

CREDIT OPINION

22 November 2023

Update



RATINGS

Norddeutsche Landesbank Girozentrale

Domicile	Hannover, Germany
Long Term CRR	A3
Туре	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	A3
Туре	Senior Unsecured - Dom Curr
Outlook	Positive
Long Term Deposit	A3
Туре	LT Bank Deposits - Fgn Curr
Outlook	Positive

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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Norddeutsche Landesbank Girozentrale

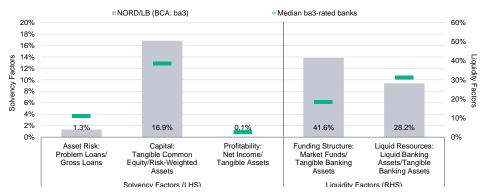
Update to credit analysis

Summary

Norddeutsche Landesbank Girozentrale's (NORD/LB) A3 deposit and senior unsecured debt ratings reflect the bank's ba3 Baseline Credit Assessment (BCA), a two-notch rating uplift from its membership in the institutional protection scheme of Sparkassen-Finanzgruppe (S-Finanzgruppe; Aa2 stable, a2)¹, resulting in a ba1 Adjusted BCA, three notches of rating uplift from our Advanced Loss Given Failure (LGF) analysis, which incorporates the relative loss severity of a liability class, and a one-notch rating uplift from government support, given its membership in the systemically relevant S-Finanzgruppe.

NORD/LB's ba3 BCA reflects the bank's financial resilience after its recapitalisation in 2019 and subsequent loan book cleanup. The significant de-risking of its balance sheet by exiting the cyclical shipping segment and other non-core segments, along with increased capital buffers, is an important mitigant to a more concentrated corporate loan book that includes sizeable Commercial Real Estate (CRE) exposures. A sustainable improvement in its profitability level is required to remove uncertainties regarding the bank's new business footprint and value proposition and will thus remain a key challenge for the bank, particularly amid economic uncertainty. Finally, NORD/LB's BCA considers the bank's elevated market funding dependence and adequate liquid resources.

Exhibit 1 **Key financial ratios**



Asset Risk and Profitability ratios are the average over the 2020 to H1 2023 period. Source: Moody's Investors Service and company filings

Credit strengths

- » Strong risk-weighted capitalisation following the capital injection in 2019, supported by asset guarantees
- » Solid asset quality after the wind-down of its shipping loan portfolio
- » Membership in S-Finanzgruppe's institutional protection scheme (IPS)

Credit challenges

- » Remaining execution risks associated with the bank's transformation plan
- » Limited track record of profit generation in the bank's core segments
- » Risks to credit quality in a recession scenario given the bank's high exposure to corporate clients and significant CRE concentration
- » Dependence on confidence-sensitive market funding

Outlook

- » The positive outlook considers that NORD/LB's BCA and thus its ratings could be upgraded if its improved credit profile is maintained and if the bank further strengthens its banking franchise, as it continues to transform itself into a leaner, more focused bank that is firmly entrenched in the German savings banks sector.
- » Furthermore, the positive outlook reflects our expectation that the bank's liability structure will remain broadly unchanged.

Factors that could lead to an upgrade

» NORD/LB's ratings could be upgraded following an upgrade of the bank's BCA. An upgrade of the BCA would be subject to evidence of continued stability of NORD/LB's credit profile and further execution of its strategy. NORD/LB's junior senior unsecured and its subordinated debt ratings could also be upgraded if the bank were to issue significant volumes of capital instruments.

Factors that could lead to a downgrade

» There is currently limited downward pressure on the bank's ratings. A downgrade of NORD/LB's ratings is likely if the bank's BCA or Adjusted BCA are downgraded, which could stem from a significant weakening of the bank's credit profile. Furthermore, a downgrade of the bank's junior senior unsecured debt ratings could result from a reduction in the volume of junior senior unsecured debt or subordinated debt outstanding, such that it results in a higher loss severity than currently expected.

