

# Volksbanken-Verbund

## Key Rating Drivers

The Austrian Volksbanken-Verbund (VB-Verbund) is not a legal entity but a medium-sized network of regional cooperative banks, the strong cohesion of which is primarily ensured by their mutual support scheme. VB-Verbund's Issuer Default Ratings (IDRs) apply to each of its member banks, in line with Fitch Ratings' criteria for rating banking structures backed by mutual support mechanisms.

The group's Long-Term IDR is driven by its Viability Rating (VR). The latter reflects VB-Verbund's smaller domestic franchise and less diverse business model than higher-rated peers, which results in below-average operating profitability and cost efficiency and limits the group's financial flexibility. The VR also reflects the group's low-risk profile, resilient asset quality, adequate capitalisation as well as good liquidity and funding profile.

**Stable Business Profile:** VB-Verbund has a solid post-restructuring record in operating a retail-oriented cooperative franchise focused on the domestic market. Its business model generates stable revenues from traditional commercial banking and does not rely on volatile business. However, the group is constrained by its small size, limited pricing power and lack of geographical diversification.

**Low Risk Appetite:** The group's robust asset quality benefits from its lending focus on domestic retail, self-employed and SME clients, conservative underwriting standards, good loan collateralisation and granular exposures with very low concentrations.

**Resilient Asset Quality:** As at larger domestic banks, the group's low impaired loans ratio has so far benefited from substantial state support that has helped to contain unemployment and corporate defaults during the pandemic. Impaired loans inflows could rise moderately in 2022 as state aid is phased out and as the effects of the war in Ukraine, global inflation and trade flows disruptions materialise. However, we expect the four-year average impaired loans ratio to stay below 3% in the coming years, a level commensurate with the 'a-' score for asset quality.

**Profitability Recovers in 2021:** VB-Verbund's operating profit/risk-weighted assets (RWAs) rebounded to an exceptionally high 1.8% in 2021 owing to reversals in pandemic-driven loan loss allowances. We expect VB-Verbund to generate an operating profit of about 0.5%-1% of RWAs on a sustained basis. Increasing interest rates are likely to gradually alleviate the margin pressure that has prevailed in recent years. Together with loan growth, this is likely to support the group's operating income.

**Adequate Capitalisation:** The group's common equity Tier 1 (CET1) ratio of 14.4% at end-2021 is adequate in light of its low risk profile and offers sufficient headroom over its capital requirement of 9.8% and to repay the EUR100 million still due to the Austrian state by end-2023. The standardised approach for the calculation of RWAs will also mitigate the impact of asset quality deterioration on the group's CET1 ratio.

## Ratings

### Foreign Currency

Long-Term IDR	BBB+
Short-Term IDR	F2

Viability Rating	bbb+
------------------	------

Government Support Rating	ns
---------------------------	----

### Sovereign Risk (Austria)

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

### Outlooks

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

## Applicable Criteria

[Bank Rating Criteria \(November 2021\)](#)

## Related Research

[Fitch Upgrades Volksbanken-Verbund to 'BBB+'; Outlook Stable \(July 2022\)](#)

[Fitch Affirms Austria at 'AA+'; Outlook Stable \(April 2022\)](#)

[Global Economic Outlook \(June 2022\)](#)

## Analysts

Markus Glabach  
+49 69 768076 195  
[markus.glabach@fitchratings.com](mailto:markus.glabach@fitchratings.com)

Roger Schneider  
+49 69 768076 242  
[roger.schneider@fitchratings.com](mailto:roger.schneider@fitchratings.com)

## Ratings Sensitivities

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

Pressure on the ratings could arise from a durable and material deterioration in asset quality, earnings and capitalisation, with an impaired loans ratio above 4%, operating profit/RWAs below 0.5% or a CET1 ratio below 11.5% without clear recovery prospects. The Short-Term IDRs are sensitive to a downgrade of the Long-Term IDRs in conjunction with a deterioration of the group's funding and liquidity profile.

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

An upgrade of the IDRs and VR would require a significantly stronger franchise, including more diversified customer, funding and revenues bases without negatively affecting the bank's risk profile. Given the bank's post-restructuring strategic plan and business model, we view this as rather unlikely in the near-to-mid-term.

