FitchRatings

Banks
Retail & Consumer Banks
Germany

Genossenschaftliche FinanzGruppe

Update

Key Rating Drivers

Leading German Retail and Commercial Group: Genossenschaftliche FinanzGruppe's (GFG) ratings reflect the group's leading and highly diversified business profile, strong risk-adjusted capitalisation, low leverage, sound asset quality, a record of profitability that is considerably better than most German peers', as well as its outstanding funding profile by international standards. GFG's Viability Rating (VR) is one notch above the implied VR, reflecting the high importance of its strong business profile for the rating.

Mutual Support Mechanism: GFG is not a legal entity, but a cooperative banking network. Its cohesion is ensured by an institutional protection scheme (IPS) managed by the Bundesverband der Deutschen Volksbanken und Raiffeisenbanken e. V. (BVR). GFG's Issuer Default Ratings (IDRs) are group ratings that apply to each member bank, including its central institution DZ BANK AG Deutsche Zentral-Genossenschaftsbank (DZ BANK) and its subsidiaries.

Diversified Business Model: GFG's domestically focused, stable universal banking business model has delivered stable profits over several economic cycles. It is based on its local banks' strong domestic retail and small SME banking franchise, interlinked and supported by DZ BANK group's product providers. These include leaders in insurance, asset management, real estate, as well as DZ BANK's capital-market business. There is a strong strategic alignment between DZ BANK and the local banks, with intensified cooperation and cross-selling across GFG.

Conservative Risk Appetite: GFG's risk profile largely reflects the group's cooperative nature with a contained risk appetite. It is underpinned by granular credit exposures based on sound underwriting standards at primary banks, conservative securities portfolios and the benefit of liquidity pooling and transmission through DZ BANK.

Sound Asset Quality; Deterioration Ahead: GFG's sound asset quality remained resilient in 2024 despite macroeconomic challenges. We estimate an increase of the impaired loans ratio to around 2% in 2024 and expect it to slightly increase from this level in the next two years, due to rising insolvencies in the group's SME and commercial real-estate portfolios.

Resilient Underlying Profitability: GFG's operating profit peaked in 2023 at 1.8% of its risk-weighted assets (RWAs), due to higher net interest income and in part driven by reversals of temporary valuation losses on the banks' securities portfolios. Fitch Ratings expects GFG's operating profit to moderately decline in 2024. This is mainly due to higher loan impairment charges (LICs), further deposit repricing and higher operating costs.

Sound Capitalisation: The local banks and DZ BANK are both well-capitalised, and GFG's leverage ratio is high by international standards. We expect GFG's common equity Tier 1 (CET1) ratio to remain above 15% in the medium term, supported by traditionally high profit retention and slower loan growth than in previous years.

Very Stable Funding: The local banks are predominantly funded by granular, mostly price-insensitive domestic retail deposits, and their structurally large excess liquidity covers most of DZ BANK's short-term funding needs.

We expect primary banks' customer deposit base to have been largely stable in 2024 with a continued shift towards time deposits, although this should slow as interest rates fall. DZ BANK provides GFG with reliable access to wholesale markets as a frequent issuer of unsecured debt and as the largest German covered bond issuer with an established and diversified investor base.

Ratings

Foreign Currency	
Long-Term IDR	AA-
Short-Term IDR	F1+
Viability Rating	aa-
Government Support Rating	ns
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

Highest ESG Relevance Scores

Environmental	3
Social	3
Governance	3

Applicable Criteria

Bank Rating Criteria (March 2024)

Related Research

Fitch Affirms German Cooperative Banks and DZ BANK at 'AA-'; Outlook Stable (April 2024)

Global Economic Outlook (December 2024)

Western European Banks Outlook 2025 (December 2024)

Analysts

Roger Schneider
+49 69 768076 242
roger.schneider@fitchratings.com

Caroline Herper, CFA
+49 69 768076 176
caroline.herper@fitchratings.com

Rating Sensitivities

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

We could downgrade GFG's and its members' ratings if GFG's impaired loans ratio rises above 3% on a sustained basis, its average operating profit declines to below 1% of RWAs, or its regulatory CET1 ratio falls durably below 13%. A downward revision of our operating environment score for GFG (aa-/stable) would also put pressure on its ratings.

