FitchRatings

Banks
Wholesale Commercial Banks
Germany

Norddeutsche Landesbank Girozentrale

Ratings

Foreign Currency

Long-Term IDR	A-
Short-Term IDR	F1
Derivative Counterparty Rating	A(dcr)
Viability Rating	bb+
Shareholder Support Rating	a-

Sovereign Risk (Germany)

Long-Term Foreign-Currency IDR	AAA
Long-Term Local-Currency IDR	AAA
Country Ceiling	AAA

Outlooks

Long-Term Foreign-Currency IDR	Stable
Sovereign Long-Term Foreign-Currency IDR	Stable
Sovereign Long-Term Local-Currency IDR	Stable

Key Rating Drivers

Owners' Support Drives IDRs: Norddeutsche Landesbank Girozentrale's (NORD/LB) Long-Term Issuer Default Rating (IDR) is driven by its Shareholder Support Rating (SSR), which reflects a strong likelihood of support from the bank's owners, Germany's savings banks group Sparkassen-Finanzgruppe (Sparkassen) (SFG; A+/Stable) and the federal states of Lower Saxony and Saxony-Anhalt (both AAA/Stable).

Fitch Ratings uses SFG's Long-Term IDR as the anchor rating for determining NORD/LB's support-driven ratings, as it believes support would need to be forthcoming from both SFG and its federal states owners to avoid triggering state-aid considerations and resolution under the German Recovery and Resolution Act if NORD/LB fails. The Stable Outlook on NORD/LB's Long-Term IDR reflects that of SFG.

Notching Reflects Role: Fitch believes Lower Saxony and Saxony-Anhalt will participate in support measures for the bank, but NORD/LB's SSR does not factor in support from the states as it is based on the lowest of the owners' ratings, i.e., that of SFG. We notch NORD/LB's SSR down twice from SFG's 'A+' to reflect regulatory restrictions on support, due to the requirement for state-aid examination under EU competition rules. The two-notch difference also reflects NORD/LB's strategic, but not key and integral, role for its owners.

Wholesale-Oriented Business Profile: The Viability Rating (VR) reflects the bank's largely wholesale-driven business profile and only modest profitability compared with domestic peers'. The bank's transformation programme is almost completed, and Fitch expects the bank to build a record of sustainable profitable business generation.

The bank also has good asset quality, adequate capitalisation and access to savings banks' excess liquidity. NORD/LB's VR is one notch below the implied VR due to the bank's only recently stabilising business profile and franchise, which has a high impact on our view of the bank's credit profile.

Concentration Constrains Risk Profile: The bank's risk appetite is in line with Landesbanken peers' and limited by its owners' close scrutiny. NORD/LB's focus on wholesale banking leads to sector concentrations, in particular in commercial real estate. The latter benefits from conservative underwriting standards and good collateralisation.

Resilient Asset Quality: We expect NORD/LB's impaired loans ratio to deteriorate slightly in 2024 as a result of the economic downturn, high interest rates, and inflation, but for it to remain below 2% in the medium term. The bank's risk concentrations, including to the energy sector, constrain our asset-quality assessment.

Stabilising Profitability: We expect NORD/LB's operating profit to remain at above 0.3% of risk-weighted assets (RWAs) in the next two years. In the coming quarters, profitability could temporarily fall below this level as a challenging operating environment in Germany could weaken loan demand and lead to higher loan impairment charges (LICs). Intense competition in most business segments structurally limits NORD/LB's pricing power and weighs on its profitability.

Adequate Capitalisation: We expect NORD/LB's common equity Tier 1 (CET1; end-3Q23: 14.8%) capital ratio to remain comfortably above its regulatory requirement of 9.6%.

IPS Membership Underpins Funding: NORD/LB's predominantly wholesale funding benefits from its membership of SFG's institutional protection scheme (IPS). The bank's liquidity profile is sound.