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
Norddeutsche Landesbank Girozentrale (Consolidated Financials) [1]

	06-23 ²	12-22 ²	12-21 ²	12-20 ²	12-19 ²	CAGR/Avg. ³
Total Assets (EUR Billion)	106.5	106.0	111.4	120.9	133.9	(6.3) ⁴
Total Assets (USD Billion)	116.2	113.1	126.2	147.9	150.3	(7.1)4
Tangible Common Equity (EUR Billion)	6.8	6.7	6.6	6.4	6.3	2.1 ⁴
Tangible Common Equity (USD Billion)	7.4	7.1	7.4	7.9	7.1	1.3 ⁴
Problem Loans / Gross Loans (%)	0.9	1.0	1.4	2.0	3.1	1.7 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	16.9	16.7	17.5	16.1	15.9	16.6 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	8.9	9.8	12.7	19.3	31.7	16.5 ⁵
Net Interest Margin (%)	1.0	0.9	0.8	0.8	0.7	0.85
PPI / Average RWA (%)	0.7	0.2	0.4	0.5	0.8	0.6 ⁶
Net Income / Tangible Assets (%)	0.2	0.1	0.1	-0.2	-0.1	0.05
Cost / Income Ratio (%)	77.6	91.6	86.8	81.9	74.4	82.5 ⁵
Market Funds / Tangible Banking Assets (%)	42.4	41.6	42.4	43.9	44.5	42.9 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	28.4	28.2	32.0	31.4	32.2	30.4 ⁵
Gross Loans / Due to Customers (%)	160.9	156.0	149.4	152.6	152.2	154.2 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 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

NORD/LB operates as a universal bank, serving private, corporate, and institutional customers, with a regional focus on Northern Germany and branches in London, New York, and Singapore. NORD/LB's retail activities are housed within Braunschweigische Landessparkasse, while the bank's commercial activities comprise corporate lending as well as asset-based financing for the energy, infrastructure, and real estate sectors. In addition, the bank serves as the state bank in the German federal states of Lower Saxony and Saxony-Anhalt, and as the central bank for the savings banks in Lower Saxony, Saxony-Anhalt, and Mecklenburg-Western Pomerania.

NORD/LB was established in July 1970 following the merger of four banks: Niedersaechsische Landesbank, Braunschweigische Staatsbank, Hannoversche Landeskreditanstalt and Niedersaechsische Wohnungskreditanstalt-Stadtschaft. As of 30 June 2023, its largest shareholder was the State of Lower Saxony, which held a 57.5% stake, while the State of Saxony-Anhalt held a 6.3% stake and the remainder of the bank was owned by several savings banks vehicles.

For more information, please see NORD/LB's Issuer Profile and Germany's Banking System Outlook.

Weighted Macro Profile of Strong (+)

NORD/LB's credit profile benefits from its Strong (+) Weighted Macro Profile, which is in line with Germany's Strong (+) Macro Profile and reflects a significant reduction in the bank's exposure to the global shipping sector as well as the refocusing of its lending activities on Germany and other European Union (EU) countries.

Detailed credit considerations

Transformation programme nearly completed; however, initial cost objectives will not be met

Since year-end 2018, NORD/LB has successfully downsized and de-risked its balance sheet, reducing its reported total assets by 29% to €109.4 billion and its risk-weighted assets (RWA) by 11% to €40.4 billion as of 30 June 2023. As part of its transformation programme "NORD/LB 2024", the bank has exited the cyclical shipping segment and it continues to reduce exposures in other non-core segments, largely related to non-strategic parts of its corporates portfolio and supra-regional municipal financing.

However, the initial cost target, which aimed to "materially" reduce the bank's 2019 operating expense base of €1 billion by 2024, will not be met. Nonetheless, the bank targets to lower its expenses in the future through a reduction of its workforce to around 2,800-3,000 employees by year-end 2023 from 3,845 employees as of year-end 2022.

Overall, the bank's transformation programme "NORD/LB 2024" is now nearly completed, but there is still some uncertainty around NORD/LB's future strategy, its banking franchise and value proposition within the German banking landscape, as it needs to successfully win new business in a competitive environment without compromising on credit quality. In addition, the bank's "fitt - future investment in technology and transformation program", which started in October 2023 and runs until 2026 aims to implement a new IT-based bank steering system, creates ongoing execution risks.