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

An upgrade of GFG's and of its members' ratings is unlikely given the already-high ratings and in light of significant economic and financial uncertainties. In addition to a domestic environment that would allow higher lending margins, an upgrade would also require greater cost efficiency, which is likely to necessitate further streamlining of the group's structure, especially at the local banks, beyond the current merger activity, as well as better asset quality and higher capitalisation.

Other Debt and Issuer Ratings

Rating Level	Rating
DZ BANK AG Deutsche Zentral-Genossenschaftsbank	
Deposit ratings[a]	AA/F1+
Long-term senior preferred debt[a,b]	AA
Long-term senior non-preferred debt[a]	AA-
Tier 2 subordinated debt	A
Additional Tier 1 notes	BBB+
Deutsche Apotheker- und Aerztebank eG	
Deposit ratings	AA-/F1+
Muenchener Hypothekenbank eG	
Deposit ratings	AA/F1+
Local cooperative banks	
Long-term deposit ratings	AA-/F1+

[a] Also applies to DZ BANK's subsidiary DZ HYP AG
[b] Also applies to DZ BANK's subsidiary DZ PRIVATBANK S.A.
Source: Fitch Ratings

The long-term deposit ratings and long-term senior preferred debt ratings of DZ BANK and its banking subsidiaries, the long-term deposit rating of Muenchener Hypothekenbank, and DZ BANK's Derivative Counterparty Rating are one notch above the banks' respective Long-Term IDRs because of the protection provided by resolution buffers to preferred creditors. In our view, resolution would only occur in the extremely unlikely event that GFG's mutual support scheme fails to protect group members' viability.

The deposit ratings of Deutsche Apotheker- und Aerztebank and of the local cooperative banks are aligned with GFG's IDRs due to the absence of sustainable significant resolution debt buffers at these entities. Each local bank is regulated individually as a less significant institution. Consequently, the German regulator's preferred resolution strategy for these banks consists of standard insolvency procedures, as opposed to the preferred bail-in resolution strategy for the DZ BANK group and Muenchener Hypothekenbank, each of which is directly under the authority of the European Single Resolution Board (SRB) and follows a single-point-of-entry approach. Therefore, the predominantly deposit-funded local banks have no incentive to build up resolution buffers. This is also the case for Deutsche Apotheker- und Aerztebank, which is directly under the authority of the SRB, but is not required to maintain resolution buffers in excess of its capital requirements.

The ratings of the subordinated Tier 2 and additional Tier 1 notes issued by DZ BANK and its subsidiaries are two and four notches below GFG's VR, respectively, which is the standard notching for these type of instruments under Fitch's criteria. We use the VR of GFG as the anchor rating as we believe that GFG, by protecting the viability of DZ BANK and its subsidiaries, increases the likelihood that all due payments on these notes will continue to be met.

Significant Changes from Last Review

Reduced Profitability Levels Are Likely in 2024

Fitch expects a moderate decline in GFG's pre-tax profit in 2024 following the record EUR14.4 billion in 2023. However, we expect GFG's profitability to remain sound, exceeding the group's long-term average pre-tax profit level of about EUR9 billion over the past decade. In 2025 GFG's profitability is likely to be negatively affected by the continued decline in interest rates, leading to slightly lower net interest income (NII). The continued weak economic environment in Germany means we also expect LICs to remain high in 2025, at a similar level to that of 2024, at around 20bp of gross loans. Cost discipline is likely to be maintained given the decline in inflation in 2024, but operating expenses are set to increase following the upcoming collective bargaining negotiations in 2025.