Applicable Criteria

Bank Rating Criteria (September 2023)

Related Research

Fitch Upgrades NORD/LB's Viability Rating to 'bb+'; Affirms IDR at 'A-'/Stable (February 2024)

Fitch Affirms Sparkassen-Finanzgruppe at 'A+'; Outlook Stable (April 2023)

Global Economic Outlook (December 2023)

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Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

A downgrade of SFG's IDRs, or an adverse change in the ownership structure or in SFG's strategic commitment to the bank, could lead to a downgrade. The ratings could also be downgraded if failed execution of the business plan threatens NORD/LB's viability, in which case an orderly wind-down under sponsorship by the owners is a credible scenario. Given the bank's significant progress in its restructuring, we view this as rather unlikely in the near-to-medium term. We believe support from SFG's IPS would qualify as an alternative private-sector measure, capable of preventing resolution under German law.

The VR would likely be downgraded if we expect the bank's impaired loans ratio to rise to, and remain above, 3%, if the CET1 ratio falls durably below 12% or if NORD/LB becomes loss-making on a sustained basis without clear recovery prospects.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

An upgrade of NORD/LB's IDRs would require an upgrade of SFG's ratings.

An upgrade of the VR would require evidence that the bank further strengthens its business profile, reflected in the generation of sufficient and adequately priced new business without relaxing its risk standards post-restructuring.

An upgrade would also require asset quality to remain resilient and to be broadly in line with peers' over the next one or two years, with its impaired loan ratio remaining below 2%. An upgrade of the VR would also be contingent on NORD/LB maintaining a CET1 ratio above 13.5% and its operating profit/RWAs rising towards 0.5%.

Other Debt and Issuer Ratings

Rating Level	Rating
Long-term deposits	A
Senior non-preferred: long term	A-
Senior preferred: long term	A
Senior preferred: short term	F1
Short-term deposits	F1
State-guaranteed subordinated	AAA
Subordinated: long term	BB-

Source: Fitch Ratings

NORD/LB's Short-Term IDR is the higher of two options mapping to an 'A-' Long-Term IDR on Fitch's rating scale, because propensity to support by its institutional owners is likely to be more certain in the near term, and the bank shares strong links with SFG and has privileged access to SFG's ample liquidity and funding resources.

NORD/LB's senior non-preferred debt is rated in line with its Long-Term IDR. Its Derivative Counterparty Rating, long-term senior preferred debt and long-term deposit ratings are one notch above its Long-Term IDR, to reflect the protection that could accrue to them from junior resolution debt buffers.

NORD/LB's short-term senior preferred debt and deposit ratings are the lower of two options mapping to a long-term rating of 'A'. This is because we believe that, despite the owners' very high propensity to provide support to NORD/LB, there are impediments to the prompt flow of funds given the lengthy process required to support a Landesbank, which are not commensurate with an 'F1+' short-term rating.

NORD/LB's non-guaranteed Tier 2 subordinated bond rating is notched down twice from the VR to reflect loss severity, in line with Fitch's baseline approach. Its upgrade to 'BB-' mirrors the upgrade of NORD/LB's VR.