Already under its "NORD/LB 2024" programme, the bank targeted to revamp its core bank steering software, an ambition that was rather unsuccessful and caused management to now terminate the project, invest anew, overhaul the implementation strategy, and start from scratch with the new "fitt" program. While the new process considers the outcome of a post mortem analysis of the old project, which should increase the chances of eventual success, it remains a key execution risk related to a crucial investment in the bank's future strategic agility.

Furthermore, on 22 September the bank has announced that it assesses options for a carve-out of the Braunschweigische Landessparkasse, a subsidiary of NORD/LB that operates as a savings bank. Lastly, there has been press speculation in October 2023 that NORD/LB might sell its aviation portfolio in the future.

Hence, to capture these remaining risks in executing its strategic revamp, we continue to incorporate a one notch negative Corporate Behaviour adjustment in NORD/LB's BCA.

Asset quality has continuously improved following the wind-down of the shipping loan portfolio

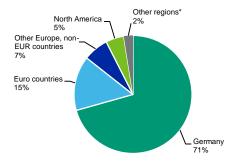
We assign a ba1 Asset Risk score, seven notches below the aa3 initial score, which is based on the average 1.3% problem loan ratio reported over the 2020 to H1 2023 period. Our downward adjustments reflect NORD/LB's sizeable sector concentrations in cyclical CRE and asset-based lending for corporate clients. Furthermore, we make a downward adjustment to reflect a potential weakening of the bank's asset quality because of ongoing challenges for the bank's corporate clients most susceptible to high energy prices.

The bank's problem loan ratio continued to decrease to 0.9% as of 30 June 2023 from 1.0% as of year-end 2022, representing a steady improvement from the 3.1% reported as of year-end 2019. NORD/LB's historically high problem loan ratio stemmed mostly from the bank's underperforming shipping loan portfolio, which has been reduced to €149 million as of 30 June 2023.

After the downsizing of its shipping loan portfolio and other non-core portfolios, NORD/LB's regional exposures now mostly relate to Germany and other Euro-area countries, which on a combined basis accounted for 86% of the bank's total exposure at default as of 30 June 2023. The bank's exposures to Germany marginally increased to 71% as of 30 June 2023 from 69% as of year-end 2019, whereas exposures derived from North America and other regions reduced during the period. Around 43% of the bank's exposures related to the service industry and the public-sector, while financial institutions accounted for 26% as of 30 June 2023.

Following the wind-down of its shipping loan portfolio, the bank's remaining most volatile and cyclical asset exposures are its CRE and aircraft finance portfolios. Previously, CRE loans were housed at NORD/LB's wholly owned subsidiary, Deutsche Hypo. Since 1 July 2021, Deutsche Hypo has been legally integrated into its parent and serves as a centre of competence for CRE within NORD/LB. At the group level, total CRE exposures stood at €16.8 billion as of 30 June 2023, with the portfolio being focused on Germany (59%) and the Benelux (21%), while exposures to the US CRE market are zero. Offices and commercial buildings are the main sub-segments. In addition, NORD/LB finances shopping centres, hotels, logistics buildings, and multi-storey residential buildings.

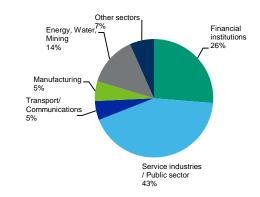
Exhibit 3
NORD/LB's exposure at default by region
Data in percentage terms as of 30 June 2023



*Other regions include Central and South America, the Middle East and Africa, and Asia/ Australia.

Sources: Moody's Investors Service and company filings

Exhibit 4
NORD/LB's exposure at default by sector
Data in percentage terms as of 30 June 2023



Sources: Moody's Investors Service and company filings

The bank's aircraft financing exposures amounted to €3.0 billion as of 30 June 2023, slightly up from €2.8 billion as of year-end 2022 following the post-pandemic recovery of the sector. The portfolio consisted of 278 aircraft and 46 (spare) engines as of 30 June 2023 and additionally comprised corporate loans to airlines and aircraft leasing companies. Nearly 30% of the portfolio remains guaranteed by the State of Lower Saxony or is securitised, mitigating the risks arising from the aircraft finance portfolio.

In addition to these two high-risk sectors, the bank's corporate clients, particularly SMEs, continue to face difficulties because of high energy prices, general inflationary pressures, and rising interest rates, which might translate into deteriorating asset quality and the formation of sizeable new problem loans in the coming quarters.