An upgrade would also be contingent on VB-Verbund achieving a further sustainable improvement in operating profitability with an average operating profit/RWAs of about 1.5% while maintaining its good asset quality and capitalisation.

An upgrade of the Short-Term IDRs is unlikely, as it would require a two-notch upgrade of the funding and liquidity score to 'a'.

## Ratings Navigator

	Operating Environment	Business Profile	Risk Profile	Financial Profile			Implied Viability Rating	Viability Rating	Government Support Rating	Issuer Default Rating	
				Asset Quality	Earnings & Profitability	Capitalisation & Leverage					Funding & Liquidity
		20%	10%	20%	15%	25%	10%				
aaa								aaa	aaa	aaa	AAA
aa+								aa+	aa+	aa+	AA+
aa								aa	aa	aa	AA
aa-								aa-	aa-	aa-	AA-
a+								a+	a+	a+	A+
a								a	a	a	A
a-								a-	a-	a-	A-
bbb+								bbb+	bbb+	bbb+	BBB+ Sta
bbb								bbb	bbb	bbb	BBB
bbb-								bbb-	bbb-	bbb-	BBB-
bb+								bb+	bb+	bb+	BB+
bb								bb	bb	bb	BB
bb-								bb-	bb-	bb-	BB-
b+								b+	b+	b+	B+
b								b	b	b	B
b-								b-	b-	b-	B-
ccc+								ccc+	ccc+	ccc+	CCC+
ccc								ccc	ccc	ccc	CCC
ccc-								ccc-	ccc-	ccc-	CCC-
cc								cc	cc	cc	CC
c								c	c	c	C
f								f	f	ns	D or RD

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 Capitalisation & Leverage score of 'bbb+' is below the 'a' category implied score due to the following adjustment reason: Internal capital generation and growth (negative).

The Funding & Liquidity score of 'bbb+' is below the 'a' category implied score due to the following adjustment reason: Non-deposit funding (negative).

## Company Summary and Key Qualitative Factors

### Operating Environment

#### *War in Ukraine Will Weaken GDP Growth*

In April 2022, Fitch lowered its growth forecast for Austria to 3.3% from 4.6% for 2022 due to the expected economic spill-overs from Russia's invasion of Ukraine. The uncertain outlook on energy supply and the increased risk of natural gas rationing presents a risk to Fitch's revised baseline growth assumptions. As Austria sources 80% of its natural gas imports and 18% of its total energy consumption from Russia, substituting Russian gas in the short term would be virtually impossible.

Fitch expects higher energy and food prices to dampen domestic demand. The potential negative effects of supply chain disruptions and higher energy costs on the manufacturing sector will be partially offset by the continued recovery in private consumption following the pandemic amid high household savings and a continued recovery in international tourist arrivals (overnight stays in 2021 were still 50% below their 2019 level).

#### *No Direct Exposure to Russia and Ukraine*

The Austrian banking sector's direct exposure to Russia and Ukraine is moderate (2.8% of total exposures at end-2021 according to the European Banking Authority) and largely concentrated at Raiffeisen Bank International. VB-Verbund has no direct loan exposure to Russia, Ukraine or Belarus as it operates exclusively in Austria. The group also focuses on Austrian mass retail customers and micro businesses, which have virtually no ties to Russia and Ukraine. VB-Verbund also does not hold any security investments in these countries.

We therefore believe that the group's asset quality is largely insulated from direct effects from the Ukrainian crisis. The second-order effects of a slowdown in economic growth and inflation are likely to weaken loan quality over the next two years, but we still expect the four-year average impaired loans ratio to remain below 3%, which underpins our stable outlook on the asset quality score.

### Business Profile

#### *Medium-Sized, Domestic Retail-Focused Cooperative Banking Group*

VB-Verbund focuses on Austrian retail, self-employed and small SME clients. Its member banks collectively serve about one million clients. The group has modest retail market shares of 7%-8% on average in the fairly small Austrian market, but the member banks generally have stronger local franchises underpinned by solid customer loyalty in rural areas. The group complements its highly standardised product mix with consumer lending and asset management products from DZ BANK, the German cooperative banks' central organisation (CO). Revenue diversification from this outsourcing agreement mitigates VB-Verbund's limited size, which would make it uneconomical to offer these services on their own.