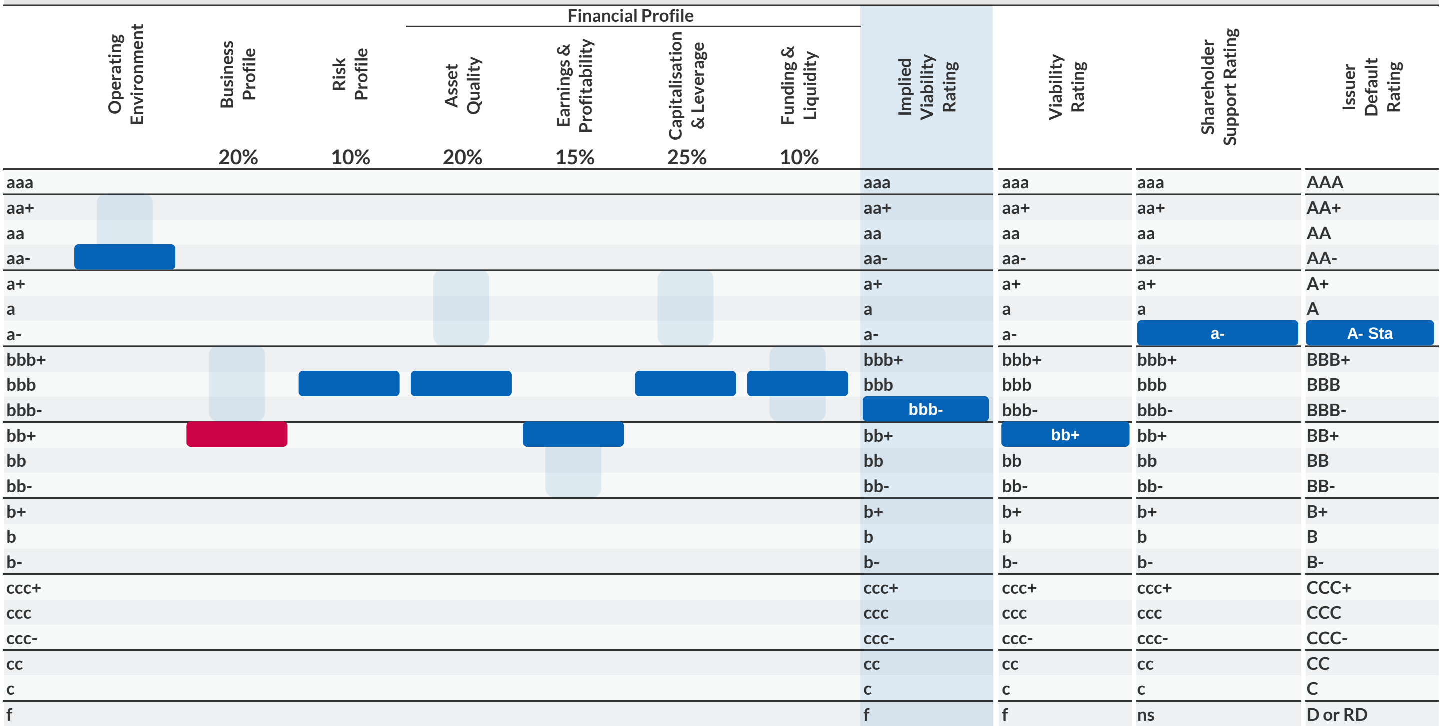
The ratings of NORD/LB's grandfathered state-guaranteed subordinated notes are equalised with the Long-Term IDRs of their guarantors, Lower Saxony and Saxony-Anhalt. This reflects our opinion that both states' ability and propensity to honour their guarantees are very strong.

Ratings Navigator

Norddeutsche Landesbank Girozentrale

ESG Relevance:

Banks
Ratings Navigator



The Key Rating Driver (KRD) weightings used to determine the implied VR are shown as percentages at the top. In cases where the implied VR is adjusted upwards or downwards to arrive at the VR, the KRD associated with the adjustment reason is highlighted in red. The shaded areas indicate the benchmark-implied scores for each KRD.

VR - Adjustments to Key Rating Drivers

The business profile score of 'bb+' is below the 'bbb' implied category score due to the following adjustment reason: business model (negative).

The asset quality score of 'bbb' is below the 'a' implied category score due to the following adjustment reason: concentrations (negative).

The capitalisation and leverage score of 'bbb' is below the 'a' implied category score due to the following adjustment reason: internal capital generation and growth (negative).

Company Summary and Key Qualitative Factors

Business Profile

Regional German Landesbank

NORD/LB is a public-sector-owned wholesale bank that focuses on corporate and asset-based finance. It operates primarily in northern Germany with modest international operations, mainly in renewable energy. Like its Landesbanken peers, its pricing power is limited and its margins are low, due to strong competition in corporate banking in Germany. In some sectors such as agriculture, however, its established relationships allow for moderate pricing power.