Again Solid Contribution from DZ BANK Group

DZ BANK expects EUR2 billion–EUR2.5 billion profit before tax in 2024. Fitch believes this is conservative, and expects the group will exceed this target. Our expectation is based on DZ BANK's strong 1H24 result, reporting a pre-tax profit of EUR1.7 billion (1H23: 1.9 billion). DZ BANK is by far GFG's largest member (accounting for almost 40% of GFG's assets at end-2023), which is driving our expectation of GFG's sound profitability in 2024.

DZ BANK's profitability declined slightly despite NII increasing by almost 27% yoy, to EUR2.4 billion in 1H24, but was weighed down by higher LICs, which rose to EUR206 million in 1H24 (1H23: EUR52 million) as well as a loss on trading activities (1H24: EUR-473 million). The loss on trading activities was driven to a large extent by technical effects from accounting-related shifts, which were partly due to the higher NII result. The increase in LICs was mainly driven by the group's TeamBank consumer lending segment as a result of the weak domestic economic environment. The group's good cost discipline led to a slight decline in operating expenses. We expect positive results in particular from the asset management and insurance activities for 2024, as for 2023.

Gradual Asset-Quality Deterioration

We expect asset quality to deteriorate gradually, due to the still-challenging macroeconomic environment, which could intensify in 2025. In December 2024, Fitch revised its forecast for Germany's GDP growth to 0.8% in 2025, down from 1.1% in the September forecast. We expect higher LICs and the majority of impaired loan inflows to come primarily from the group's SME loans and the domestic CRE sector, which remains under pressure, despite signs of stabilisation. The German economy weakening substantially further is a key downside risk for GFG's performance in 2025, as higher unemployment and a sharp increase in corporate insolvencies would result in further asset quality deterioration.

Support from Institutional Protection Scheme

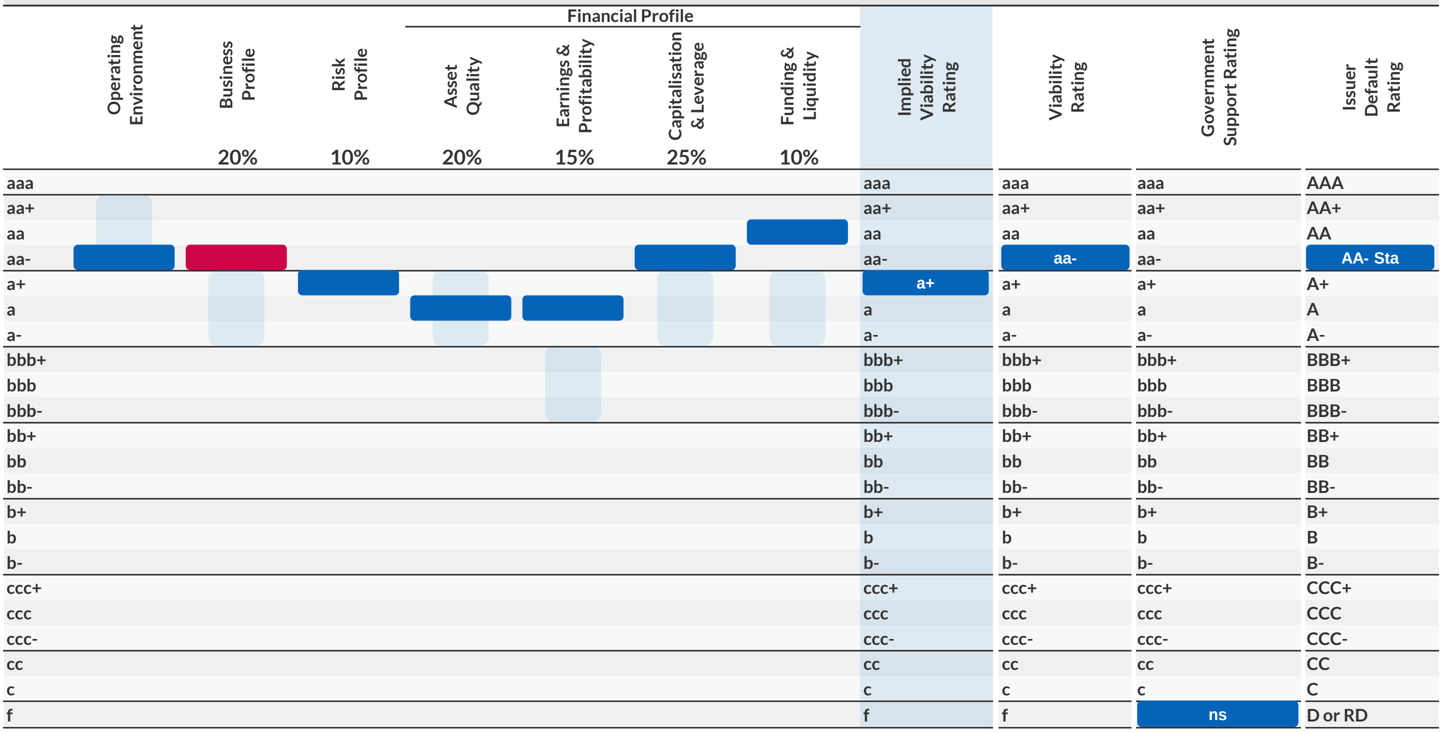
BVR's IPS had to support a small number of individual primary banks in 2024. We believe that these cases are not correlated to each other and that they do not indicate structural deficiencies in the scheme's risk practice, although we expect further refinements to its risk-surveillance processes. The cost to the IPS of the support measure was small relative to the capacity of the scheme.