#### *Verbund Contract Strengthens CO and Governance*

After years of deep restructuring, VB-Verbund is now a highly integrated cooperative banking group steered by its CO, Volksbank Wien (VBW). The Verbund (group) contract in force since 2016 entrusts the CO with broad discretionary powers. VBW's management can unilaterally issue binding orders to all or single member banks and impose support measures. The contract ensures the effectiveness of the group's governance, mutual support and organisation by governing the CO's powers, duties and interactions with the member banks. This enables VB-Verbund's recognition as a financial institution group by the Single Resolution Board, although its member banks are legally independent and have no common parent. The Verbund contract makes VBW responsible for the group's adherence to regulatory capital, liquidity and risk management requirements as well as strategic decisions and their implementation, including products and pricing. The member banks must place their excess liquidity at VBW.

#### *Restructured Mutual Support Scheme Ensures Cohesion and Reactivity*

Volksbanken Leistungsfonds (VL), a fund endowed with trust assets to support troubled member banks, became operative in 2016. The VL's target endowment of EUR100 million is fully paid-in and was calibrated by the CO based on the member banks' average risk position. In our view, this should be sufficient to recapitalise member banks other than VBW in a reasonable idiosyncratic stress scenario, but it is unlikely to ensure a substantial line of defence for the group in a systemic crisis.

If the CO estimates that VL is insufficient to cover support needs as these arise, it can call unilaterally for additional contributions from the member banks. The Verbund contract does not cap each member bank's maximum contributions to mutual support measures. The mutual support framework allows the CO's management to impose remedial actions on troubled member banks if early-warning indicators (macroeconomic, market-based or breaches of capital, liquidity, profitability or asset-quality ratios) deteriorate materially. Such interventions are possible without

the consent of the bank concerned or preliminary consultation with the group's members. This is rating positive as it increases cohesion, discipline and responsiveness.

## **Risk Profile**

The restructuring process has enhanced VB-Verbund's risk profile, which we view as robust in light of its simplified retail-focused business model. Risk controls strongly benefit from the centralised risk-management functions at VBW, the standardised product offering and the simplified organisational structure. The group has also enhanced its internal data quality and monitoring tools in recent years, which makes day-to-day management and reporting more effective.

Structural interest rate risk in the member banks' banking books is VB-Verbund's main source of market risk, primarily driven by the mismatch between its mainly short-term deposits and its long-term mortgage loans. This is mitigated by the fact that, similar to its Austrian peers, the majority of retail loans in the group's back book carry variable rates. Austrian banks' new mortgage lending has been predominantly on a fixed-rate basis in the past few years, effectively transferring interest rate risk to the lenders from the borrowers. When the banks hedge this risk, the hedging costs tend to compound the prevailing margin pressure.

## Financial Profile

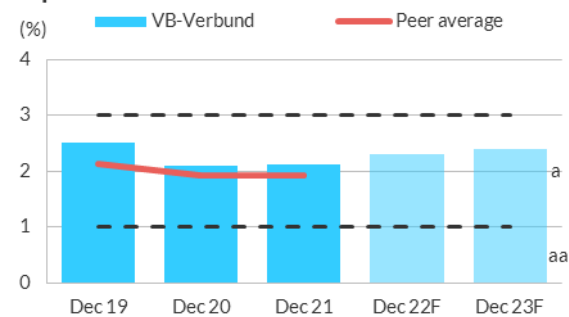
### Asset Quality

#### Asset Quality Improved in 2021; Major Deterioration Unlikely

Strong state support contained asset quality deterioration in 2021 and helped VB-Verbund maintain a stable impaired loans ratio at end-2021. We expect that some more vulnerable micro and small SME borrowers, notably in the tourism and accommodation sectors, might not fully recover once state support measures are lifted, including state-guaranteed loans with original maximum tenors of up to five years. Some corporates and SMEs are likely to emerge from the crisis with durably weaker credit profiles.

