021. Deka doubled its retail customer segment's net sales to ≤ 25.0 billion in 2021, while net sales of institutional customers declined to ≤ 10.7 billion from ≤ 19.5 billion in the prior year due to the one-off loss of a large-volume contract. Overall, this led to an increase in total customer assets to ≤ 395 billion in December 2021, up 16% year over year.

Based on our adjusted financials, DekaBank's net income increased by €382 million in 2021 to €567 million. DekaBank's net commission income, the bank's main profitability driver, increased by €0.3 billion (24%) in 2021 to €1.6 billion. Commissions from the investment fund business rose, in particular because of higher portfolio-related fees as a result of higher average total customer assets. In 2021, DekaBank also benefited from a drop in loan loss provisions to €18.5 million after it had set aside €162.2 million in 2020 against the background of the weak economic environment marked by the coronavirus pandemic. The bank's trading profit also increased to €191 million in 2021, primarily driven by the increased sales of certificates.

Exhibit 7



Net fee and commission income supported earnings, with further growth throughout 2021

Sources: Company and Moody's Investors Service

In addition to its results under International Financial Reporting Standards (IFRS), DekaBank reports an economic result to better represent its true economic position. This non-GAAP pretax measure incorporates several items not shown in the IFRS income statement, such as valuation gains and losses from hedged lending, actuarial gains and losses, potential charges and interest expense related to Additional Tier 1 bonds (with the latter also being reclassified to interest expenses in our adjusted financials).

DekaBank's 2021 economic pretax result of €848 million (up from €269 million in 2020) was moderately above the bank's reported €791 million IFRS pre-tax profit (which was €386 million in 2020). The economic pretax result mainly benefited from a turnaround in the economic result of the financing business division to €95 million from a loss of €87 million in 2020 because of elevated loan loss provisions in 2020, as well as from a marked improvement in the economic result of the asset management securities business division, which contributed €606 million compared with €366 million in the previous year.

Wholesale funding dependence mitigated by a strong access to sector funding

We assign a Funding Structure score of ba3, four notches above the caa1 initial score, incorporating the bank's access to additional funding resources and the expected trend.

DekaBank is highly dependent on wholesale funds. More than half of the bank's balance sheet is funded through interbank repo and other short-term products, as Exhibit 8 shows, specifically institutional deposits. This high dependence on confidence-sensitive wholesale funding sources is balanced by DekaBank's strong and recurring access to funds from the savings bank sector, and substantial regular excess cash from its mutual funds franchise, from which the bank received €16.0 billion in customer deposits as of 31 December 2021 (€13.1 billion as of 31 December 2020). The still-modest volume of €30.6 billion of customer loans (as of December 2021) is sufficiently matched by medium- and long-term funds.



Exhibit 8 Detailed composition of market funding

Sources: Company and Moody's Investors Service

Moderate amounts of temporarily sourced funds from the European Central Bank's targeted longer-term refinancing operations (TLTRO) are used for arbitrage purposes and contributed €20 million of refinancing gains for DekaBank in 2021. We expect these funds to be repaid out of the excess cash held by the bank.

From June 2021, a minimum regulatory net stable funding ratio (NSFR) of 100% came in force. At 118.9% as of December 2021, DekaBank comfortably complied with it, yet this metric will limit DekaBank's ability to shift its funding structure back toward shorterterm funding products, such as its commercial paper programme. The regulatory minimum requirement for own funds and eligible liabilities (MREL) is a far less binding constraint for DekaBank. From 1 January 2022, the bank's MREL requirement will be set against both RWA and leverage exposure. As of December 2021, DekaBank reported very strong MREL ratios of 59.7% (against RWA) and 21.7% (against leverage exposure). DekaBank's MREL instruments included €6.1 billion of own funds, €7.7 billion of senior non-preferred issues, €4.5 billion of senior preferred issues and €0.2 billion unsecured subordinated liabilities.