Ratings Navigator

Genossenschaftliche FinanzGruppe

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 'aa-' is above the 'a' implied category score ore due to the following adjustment reason: business model (positive).

The earnings and profitability score of 'a' is above the 'bbb' implied category score due to the following adjustment reason: earnings stability (positive).

The capitalisation and leverage score of 'aa-' is above the 'a' implied category score due to the following adjustment reason: leverage and risk-weight calculation (positive).

The funding and liquidity score of 'aa' is above the 'a' implied category score due to the following adjustment reason: deposit structure (positive).

Financials

Financial Statements

	31 Dec 23 (USDm)	31 Dec 23 (EURm)	31 Dec 22 (EURm)	31 Dec 21 (EURm)	31 Dec 20 (EURm)
Summary income statement					
Net interest and dividend income	26,412	24,107	20,546	18,232	18,272
Net fees and commissions	9,673	8,829	8,646	8,675	7,439
Other operating income	3,964	3,618	-4,858	1,610	1,709
Total operating income	40,049	36,554	24,334	28,517	27,420
Operating costs	22,317	20,370	19,079	18,577	18,036
Pre-impairment operating profit	17,731	16,184	5,255	9,940	9,384
Loan and other impairment charges	1,982	1,809	1,363	-337	2,327
Operating profit	15,749	14,375	3,892	10,277	7,057
Other non-operating items (net)	–	–	–	245	159
Tax	3,911	3,570	1,790	3,017	2,189
Net income	11,838	10,805	2,102	7,505	5,027
Other comprehensive income	158	144	-5,151	133	377
Summary balance sheet					
Assets					
Gross loans	1,121,458	1,023,602	999,937	944,028	890,576
Loan loss allowances	12,785	11,669	9,860	9,170	9,830
Net loans	1,108,674	1,011,933	990,077	934,858	880,746
Interbank	41,657	38,022	45,097	15,794	19,651
Derivatives	16,739	15,278	18,880	19,695	29,443
Other securities and earning assets	412,881	376,854	376,881	411,846	399,375
Total earning assets	1,579,950	1,442,087	1,430,935	1,382,193	1,329,215
Cash and due from banks	131,206	119,757	117,964	156,973	120,961
Other assets	38,714	35,336	32,205	27,285	25,715
Total assets	1,749,870	1,597,180	1,581,104	1,566,451	1,475,891
Liabilities					
Customer deposits	1,131,974	1,033,200	1,032,861	984,926	937,876
Interbank and other short-term funding	168,035	153,373	180,418	207,032	170,802
Other long-term funding	119,463	109,039	82,859	77,280	75,071
Trading liabilities and derivatives	25,477	23,254	28,191	21,932	32,589
Total funding and derivatives	1,444,949	1,318,866	1,324,329	1,291,170	1,216,338
Other liabilities	147,974	135,062	129,190	145,720	137,725
Preference shares and hybrid capital	264	241	233	176	246
Total equity	156,683	143,011	127,352	129,385	121,582
Total liabilities and equity	1,749,870	1,597,180	1,581,104	1,566,451	1,475,891
Exchange rate		USD1 = EUR0.912742	USD1 = EUR0.937559	USD1 = EUR0.884173	USD1 = EUR0.821963