NORD/LB is also the state bank for the states of Lower Saxony and Saxony-Anhalt and the central institution for the saving banks in both regions and in Mecklenburg-Western-Pomerania. It also serves retail and small business clients in Lower Saxony via its subsidiary Braunschweigische Landessparkasse (BLSK).

Business Model in Transition

NORD/LB has been undergoing a deep restructuring, agreed in its transformation plan with its owners, and approved by the European Commission for state aid, since its recapitalisation by its owners at end-2019. The plan envisaged a wind-down of the bank's ship-financing business, and a significantly leaner and more profitable bank. At end-1H23 NORD/LB's balance sheet totalled EUR109 billion (end-2020: EUR127 billion). We believe NORD/LB has a moderate appetite for growth. However, this should not compromise the bank's capitalisation and cost-cutting measures.

Further changes to NORD/LB's structure are being considered, in particular a carve-out of BLSK. This is likely to be a lengthy process. The development bank of Saxony-Anhalt was finally carved out on 1 March 2023 without any financial impact on NORD/LB's because it was already outside of NORD/LB's consolidation perimeter.

Risk Profile

NORD/LB's commitment to preserve its capitalisation and its adherence to its restructuring plan both limit its risk appetite. The bank's risk and growth appetite is also closely monitored by its owners, SFG in particular. The deleveraging of riskier non-strategic assets is improving NORD/LB's risk profile and asset quality metrics, which have converged toward its peers' levels. Consequently, we expect LICs, which have been material and volatile in the past, to be manageable over the next few years, despite the deteriorating economic environment.

Interest-rate risk in the banking book does not materially affect NORD/LB's risk profile. A 200bp parallel downward shift in interest rates would have reduced the economic value of its equity by 4.8% at end-1H23. Foreign-currency risk in the loan book (primarily caused by its US dollar-denominated legacy ship and aviation financing) has decreased to low 6% of NORD/LB's total usage of economic capital for market risk.

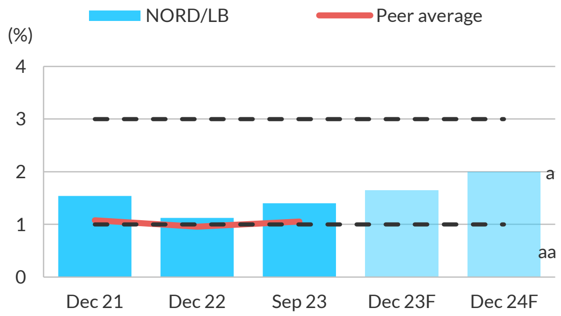
Financial Profile

Asset Quality

Similar to its domestic peers, NORD/LB's asset quality has been resilient, despite the gradually worsening economic environment in Germany. Its Stage 3 loans declined to EUR707 million at end-1H23 (end-2022: EUR814 million) and its impaired loan ratio fell to 1.0% at end-1H23 (end-2022: 1.1%), which is stronger than peers. Fitch expects the ratio to have deteriorated in 2H23, and to fall slightly further in 2024 as a result of the economic downturn. We also expect higher LICs for 2H23 and for 2024, which could be cushioned by NORD/LB's remaining management adjustment of EUR260 million at end-1H23.

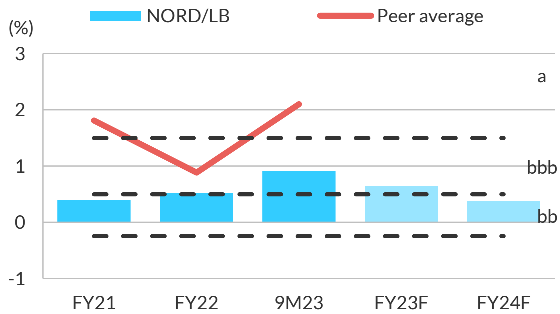
Commercial real estate accounts for 15% of total assets, which is below that for Landesbanken peers, and focuses on Germany (59%), Benelux (21%) and the UK (7%). CRE lending includes inherently high loan concentrations, and we expect further inflows of impaired loans in this segment as CRE remains vulnerable to refinancing risks, due to rising rates and falling market valuations. However, this should not result in outsized credit losses, in particular due to strong collateralisation and adequate provisioning.