Solid capital buffers, but internal capital generation is still weak

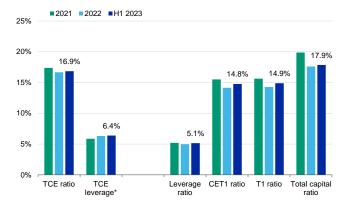
We assign an a3 Capital score, four notches below the aa2 initial score, reflecting that NORD/LB's capitalisation might weaken if the bank resumes growth, which would result in higher RWA, while its internal capital generation capacity is still weak. In addition, in a stressed scenario, the bank might find it difficult to remain profitable and strengthen its loss-absorption capacity through earnings retention.

NORD/LB's improved capitalisation following the €2.8 billion capital injection in 2019 helped the bank de-risk and resize its activities in recent years. As of 30 June 2023, the bank reported a tangible common equity (TCE) to RWA ratio of 16.9%, slightly higher than the 16.7% reported as of year-end 2022. The bank's regulatory Common Equity Tier 1 (CET1) capital ratio declined slightly to 14.8% from 15.1% during the period, however, due to the voluntary advanced termination of the RWA relief structure "North Vest II" and due to the unaudited H1 2023 net profit not yet counting towards CET1 capital. Including the H1 2023 result, the CET1 ratio would have improved to 15.4% as of 30 June 2023. The difference between our TCE ratio and the regulatory CET1 ratio results from the additional consideration of the negative accumulated other comprehensive income (OCI) in the CET1 capital calculation, which mostly captures unrealized losses on financial instruments, which reduced by €146 million to €373 million during H1 2023.

In terms of leverage, our TCE leverage ratio (defined as TCE to tangible banking assets) stood at 6.4% as of 30 June 2023, slightly above the 6.3% reported as of year-end 2022, while the bank's regulatory leverage ratio reached 5.4% as of 30 June 2023 compared to 5.1% as of year-end 2022. Since the TCE leverage ratio is well above our 5% baseline requirement, we do not negatively adjust for leverage in NORD/LB's assigned Capital score.

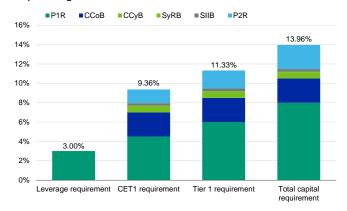
Since February 2023, German banks have to comply with additional sectorwide capital requirements, including a 0.75% countercyclical buffer in relation to domestic RWA and a 2.0% systemic risk buffer specific to domestic residential housing loan RWA. The changes translated into additional capital requirements of 0.71% for NORD/LB, which the bank can comfortably meet. NORD/LB has also participated in the European Banking Authority's (EBA) stress test in July 2023, in which the EBA tested banks' capital resiliency in a

Exhibit 5
Solid capital and leverage ratios as of 30 June 2023
As a percentage of RWA



TCE = Tangible common equity (our calculation); CET1 = Common Equity Tier 1 capital; T1 = Tier 1 capital. *The leverage ratio compares TCE with tangible banking assets. Sources: Moody's Investors Service and company filings

Exhibit 6
Capital requirements as of 30 June 2023
As a percentage of RWA



P1R = Pillar 1 requirement; CCoB = Capital conservation buffer; CCyB = Countercyclical capital buffer; SyRB = Systemic risk buffer; SIIB = Systemically important institutions buffer; P2R = Pillar II requirement.

Sources: Moody's Investors Service and company filings

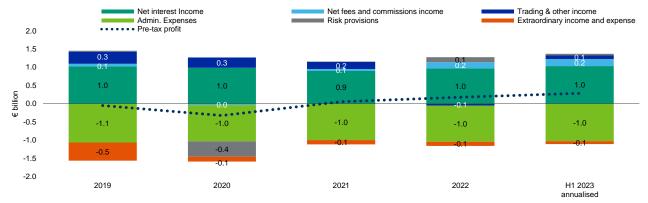
severe adverse scenario and in which NORD/LB's CET1 ratio dropped to 7.6% by year-end 2025, 1.9 percentage points below its 9.5% regulatory CET1 ratio requirement. Hence, the bank's regulator, the European Central Bank (ECB), has announced that it plans to review and to increase NORD/LB's capital requirements following the annual Supervisory Review and Evaluation Process (SREP) in H2 2023.³

Profitability has improved, but remains subdued

We assign a b3 Profitability score, in line with the initial score, which is derived from the average 0.1% return on assets generated over the 2020 to H1 2023 period. While profitability has improved in 2022 and H1 2023 due to the bank's transformation program, but also due to the higher interest rate environment, maintaining and improving profitability will remain a key challenge for the bank, particularly amid the ongoing economic uncertainty and the need to continuously invest in digitalisation, as exemplified by the bank's "fitt" program.