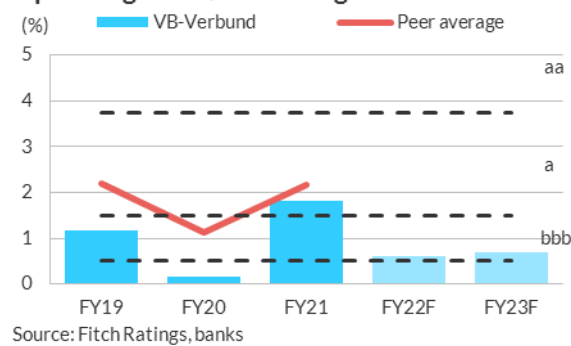
We expect VB-Verbund's relatively low-risk business model and prudent lending standards to largely insulate its asset quality from economic disruptions brought about by the war in Ukraine. In addition, we do not expect pressure on VB-Verbund's mortgage loans, given their robust collateralisation and mortgage borrowers' strong payment behaviour.

#### Impaired Loans/Gross Loans



Source: Fitch Ratings, banks

#### Operating Profit/Risk-Weighted Assets



Source: Fitch Ratings, banks

### Earnings and Profitability

#### Record High 2021 Profit Strengthens Capitalisation

VB-Verbund's record-high net income of EUR219 million in 2021 was mainly driven by a net release of provisions for pandemic-driven expected credit losses booked in 2020. Net fee income also increased by 6% owing to higher asset management commissions. However, the group's loan growth, which was weaker than that of domestic peers due to VB-Verbund's prudent underwriting standards and limited appetite for new business during the pandemic, was not sufficient to offset the pressure from low interest rates, leading to a slight decline of net interest income.

We expect loan growth to pick up in 2022 as VB-Verbund has sufficient excess capital buffers to underpin such growth. Loan demand should remain robust despite rising interest rates. In addition, the new macroprudential measures introduced by Austria's Financial Market Stability Board to tackle accelerating house prices are not particularly constraining.

The group's operating expenses were roughly stable in 2021 as higher contributions to the Austrian banking sector's deposit protection scheme ('Einlagensicherung Austria') offset the benefits of the strategic cost reduction programme. The group is also envisaging outsourcing part of its IT functions. This could reduce operating expenses to below EUR500 million a year, but we expect the cost-income ratio to remain above 70% in the next two years.

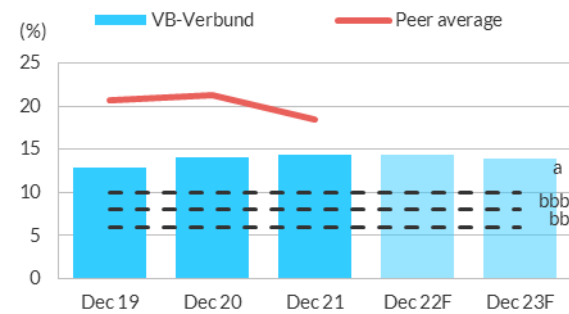
### Capital and Leverage

#### Adequate Capitalisation

VB-Verbund's capitalisation slightly improved at end-2021 despite the repayment of EUR124 million of government participation rights. The Austrian government was granted profit participation rights (Genussrecht) and a blocking minority (25% plus one share) in VBW as part of the restructuring in 2015. The government will return its stake to VBW's other owners once VB-Verbund repays the EUR100 million still outstanding until end-2023. Until the final repayment of the participation right dividend payments are limited. We expect the group to maintain a CET1 ratio sustainably above 12.5% following the repayment of the final tranche to the Austrian state at end-2023.

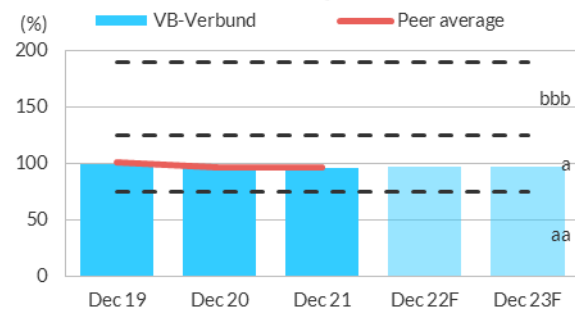
The group's leverage ratio of 6.6% at end-2021 (end-2020: 7.3%) compares well with peers. The temporary decline in 2021 results from VB-Verbund's TLTRO drawings (in total EUR3.5 billion at end-2021), which inflates its leverage exposure.