Impaired Loans/Gross Loans



Source: Fitch Ratings, Fitch Solutions, banks

Operating Profit/Risk-Weighted Assets



Source: Fitch Ratings, Fitch Solutions, banks

Earnings and Profitability

NORD/LB has made significant progress in its restructuring, as evidenced by the stabilisation of administrative costs despite the inflationary environment in 1H23. However, further cost development is also dependent on the implementation of the new core bank IT system. This process will last into 2026, and is subject to execution risk, in Fitch's view.

For 2023 we expect a higher profitability than in the previous year, with an operating profit/RWAs ratio of above 0.5%. Good new business volumes and higher interest rates increased the bank's net interest and fee income in 1H23. In addition, lower guarantee fees paid to Lower Saxony, and the reversal of risk provisions, let to a net income of EUR109 million in 1H23 (negative EUR62 million in 1H22).

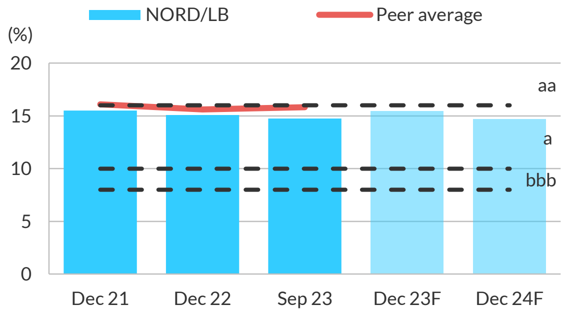
We expect NORD/LB's profitability to moderate in 2H23 because of cost inflation, higher loan impairment charges and a gradual repricing of deposits, which will burden its operating profitability. As the economic environment weakens, we expect NORD/LB's strong franchise in the renewable energy sector to mitigate the lower levels of new business in the corporate and commercial real estate segments in 2024.

Capital and Leverage

We expect NORD/LB to maintain its CET1 ratio at about 15% by end-2024, which we view as achievable if credit losses remain low. Lower Saxony's contractual commitment to reinvest the fees it receives from NORD/LB for guaranteeing aviation and shipping loans will support the bank's capitalisation until 2024. The Basel leverage ratio was 5.4% at end-1H23.

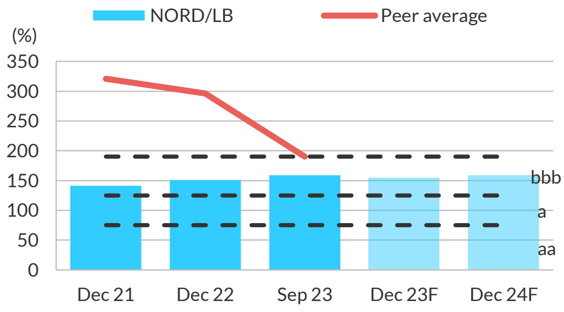
We believe that maintaining a sound capitalisation and a low-risk profile, rather than maximising returns on investment, is also the priority for SFG. We expect that profit retention will counterbalance the likely RWA increase due to higher business volumes and rating deterioration.

CET1 Ratio



Source: Fitch Ratings, Fitch Solutions, banks

Gross Loans/Customer Deposits



Source: Fitch Ratings, Fitch Solutions, banks

Funding and Liquidity

Similar to the other Landesbanken, NORD/LB's funding benefits from the savings banks' excess liquidity placed with the bank, and from client deposits, which are mainly sourced from corporates and SMEs. NORD/LB's EUR47 billion client deposits at end-1H23 include a high share of corporate deposits. Therefore, we believe NORD/LB will need to reprice these quickly in light of the central bank's interest rate rises. NORD/LB also collects retail deposits through BLSK. Its reliance on interbank funding remains reasonable, in our view, at about 30% of total funding in recent years. It is mostly sourced from SFG and also includes pass-through funding from development banks.