Highly liquid balance sheet despite asset encumbrance

We assign DekaBank a Liquid Resources score of a2, two notches below the initial score. The a2 assigned score takes into account the strong buffer of liquid resources based on cash, liquid securities and interbank claims. However, this buffer is reduced by a significant extent through encumbrance resulting from secured funding transactions.

About half of DekaBank's balance sheet can — in principle — be considered liquid, as Exhibit 9 shows, reflecting securities lending and reverse repo balances, cash and trading positions. However, a relevant share of these are encumbered. As of year-end 2021, DekaBank had provided \in 3.6 billion in liquid assets as collateral for derivative transactions, down from \in 5.2 billion as of year-end 2020. At the peak of 2020's market volatility in H1 2020, the bank had posted up to \notin 7.7 billion of liquid assets as collateral, highlighting the need to maintain ample buffers for unforeseen market swings.

DekaBank's Day One liquidity potential of \in 3.2 billion and total unencumbered high-quality liquid resources eligible for the regulatory liquidity coverage ratio (LCR) of \in 24.5 billion on average in Q4 2021 provide sound buffers against such unforeseen market swings. Consequently, the LCR remained solid, averaging 160.2%, down from 180.4%.

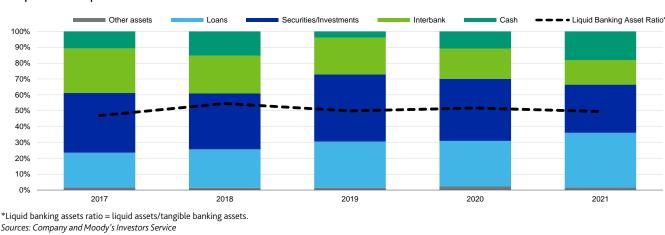


Exhibit 9 Composition of liquid assets

As of December 2021, DekaBank's cash holdings increased to €15.9 billion from €9.2 billion as of year-end 2020. At the same time, liabilities to banks remained relatively stable compared with the prior year at €15.7 billion, following a decline in interbank lending that was offset by an increase in the repo business. We expect DekaBank's excess cash position to normalise upon the repayment of its undisclosed TLTRO borrowing amount.

ESG considerations

DEKABANK DEUTSCHE GIROZENTRALE's ESG Credit Impact Score is Neutral-to-Low CIS-2

rating; i.e., the overall influence of these attributes on the rating is non-material.

Exhibit 10 ESG Credit Impact Score



Source: Moody's Investors Service

DekaBank's ESG Credit Impact Score is neutral-to-low (**CIS-2**), reflecting the mitigating rating impact of affiliate support from Sparkassen-Finanzgruppe (S-Finanzgruppe) over DekaBank's ESG risk profile. Environmental and social factors have a limited impact on the bank's credit profile to date. The bank's corporate governance risks mainly stem from the bank's subdued operational efficiency and concentration risks in its loan book, which are inherent to its business profile.

Exhibit 11 ESG Issuer Profile Scores

| ENVIRONMENTAL | SOCIAL | GOVERNANCE |
|---------------------|-----------------|---------------------|
| E-3 | S-4 | G-3 |
| Moderately Negative | Highly Negative | Moderately Negative |
| | | |

Source: Moody's Investors Service

Environmental

DekaBank faces moderate exposure to environmental risks, primarily because of its exposure to carbon transition risk from its corporate lending activities. Within its asset management business, DekaBank has low direct corporate exposure to environmental risks and its fund exposures are well diversified. In response to increasing stakeholder focus on environmental stewardship in its asset management products and on meeting broader carbon transition goals, DekaBank is actively engaging in aligning its business with the transition to a low-carbon economy.

Social

DekaBank faces high industrywide social risks related to customer relations, mostly arising from the marketing and distribution of financial products as an asset manager with a large retail business. Rising digitization will increase data security risks. High cyber and personal data risks are mitigated by technology solutions and organisational measures to prevent data breaches. DekaBank faces moderate exposure to demographic and societal trends, related primarily to its focus on active management against the backdrop of increasing popularity of passive asset management strategies. As a mitigant, DekaBank benefits from strong net new money inflows from its retail customer base which is mostly covered by the strong distribution network of local German savings banks that benefits from a strong degree of customer loyalty.