Source: Fitch Ratings, Fitch Solutions, GFG

Key Ratios

	31 Dec 23	31 Dec 22	31 Dec 21	31 Dec 20
Ratios (%; annualised as appropriate)				
Profitability				
Operating profit/risk-weighted assets	1.8	0.5	1.4	1.0
Net interest income/average earning assets	1.7	1.5	1.3	1.4
Non-interest expense/gross revenue	55.1	78.7	65.1	65.8
Net income/average equity	8.0	1.6	6.0	4.2
Asset quality				
Growth in gross loans	2.4	5.9	6.0	5.5
Loan impairment charges/average gross loans	0.2	0.1	-0.1	0.3
Capitalisation				
Common equity Tier 1 ratio	15.6	15.1	15.1	15.3
Tangible common equity/tangible assets	8.9	8.0	8.2	8.2
Basel leverage ratio	8.0	7.4	8.0	8.0
Funding and liquidity				
Gross loans/customer deposits	99.1	96.8	95.9	95.0
Gross loans/customer deposits + covered bonds	93.8	92.2	91.2	90.5
Liquidity coverage ratio	185.9	158.5	160.1	177.6
Customer deposits/total non-equity funding	79.4	79.5	77.4	78.9

Source: Fitch Ratings, Fitch Solutions, GFG

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
Government Support Rating	**ns**
Government ability to support D-SIBs	
Sovereign Rating	AAA/ Stable
Size of banking system	Negative
Structure of banking system	Neutral
Sovereign financial flexibility (for rating level)	Positive
Government propensity to support D-SIBs	
Resolution legislation	Negative
Support stance	Negative
Government propensity to support bank	
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

GFG's Government Support Rating (GSR) of 'no support' reflects our view that extraordinary sovereign support for EU banks is possible but cannot be relied on due to the Bank Recovery and Resolution Directive and the Single Resolution Mechanism's resolution tools and mechanisms. It is likely that senior creditors will be required to participate in losses ahead of the group receiving sovereign support.

Environmental, Social and Governance Considerations

FitchRatings **Genossenschaftliche FinanzGruppe**

Banks
Ratings Navigator

Credit-Relevant ESG Derivation

Genossenschaftliche FinanzGruppe has 5 ESG potential rating drivers
- Genossenschaftliche FinanzGruppe 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.

			Overall ESG Scale
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)

General Issues	E Score	Sector-Specific Issues	Reference	E Scale
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

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

The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies some of the main ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with 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) and the Sustainability Accounting Standards Board (SASB).

Sector references in the scale definitions below refer to Sector as displayed in the Sector Details box on page 1 of the navigator.

Social (S)

General Issues	S Score	Sector-Specific Issues	Reference	S Scale
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)

General Issues	G Score	Sector-Specific Issues	Reference	G Scale
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

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.

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' 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 on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

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. Fitch Ratings makes routine, commonly-accepted adjustments to reported financial data in accordance with the relevant criteria and/or industry standards to provide financial metric consistency for entities in the same sector or asset class.

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.