**CET1 Ratio**



Source: FitchRatings, banks

**Gross Loans/Customer Deposits**



Source: FitchRatings, banks

**Funding and Liquidity**

**Opportunistic Use of ECB Facilities Enhances Funding and Liquidity**

VB-Verbund’s funding and liquidity are good and its refinancing is stable. The group increased its TLTRO funding by EUR2 billion to EUR3.5 billion in 2021, strengthening its liquidity reserve to EUR8.9 billion at end-2021 (EUR5.5 billion at end-2019), reflected in a high Liquidity Coverage Ratio (LCR) of 224% at end-2021. Its liquidity portfolio is of high quality and consists of central bank deposits, cash, bonds and retained covered bonds. We expect the LCR to decline gradually as the group deploys some excess liquidity for new lending and is likely to repay some TLTRO tranches during 2022.

**About Fitch Forecasts**

The forecasts in the charts in this section reflect Fitch’s forward view on the bank’s core financial metrics under Fitch’s *Bank Rating Criteria*. They are based on a combination of Fitch’s macro-economic 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 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 averages include Erste Group Bank AG (VR: a), Corner Banca SA (bbb+), de Volksbank N.V. (a-), NIBC Bank N.V. (bbb), Triodos Bank N.V. (bbb).

## Financials

### Financial Statements

	31 Dec 21		31 Dec 20	31 Dec 19	31 Dec 18
	(USDm)	(EURm)	(EURm)	(EURm)	(EURm)
<b>Summary income statement</b>					
Net interest and dividend income	459	406	413	422	420
Net fees and commissions	287	253	239	230	234
Other operating income	19	17	9	78	11
Total operating income	764	676	662	730	664
Operating costs	583	515	512	534	568
Pre-impairment operating profit	181	160	150	196	96
Loan and other impairment charges	-101	-89	126	22	-6
Operating profit	283	250	24	174	102
Other non-operating items (net)	1	1	33	5	21
Tax	36	32	37	31	8
Net income	248	219	20	149	115
Other comprehensive income	10	9	13	-2	-13
Fitch comprehensive income	258	228	33	146	102
<b>Summary balance sheet</b>					
<b>Assets</b>					
Gross loans	24,697	21,837	21,651	21,537	20,795
- Of which impaired	523	463	454	538	633
Loan loss allowances	309	273	364	286	293
Net loans	24,388	21,563	21,287	21,251	20,502
Interbank	290	257	438	431	470
Derivatives	130	115	170	143	127
Other securities and earning assets	2,990	2,644	2,898	2,850	2,718
Total earning assets	27,798	24,579	24,793	24,675	23,817
Cash and due from banks	7,828	6,921	3,944	2,072	1,732
Other assets	673	595	634	750	1,016
Total assets	36,300	32,095	29,370	27,496	26,564
<b>Liabilities</b>					
Customer deposits	25,727	22,747	22,154	21,729	21,555
Interbank and other short-term funding	4,294	3,797	1,884	412	595
Other long-term funding	2,681	2,371	1,972	1,985	1,037
Trading liabilities and derivatives	370	327	504	463	455
Total funding and derivatives	33,072	29,242	26,513	24,589	23,643
Other liabilities	589	521	518	562	940
Preference shares and hybrid capital	246	218	293	316	126
Total equity	2,392	2,115	2,047	2,028	1,855
Total liabilities and equity	36,300	32,095	29,370	27,496	26,564
Exchange rate		USD1 = EUR0.884173	USD1 = EUR0.821963	USD1 = EUR0.89015	USD1 = EUR0.873057