Governance

Governance risks for DekaBank are moderate, reflecting higher concentration risks inherent in its business model as a specialised lender. Its strategy, risk management function and organisational structure are in line with industry practices. Management's ability to address the bank's modest profitability remains a concern because it provides only a limited buffer against adverse developments and limits the bank's capital generation capacity and, hence, growth prospects. DekaBank's board of directors' composition reflects the group's savings banks owners, with limited independent representation, but this does not result in incremental governance risks because of Germany's developed institutional framework.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click <u>here</u> to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Support and structural considerations

Affiliate support

DekaBank benefits from cross-sector support from S-Finanzgruppe. This cross-sector support significantly reduces the probability of default, as it would be available to stabilise a distressed member bank and not just compensate for losses in resolution. We consider the readiness of the sector to support DekaBank to be Very High because of the bank's key service function for the sector, and its 100% ownership by the sector's savings banks. Cross-sector support continues to provide two notches of rating uplift from the baa2 BCA, leading to an a3 Adjusted BCA.

Loss Given Failure (LGF) analysis

DekaBank 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. We assume residual TCE of 3%, post-failure losses of 8% of tangible banking assets, a 26% proportion of junior deposits, and a 25% run-off of these before failure and a 5% run-off in preferred deposits. These metrics are in line with our standard assumptions.

- » For deposits and senior unsecured debt, our LGF analysis indicates an extremely low loss given failure, leading us to position the Preliminary Rating Assessment at aa3, three notches above the a3 Adjusted BCA.
- » For junior senior unsecured debt, our LGF analysis indicates a very low loss given failure, leading us to position its Preliminary Rating Assessment at a1, two notches above the a3 Adjusted BCA.
- » For subordinated debt, our LGF analysis indicates a high loss given failure, leading us to rate these instruments Baa1, one notch below the a3 Adjusted BCA.
- » We rate DekaBank's perpetual Additional Tier 1 notes Baa3(hyb), three notches below the a3 Adjusted BCA, reflecting our framework for rating non-viability contingent convertible securities.

Government support considerations

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

Counterparty Risk Ratings (CRRs)

DekaBank's CRRs are Aa2/P-1

The CRRs, before government support, are three notches above the Adjusted BCA of a3, reflecting the extremely low loss given failure from the high volume of instruments, primarily junior senior unsecured debt, which are subordinated to CRR liabilities. DekaBank's CRRs also benefit from one notch of rating uplift provided by government support, in line with our support assumptions on deposits and senior unsecured debt.

Counterparty Risk (CR) Assessment

DekaBank's CR Assessment is Aa2(cr)/P-1(cr)

DekaBank's CR Assessment is four notches above the Adjusted BCA of a3, incorporating three notches of uplift derived from the buffer against default provided by more subordinated instruments, primarily junior senior unsecured debt, to the senior obligations represented by the CR Assessment; and one notch of government support uplift, assuming a moderate level of support. To determine the CR Assessment, we focus purely on subordination and we do not take into account the volume of the instrument class.

Methodology and scorecard

Methodology

The principal methodology used in rating DekaBank was the Banks Methodology, published in July 2021.

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 might significantly 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 can be adjusted up or down to reflect conditions specific to each rated entity.