Following a net loss of €63 million in H1 2022 and a net profit of €152 million in H2 2022, NORD/LB reported a net profit of €109 million in H1 2023, which translated into a return on assets of 0.2%. The material year-on-year improvement mostly reflected an 18% or €79 million increase in net interest income to €517 million due to the higher interest rate environment, a 56% or €35 million higher net fee and commission income of €97 million partly due to additional fees on new business, and a flat trading result compared to a loss of €137 million in H1 2022. In addition, the bank's operating costs, according to our definition, only advanced by 2% or €11 million

Exhibit 7
NORD/LB's profitability has improved in 2022 and H1 2023



Sources: Moody's Investors Service and company filings

to €513 million, while loan loss reversals fell to €23 million in H1 2023 from €67 million in H1 2022. As of 30 June 2023, NORD/LB maintained a €260 million post-model management adjustment to take into account the indirect risks stemming from the war in Ukraine, which should support profitability in the future.

Nonetheless, NORD/LB's management needs to demonstrate a sustainable improvement in the bank's profitability and establish a track record of meeting its profitability targets without compromising the bank's improved credit quality. Furthermore, while profitability has recently improved, it remains subdued in an international context.

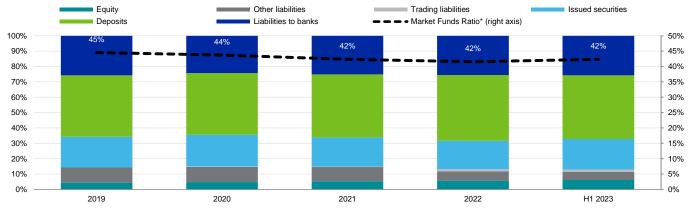
Wholesale funding dependence is partly mitigated by access to the savings banks network

We assign a ba1 Funding Structure score, three notches above the b1 initial score. The upward adjustment reflects the fact that NORD/LB's market funds ratio contains development bank funding as well as sector funding from the savings banks, which do not represent confidence-sensitive market funding sources. In addition, we positively reflect the bank's broadly matched asset and liability structure as well as good access to a mainly German-domiciled investor base.

NORD/LB's market funding dependence declined somewhat in the last few years, driven by lower refinancing needs during the bank's transformation. However, without a substantial retail deposit franchise outside of Braunschweigische Landessparkasse, the bank might need to increase its market funding dependence again if it chooses to resume growth in its lending business. The bank's non-retail deposits consist of SME and larger corporate deposits, both of which are more susceptible to flight risk in case of concerns over the bank's financial stability. At the same time, the bank's deposit withdrawal risk is largely mitigated by NORD/LB's membership in the IPS of S-Finanzgruppe.

As of 30 June 2023, NORD/LB's market funds of €45.1 billion were comprised of €27.4 billion of interbank funding, which contain the aforementioned development bank funding, €0.6 billion of trading and derivative liabilities, €7.4 billion of senior unsecured funding, €5.9 billion of covered bond funding, and €4.0 billion of financial liabilities designated at fair value through profit and loss. As of the same date, the bank reported a net stable funding ratio (NSFR) of 116%, slightly up from 113% as of year-end 2022. NORD/LB did not participate in the ECB's targeted longer-term refinancing operations (TLTRO III) in 2021 and 2022, with the exception of its former subsidiary Deutsche Hypo in H1 2021.