Source: Fitch Ratings, Fitch Solutions, VB-Verbund

## Key Ratios

	31 Dec 21	31 Dec 20	31 Dec 19	31 Dec 18
<b>Ratios (annualised as appropriate)</b>				
<b>Profitability</b>				
Operating profit/risk-weighted assets	1.8	0.2	1.2	0.7
Net interest income/average earning assets	1.7	1.7	1.7	1.8
Non-interest expense/gross revenue	76.1	77.3	73.1	87.1
Net income/average equity	10.5	1.0	7.3	6.4
<b>Asset quality</b>				
Impaired loans ratio	2.1	2.1	2.5	3.0
Growth in gross loans	0.9	0.5	3.6	5.2
Loan loss allowances/impaired loans	59.1	80.2	53.2	46.2
Loan impairment charges/average gross loans	-0.4	0.6	0.1	0.0
<b>Capitalisation</b>				
Common equity Tier 1 ratio	14.4	14.1	12.9	12.1
Fully loaded common equity Tier 1 ratio	14.1	13.5	12.8	12.1
Tangible common equity/tangible assets	4.8	5.9	6.5	6.8
Basel leverage ratio	6.6	7.3	7.5	6.4
Net impaired loans/common equity Tier 1	9.6	4.5	13.2	19.3
<b>Funding and liquidity</b>				
Gross loans/customer deposits	96.0	97.7	99.1	96.5
Liquidity coverage ratio	223.7	194.0	142.1	133.0
Customer deposits / total non-equity funding	78.1	84.2	88.9	92.5
Net stable funding ratio	138.0	141.3	133.5	125.9

Source: Fitch Ratings, Fitch Solutions, VB-Verbund



## Support Assessment

### Commercial Banks: Government Support

Typical D-SIB GSR for sovereign's rating level (assuming high propensity)	A+ to A-
Actual jurisdiction D-SIB GSR	ns
<b>Government Support Rating</b>	<b>ns</b>
<b>Government ability to support D-SIBs</b>	
Sovereign Rating	AA+/ Stable
Size of banking system	Neutral
Structure of banking system	Neutral
Sovereign financial flexibility (for rating level)	Neutral
<b>Government propensity to support D-SIBs</b>	
Resolution legislation	Negative
Support stance	Neutral
<b>Government propensity to support bank</b>	
Systemic importance	Neutral
Liability structure	Neutral
Ownership	Neutral

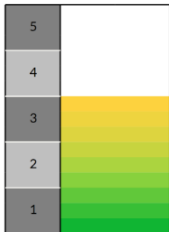
The colours indicate the weighting of each KRD in the assessment.

■ Higher influence
 ■ Moderate influence
 ■ Lower influence

VB-Verbund's GSR reflects Fitch's view that senior creditors can no longer rely on full extraordinary state support. This is driven by the EU's Bank Recovery and Resolution Directive, which has been in force in Austria since 2015.

## Environmental, Social and Governance Considerations

### Overall ESG

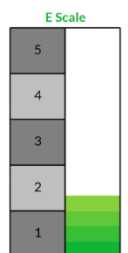


### How relevant are E, S and G issues to the overall credit rating?

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.

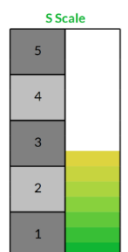
### Environmental (E)

General Issues	Score	Impact	Sector-Specific Issues	Reference
GHG Emissions & Air Quality	1		n.a.	n.a.
Energy Management	1		n.a.	n.a.
Water & Wastewater Management	1		n.a.	n.a.
Waste & Hazardous Materials Management; Ecological Impacts	1		n.a.	n.a.
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



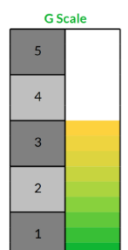
### Social (S)

General Issues	Score	Impact	Sector-Specific Issues	Reference
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
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
Labor Relations & Practices	2		Impact of labor negotiations, including board/employee compensation and composition	Business Profile (incl. Management & governance)
Employee Wellbeing	1		n.a.	n.a.
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



### Governance (G)

General Issues	Score	Impact	Sector-Specific Issues	Reference
Management Strategy	3		Operational implementation of strategy	Business Profile (incl. Management & governance)
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
Group Structure	3		Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership	Business Profile (incl. Management & governance)
Financial Transparency	3		Quality and frequency of financial reporting and auditing processes	Business Profile (incl. Management & governance)



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. For more information on Fitch's ESG Relevance Scores, visit [www.fitchratings.com/esg](http://www.fitchratings.com/esg).

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

#### DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: <https://www.fitchratings.com/understandingcreditratings>. In addition, the following <https://www.fitchratings.com/rating-definitions-document> details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at <https://www.fitchratings.com/site/regulatory>. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see <https://www.fitchratings.com/site/regulatory>), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2022 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.