TLTRO funding was modest, and repaid in 2022 without any negative impact on the bank's prudent liquidity profile. At end-1H23, NORD/LB's liquidity coverage ratio (137%) was underpinned by almost EUR18 billion of highly liquid assets (about 20% of total funding).

NORD/LB issued moderate unsecured bond volumes in 1H23, as in 2022, while its market funding needs have been modest in the past few years due to its declining balance sheet.

Additional Notes on Charts

The forecasts in the charts in this section reflect Fitch's forward view on the bank's core financial metrics per Fitch's *Bank Rating Criteria*. They are based on a combination of Fitch's macroeconomic forecasts, outlook at the sector level and company-specific considerations. As a result, Fitch's forecasts may materially differ from the guidance provided by the rated entity to the market.

To the extent Fitch is aware of material non-public information with respect to future events, such as planned recapitalisations or merger and acquisition activity, Fitch will not reflect these non-public future events in its published forecasts. However, where relevant, such information is considered by Fitch as part of the rating process.

Black dashed lines represent boundaries for indicative quantitative ranges and implied scores for Fitch's core financial metrics for banks operating in the environments that Fitch scores in the 'aa' category. Light-blue columns represent Fitch's forecasts.

Peer average includes Landesbank Baden-Wuerttemberg (VR: bbb+), Bayerische Landesbank (bbb+), Landesbank Saar (bbb-), Berlin Hyp AG (bbb+), IKB Deutsche Industriebank AG (bbb-), NIBC Bank N.V. (bbb), Kommunalkredit Austria AG (bbb-). Unless otherwise stated, financial year (FY) end is 31 December for all banks in this report. Latest average uses 1H23 data for Landesbank Baden-Wuerttemberg, Landesbank Saar, IKB Deutsche Industriebank AG, NIBC Bank N.V., Kommunalkredit Austria AG.

Financials

Financial Statements

	30 Jun 23		31 Dec 22	31 Dec 21	31 Dec 20
	6 months - interim (USDm)	6 months - interim (EURm)	Year end (EURm)	Year end (EURm)	Year end (EURm)
Summary income statement					
Net interest and dividend income	562	517	896	899	988
Net fees and commissions	104	96	166	52	-38
Other operating income	17	16	-86	91	40
Total operating income	683	629	976	1,042	990
Operating costs	484	445	909	911	916
Pre-impairment operating profit	200	184	67	131	74
Loan and other impairment charges	-26	-24	-142	-18	425
Operating profit	226	208	209	149	-351
Other non-operating items (net)	-71	-65	-105	-133	338
Tax	37	34	15	-3	-38
Net income	118	109	89	19	25
Summary balance sheet					
Assets					
Gross loans	79,090	72,787	72,411	69,687	75,119
- Of which impaired	768	707	814	1,076	1,427
Loan loss allowances	704	648	706	877	1,014
Net loans	78,386	72,139	71,705	68,810	74,105
Interbank	14,832	13,650	13,107	14,029	14,949
Derivatives	2,761	2,541	2,983	3,907	5,983
Other securities and earning assets	19,272	17,736	17,748	19,614	23,626
Total earning assets	115,251	106,066	105,543	106,360	118,663
Cash and due from banks	2,256	2,076	2,464	6,930	6,031
Other assets	1,408	1,296	1,318	1,373	1,797
Total assets	118,915	109,438	109,325	114,663	126,491
Liabilities					
Customer deposits	50,997	46,933	47,925	49,357	52,374
Interbank and other short-term funding	31,260	28,769	28,664	28,705	30,460
Other long-term funding	23,977	22,066	21,184	22,867	27,401
Trading liabilities and derivatives	2,544	2,341	2,429	3,699	6,122
Total funding and derivatives	108,778	100,109	100,202	104,628	116,357
Other liabilities	3,027	2,786	2,823	4,155	4,313
Preference shares and hybrid capital	53	49	50	50	50
Total equity	7,056	6,494	6,250	5,830	5,771
Total liabilities and equity	118,915	109,438	109,325	114,663	126,491
Exchange rate		USD1 = EUR0.920302	USD1 = EUR0.937559	USD1 = EUR0.884173	USD1 = EUR0.821963