Exhibit 8
NORD/LB remains dependent on capital market and interbank funding
Liability breakdown as a percentage of assets (left); market funds ratio (right)



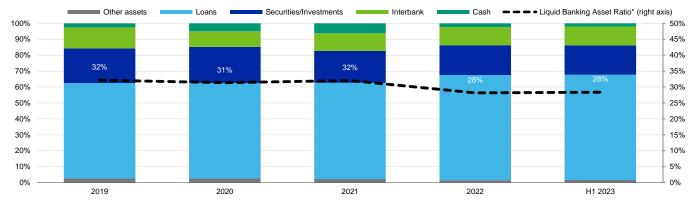
*Market funds ratio = Market funds/tangible banking assets. Sources: Moody's Investors Service and company filings

Adequate liquidity, which could decline though if the loan book grows further

We assign a baa2 Liquid Resources score, two notches below the a3 initial score. The negative adjustment reflects asset encumbrance, which mostly stems from NORD/LB's development bank pass-through loans, which represent collateral for its development bank funding that is passed on to the savings banks. We also consider that NORD/LB has some leeway to issue additional (retained) covered bonds to generate liquidity if required.

NORD/LB's liquidity has declined since 2022 and might reduce somewhat further in the future because additional lending could eat into the bank's liquid resources and because the bank might select to further reduce the burden of excess liquidity on its profitability. As of 30 June 2023, NORD/LB liquid banking assets amounted to €30.2 billion, which was comprised of €2.1 billion of cash, €12.7 billion of interbank loans, which contain the development bank pass-through loans, €10.5 billion of securities, and €4.9 billion of trading assets. NORD/LB's still adequate liquidity was also reflected in the bank's regulatory liquidity coverage ratio (LCR) of 137% as of 30 June 2023 (139% as of year-end 2022).

Exhibit 9
NORD/LB's liquid resources remain adequate for the time being
Asset breakdown as a percentage of total assets (left); liquid banking asset ratio (right)



^{*}Liquid banking assets ratio = Liquid assets/tangible banking assets.

Sources: Moody's Investors Service and company filings

BCA positioning

The BCA is positioned at the bottom of the scorecard-indicated-outcome range (ba1 – ba3), reflecting that the BCA could be upgraded to ba2 if NORD/LB is able to maintain its current credit profile and if the bank further strengthens its banking franchise, as it continues to transform itself into a leaner, more focused bank that is firmly entrenched in the German savings banks sector.

ESG considerations

NORD/LB's ESG Credit Impact Score is Highly Negative CIS-4

Exhibit 10

ESG Credit Impact Score



Source: Moody's Investors Service

NORD/LB's ESG Credit Impact Score CIS-4 incorporates the material rating impact of the bank's high governance risks, which is reflected in the one-notch negative rating adjustment for corporate behaviour. The bank's corporate governance risks mainly stem from the remaining execution risks of the bank's ongoing transformation program, subdued, albeit improving profitability, risk strategy shortcomings related to ship finance exposures until 2019 and a lack of medium-term track record regarding the viability of its amended strategy. Environmental and social factors have a limited impact on the bank's credit profile to date.

Exhibit 11 ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

NORD/LB faces moderate exposure to environmental risks primarily because of its portfolio exposure to carbon transition risk as a large, mostly regional banking group. In line with its peers, NORD/LB faces mounting business risks and stakeholder@pressure to meet broader carbon transition goals. In response, NORD/LB is actively engaging in transforming its lending book towards less carbonintensive assets.

Social

NORD/LB faces high social risks, in particular customer relations risks@associated with regulatory risk, exposure to litigation and it has to meet high compliance standards in its@operations. High cyber and personal data risks are mitigated by technology solutions and organizational measures to prevent data breaches.

Governance

NORD/LB's governance risks are material, reflecting legacy issues from risk management shortcomings, execution risks during its transition phase towards its new business model and a lack of track record regarding the viability of its amended strategy. Previous business focus on ship finance led to severe financial losses in the past and has made the current restructuring programme necessary. Management's ability to address the bank's subdued profitability remains a concern because it provides only a limited buffer against potential adverse developments and limits the bank's capital generation capacity and, hence, growth prospects. As a public-sector bank, NORD/LB is majority owned by the federal state of Lower Saxony (57%), which is reflected in the composition of its board of directors. Germany's developed institutional framework mitigates associated governance risks.