Rating methodology and scorecard factors

Exhibit 12

DekaBank Deutsche Girozentrale

| 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 | 1.3% | aa3 | \leftrightarrow | baa2 | Sector concentration | Market risk |
| Capital | | | | | | |
| Tangible Common Equity / Risk Weighted Assets (Basel III - fully loaded) | 17.7% | aa2 | \leftrightarrow | a2 | Expected trend | Risk-weighted capitalisation |
| Profitability | | | | | | |
| Net Income / Tangible Assets | 0.4% | ba2 | \leftrightarrow | ba2 | Expected trend | Return on assets |
| Combined Solvency Score | | a1 | | baa2 | | |
| Liquidity | | | | | | |
| Funding Structure | | | | | | |
| Market Funds / Tangible Banking Assets | 64.2% | caa1 | \leftrightarrow | ba3 | Market funding quality | Extent of market funding reliance |
| Liquid Resources | | | | | | - |
| Liquid Banking Assets / Tangible Banking Assets | 49.5% | aa3 | \leftrightarrow | a2 | Asset encumbrance | Quality of liquid asset |
| Combined Liquidity Score | | ba1 | | 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 | | |
| BCA Scorecard-indicated Outcome - Range | | | | baa1 - baa3 | | |
| Assigned BCA | | | | baa2 | | |
| Affiliate Support notching | | | | 2 | | |
| Adjusted BCA | | | | a3 | | |

Balance Sheet is not applicable.

| Debt Class | De Jure wa | nterfal | l De Facto v | /aterfall | Not | ching | LGF | Assigned | Additional Preliminary | |
|--------------------------------------|--------------------------------------------|---------|----------------------------------------------|-----------|---------|----------|------------------------------------------------|----------|------------------------|----------------------|
| | Instrument volume + or subordination | | Instrument on volume + o subordinatior | rdination | De Jure | De Facto | Notching Guidance vs. Adjusted BCA | | Notching | Rating Assessment |
| Counterparty Risk Rating | - | - | - | - | - | - | - | 3 | 0 | aa3 |
| Counterparty Risk Assessment | - | - | - | - | - | - | - | 3 | 0 | aa3 (cr) |
| Deposits | - | - | - | - | - | - | - | 3 | 0 | aa3 |
| Senior unsecured bank debt | - | - | - | - | - | - | - | 3 | 0 | aa3 |
| Junior senior unsecured bank debt | - | - | - | - | - | - | - | 2 | 0 | a1 |
| Dated subordinated bank debt | - | - | - | - | - | - | - | -1 | 0 | baa1 |
| Non-cumulative bank preference share | s - | - | - | - | - | - | - | -1 | -2 | baa3 |

| 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 | aa3 | 1 | Aa2 | Aa2 |
| Counterparty Risk Assessment | 3 | 0 | aa3 (cr) | 1 | Aa2(cr) | |
| Deposits | 3 | 0 | aa3 | 1 | Aa2 | Aa2 |
| Senior unsecured bank debt | 3 | 0 | aa3 | 1 | Aa2 | Aa2 |
| Junior senior unsecured bank debt | 2 | 0 | al | 0 | A1 | |
| Dated subordinated bank debt | -1 | 0 | baa1 | 0 | Baa1 | |
| Non-cumulative bank preference shares | -1 | -2 | baa3 | 0 | Baa3 (hyb) | |

[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 13

| Category | Moody's Rating |
|---------------------------------------|-----------------|
| DEKABANK DEUTSCHE GIROZENTRALE | |
| Outlook | Stable |
| Counterparty Risk Rating | Aa2/P-1 |
| Bank Deposits | Aa2/P-1 |
| Baseline Credit Assessment | baa2 |
| Adjusted Baseline Credit Assessment | a3 |
| Counterparty Risk Assessment | Aa2(cr)/P-1(cr) |
| Issuer Rating | Aa2 |
| Senior Unsecured -Dom Curr | Aa2 |
| Junior Senior Unsecured -Dom Curr | A1 |
| Junior Senior Unsecured MTN -Dom Curr | (P)A1 |
| Subordinate -Dom Curr | Baa1 |
| Pref. Stock Non-cumulative -Dom Curr | Baa3 (hyb) |
| Commercial Paper -Dom Curr | P-1 |
| Other Short Term -Dom Curr | P-1 |
| Source: Moody's Investors Service | |

Source: Moody's Investors Service

Endnotes

1 The ratings shown are S-Finanzgruppe's corporate family ratings, outlook and BCA.

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS. INC. AND/OR ITS AFFILIATES, MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL. WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1328843

Contacts

Bernhard Held, CFA VP-Sr Credit Officer Sarah Sorek Associate Analyst

MOODY'S INVESTORS SERVICE