Source: Fitch Ratings, Fitch Solutions, Norddeutsche Landesbank Girozentrale

Key Ratios

	30 Jun 23	31 Dec 22	31 Dec 21	31 Dec 20
Ratios (%; annualised as appropriate)				
Profitability				
Operating profit/risk-weighted assets	1.0	0.5	0.4	-0.9
Net interest income/average earning assets	1.0	0.9	0.8	0.8
Non-interest expense/gross revenue	72.2	97.2	87.8	90.3
Net income/average equity	3.5	1.5	0.3	0.4
Asset quality				
Impaired loans ratio	1.0	1.1	1.5	1.9
Growth in gross loans	0.5	3.9	-7.2	-9.4
Loan loss allowances/impaired loans	91.7	86.7	81.5	71.1
Loan impairment charges/average gross loans	-0.1	-0.2	0.0	0.5
Capitalisation				
Common equity Tier 1 ratio	14.8	15.1	15.5	14.6
Tangible common equity/tangible assets	5.5	5.6	5.0	4.5
Basel leverage ratio	5.4	5.5	5.2	4.3
Net impaired loans/common equity Tier 1	1.0	1.8	3.4	7.1
Funding and liquidity				
Gross loans/customer deposits	155.1	151.1	141.2	143.4
Gross loans/customer deposits + covered bonds	129.9	122.5	113.0	112.3
Liquidity coverage ratio	136.6	138.6	147.1	158.9
Customer deposits/total non-equity funding	48.0	49.0	48.9	47.5

Source: Fitch Ratings, Fitch Solutions, Norddeutsche Landesbank Girozentrale

Support Assessment

Shareholder Support	
Shareholder IDR	A+
Total Adjustments (notches)	-2
Shareholder Support Rating	a-
Shareholder ability to support	
Shareholder Rating	A+/ Stable
Shareholder regulation	2+ Notches
Relative size	1 Notch
Country risks	Equalised
Shareholder propensity to support	
Role in group	1 Notch
Reputational risk	1 Notch
Integration	2+ Notches
Support record	Equalised
Subsidiary performance and prospects	1 Notch
Legal commitments	1 Notch

The colours indicate the weighting of each KRD in the assessment.
Higher influence Moderate influence Lower influence

Fitch's support assumptions are underpinned by NORD/LB's focus on its statutory roles, which include supporting the regional economy as well as acting as the central institution for regional savings banks and as house bank for its federal state owners, and by provisions contained in the statutes of the institutional protection scheme (IPS) of SFG and the Landesbanken.

NORD/LB's Shareholder Support Rating (SSR) reflects our view of very high support propensity from its owners. We use the lowest rating of NORD/LB's parents, SFG's Long-Term IDR, as the anchor rating for determining the bank's SSR because, in our view, support from SFG would be necessary to avoid triggering state-aid considerations and resolution under the German Recovery and Resolution Act if NORD/LB fails.

Fitch believes the federal states of Lower Saxony and Saxony-Anhalt will participate in support measures for the bank; however, NORD/LB's SSR does not factor support from the federal states as it is based on the lowest of the owners' ratings, i.e. that of SFG. We notch down NORD/LB's Long-Term IDR twice from SFG's 'A+', so as to reflect regulatory restrictions to support due to the requirement for state aid examination under the EU competition rules. The two-notch difference in the ratings also reflects NORD/LB's non-integral role within SFG despite strong synergies. The Stable Outlook on NORD/LB's Long-Term IDR mirrors that on SFG.