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 here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Support and structural considerations

Affiliate support

NORD/LB benefits from cross-sector support from S-Finanzgruppe. Cross-sector support reduces the probability of default because the support would be available to stabilise a distressed member bank and not just to compensate for losses in resolution. Cross-sector support for NORD/LB provides a two-notch rating uplift from the ba3 BCA, leading to a ba1 Adjusted BCA.

The high support assumption assigned to NORD/LB, and also to most other Landesbanks, reflects their cross-liability scheme membership, but only partial ownership by S-Finanzgruppe members. Furthermore, the high likelihood of support reflects the bank's prominent service function for the savings banks in its main business regions as well as the significant €1.7 billion capital contribution to NORD/LB from the savings bank sector in 2019 (the bank's other owners - the federal states of Lower Saxony and Saxony-Anhalt - injected €1.1 billion).

Loss Given Failure (LGF) analysis

NORD/LB is subject to the EU Bank Recovery and Resolution Directive (BRRD), which we consider an Operational Resolution Regime. We therefore 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.

In our Advanced LGF analysis, we consider the results of both the formal legal position (pari passu, or de jure scenario), to which we assign a 75% probability, and an alternative liability ranking, reflecting resolution authority 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 TCE of 3% and losses post-failure of 8% of tangible banking assets. In addition, we assume a 26% share of deposits being "junior" wholesale deposits, for which we factor in a 25% run-off before failure, while we assume a 5% run-off in preferred deposits. These ratios are in line with our standard assumptions. The results of our Advanced LGF analysis are:

- » For deposits and senior unsecured debt, as well as counterparty risk liabilities, our LGF analysis indicates an extremely low loss given failure, leading us to position their Provisional Rating Assessments at baa1, three notches above the ba1 Adjusted BCA.
- » For junior senior unsecured debt, our LGF analysis indicates a very low loss given failure, leading us to position its Provisional Rating Assessment at baa2, two notches above the ba1 Adjusted BCA.
- » For subordinated debt, our LGF analysis indicates a high loss given failure, leading us to position its Provisional Rating Assessment at ba2, one notch below the ba1 Adjusted BCA.

Government support

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 its size on a consolidated basis, we consider S-Finanzgruppe to be systemically important. We, 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. As a result, we still include one notch of government support uplift in our Counterparty Risk Ratings (CRR), senior unsecured debt and deposit ratings for S-Finanzgruppe member banks that are incorporated in Germany, including NORD/LB. For junior senior unsecured debt and subordinated debt instruments, 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)

NORD/LB's CRRs are A3/P-2

The CRRs, before government support, are three notches above NORD/LB's ba1 Adjusted BCA, reflecting the extremely low loss given failure from the high volume of instruments that are subordinated to CRR liabilities. NORD/LB's CRRs benefit from one notch of rating uplift stemming from government support, in line with our moderate support assumptions for deposits and senior unsecured debt.

Counterparty Risk (CR) Assessment

NORD/LB's CR Assessment is A3(cr)/P-2(cr)

The CR Assessment, before government support, is three notches above NORD/LB's ba1 Adjusted BCA, based on the buffer against default provided to the senior obligations represented by the CR Assessment by more subordinated instruments, including junior deposits and senior unsecured debt. NORD/LB's CR Assessment also benefits from one notch of rating uplift stemming from government support, in line with our moderate support assumptions for deposits and senior unsecured debt.

Because the CR Assessment captures the probability of default on certain senior operational obligations, rather than expected loss, we focus purely on subordination and take no account of the volume of the instrument class.

Methodology and scorecard

The principal methodology used in rating NORD/LB was our **Banks Methodology**, published in July 2021.

About Moody's Bank Scorecard

Our Bank 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 outcome of our scorecard may significantly differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard outcome and the individual scores are discussed in Rating Committees and may be adjusted up or down to reflect conditions specific to each rated entity.

Rating methodology and scorecard factors

Exhibit 12 Norddeutsche Landesbank 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	ba1	Expected trend	Sector concentration
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	16.9%	aa2	\leftrightarrow	a3	Stress capital resilience	Risk-weighted capitalisation
Profitability						
Net Income / Tangible Assets	0.1%	Ь3	\leftrightarrow	b3	Expected trend	Return on assets
Combined Solvency Score		a2		ba1		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	41.6%	b1	\leftrightarrow	ba1	Market funding quality	Extent of market funding reliance
Liquid Resources					<u> </u>	<u> </u>
Liquid Banking Assets / Tangible Banking Assets	28.2%	a3	\leftrightarrow	baa2	Asset encumbrance	Stock of liquid assets
Combined Liquidity Score		ba1		baa3		
Financial Profile				ba1		
Qualitative Adjustments				Adjustment		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				-1		
Total Qualitative Adjustments				-1		
Sovereign or Affiliate constraint				Aaa		
BCA Scorecard-indicated Outcome - Range				ba1 - ba3		
Assigned BCA				ba3		
Affiliate Support notching				2		
Adjusted BCA				ba1		

Balance Sheet	in-scope	% in-scope	at-failure	% at-failure	
	(EUR Million)	•	(EUR Million)		
Other liabilities	54,748	51.4%	57,770	54.3%	
Deposits	29,626	27.8%	26,604	25.0%	
Preferred deposits	21,923	20.6%	20,827	19.6%	
Junior deposits	7,703	7.2%	5,777	5.4%	
Senior unsecured bank debt	6,320	5.9%	6,320	5.9%	
Junior senior unsecured bank debt	10,452	9.8%	10,452	9.8%	
Dated subordinated bank debt	2,027	1.9%	2,027	1.9%	
Preference shares (bank)	50	0.0%	50	0.0%	
Equity	3,192	3.0%	3,192	3.0%	
Total Tangible Banking Assets	106,416	100.0%	106,416	100.0%	

Debt Class	De Jure waterfall De Facto waterfall Notchi		ching	ning LGF		Additional Preliminary				
	Instrument volume + subordinatio	ordinati	Instrument on volume + o subordinatio	ordination	De Jure	De Facto	Notching Guidance vs. Adjusted BCA		Notching	Rating Assessment
Counterparty Risk Rating	26.1%	26.1%	26.1%	26.1%	3	3	3	3	0	baa1
Counterparty Risk Assessment	26.1%	26.1%	26.1%	26.1%	3	3	3	3	0	baa1 (cr)
Deposits	26.1%	14.8%	26.1%	20.7%	3	3	3	3	0	baa1
Senior unsecured bank debt	26.1%	14.8%	20.7%	14.8%	3	3	3	3	0	baa1
Junior senior unsecured bank debt	14.8%	5.0%	14.8%	5.0%	2	2	2	2	0	baa2
Dated subordinated bank debt	5.0%	3.0%	5.0%	3.0%	-1	-1	-1	-1	0	ba2

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	baa1	1	A3	A3
Counterparty Risk Assessment	3	0	baa1 (cr)	1	A3(cr)	
Deposits	3	0	baa1	1	A3	A3
Senior unsecured bank debt	3	0	baa1	1	A3	A3
Junior senior unsecured bank debt	2	0	baa2	0	Baa2	
Dated subordinated bank debt	-1	0	ba2	0	Ba2	Ba2

^[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
NORDDEUTSCHE LANDESBANK GIROZENTRALE	
Outlook	Positive
Counterparty Risk Rating	A3/P-2
Bank Deposits	A3/P-2
Baseline Credit Assessment	ba3
Adjusted Baseline Credit Assessment	ba1
Counterparty Risk Assessment	A3(cr)/P-2(cr)
Issuer Rating	A3
Senior Unsecured -Dom Curr	A3
Junior Senior Unsecured -Dom Curr	Baa2
Junior Senior Unsecured MTN -Dom Curr	(P)Baa2
Subordinate	Ba2
Commercial Paper	P-2
Other Short Term -Dom Curr	(P)P-2
NORDDEUTSCHE LANDESBANK GZ, NEW YORK BRANCH	
Counterparty Risk Rating	A3/P-2
Counterparty Risk Assessment	A3(cr)/P-2(cr)
Commercial Paper	P-2
Source: Moody's Investors Service	

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Endnotes

- 1 The ratings shown are S-Finanzgruppe's corporate family rating and outlook, and its BCA.
- 2 North Vest II was a securitized credit portfolio placed with institutional investors in 2017.
- 3 As of 30 June 2023, NORD/LB's Pillar 2 requirement (P2R) on a total capital basis was 2.50%, which compares to a median 2.14% for all banks under ECB supervision.

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