Environmental, Social and Governance Considerations

FitchRatings **Norddeutsche Landesbank Girozentrale**

Banks
Ratings Navigator

Credit-Relevant ESG Derivation

Norddeutsche Landesbank Girozentrale has 5 ESG potential rating drivers

- Norddeutsche Landesbank Girozentrale has exposure to compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security) but this has very low impact on the rating.
- Governance is minimally relevant to the rating and is not currently a driver.

			ESG Relevance to Credit Rating
key driver	0	issues	5
driver	0	issues	4
potential driver	5	issues	3
not a rating driver	4	issues	2
	5	issues	1

Environmental (E) Relevance Scores

General Issues	E Score	Sector-Specific Issues	Reference	E Relevance
GHG Emissions & Air Quality	1	n.a.	n.a.	5
Energy Management	1	n.a.	n.a.	4
Water & Wastewater Management	1	n.a.	n.a.	3
Waste & Hazardous Materials Management; Ecological Impacts	1	n.a.	n.a.	2
Exposure to Environmental Impacts	2	Impact of extreme weather events on assets and/or operations and corresponding risk appetite & management; catastrophe risk; credit concentrations	Business Profile (incl. Management & governance); Risk Profile; Asset Quality	1

Social (S) Relevance Scores

General Issues	S Score	Sector-Specific Issues	Reference	S Relevance
Human Rights, Community Relations, Access & Affordability	2	Services for underbanked and underserved communities: SME and community development programs; financial literacy programs	Business Profile (incl. Management & governance); Risk Profile	5
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security)	Operating Environment; Business Profile (incl. Management & governance); Risk Profile	4
Labor Relations & Practices	2	Impact of labor negotiations, including board/employee compensation and composition	Business Profile (incl. Management & governance)	3
Employee Wellbeing	1	n.a.	n.a.	2
Exposure to Social Impacts	2	Shift in social or consumer preferences as a result of an institution's social positions, or social and/or political disapproval of core banking practices	Business Profile (incl. Management & governance); Financial Profile	1

Governance (G) Relevance Scores

General Issues	G Score	Sector-Specific Issues	Reference	G Relevance
Management Strategy	3	Operational implementation of strategy	Business Profile (incl. Management & governance)	5
Governance Structure	3	Board independence and effectiveness; ownership concentration; protection of creditor/stakeholder rights; legal /compliance risks; business continuity; key person risk; related party transactions	Business Profile (incl. Management & governance); Earnings & Profitability; Capitalisation & Leverage	4
Group Structure	3	Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership	Business Profile (incl. Management & governance)	3
Financial Transparency	3	Quality and frequency of financial reporting and auditing processes	Business Profile (incl. Management & governance)	2
				1

How to Read This Page
ESG relevance scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant to the credit rating and green (1) is least relevant.

The Environmental (E), Social (S) and Governance (G) tables break out the ESG general issues and the sector-specific issues that are most relevant to each industry group. Relevance scores are assigned to each sector-specific issue, signaling the credit-relevance of the sector-specific issues to the issuer's overall credit rating. The Criteria Reference column highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis. The vertical color bars are visualizations of the frequency of occurrence of the highest constituent relevance scores. They do not represent an aggregate of the relevance scores or aggregate ESG credit relevance.

The Credit-Relevant ESG Derivation table's far right column is a visualization of the frequency of occurrence of the highest ESG relevance scores across the combined E, S and G categories. The three columns to the left of ESG Relevance to Credit Rating summarize rating relevance and impact to credit from ESG issues. The box on the far left identifies any ESG Relevance Sub-factor issues that are drivers or potential drivers of the issuer's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the relevance score. All scores of '4' and '5' are assumed to result in a negative impact unless indicated with a '+' sign for positive impact.h scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI), the Sustainability Accounting Standards Board (SASB), and the World Bank.

CREDIT-RELEVANT ESG SCALE

How relevant are E, S and G issues to the overall credit rating?

5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Irrelevant to the entity rating but relevant to the sector.
1	Irrelevant to the entity rating and irrelevant to the sector.

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation of the materiality and relevance of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg

SOLICITATION & PARTICIPATION STATUS

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