

Cincinnati Financial Corporation

Key Rating Drivers

Independent Agency Distribution: Cincinnati Financial Corporation's (CINF) well-established independent agency system contributes to the company's value proposition and operating success with ongoing independent agency consolidation. Independent agents still represent the bulk of industry volume by premiums, particularly in the commercial segment. While there is a small portion of CINF business, Cincinnati Re, that utilizes brokers, the company's business profile is more focused on independent agents.

Very Strong Capitalization: CINF's balance sheet strengths include conservative operating subsidiary capitalization and modest financial leverage. As of 3Q22, the financial leverage ratio (FLR) was 8%. The holding company held \$3.9 billion in investments as of Sept. 30, 2022, with the bulk of these assets in equity securities. The property/casualty (P/C) group's score on Fitch Ratings' Prism capital model improved to 'Extremely Strong' at YE 2021.

Investment Risk Driven by Equities: The asset allocation to equities remains nearly double industry norms, but the company's very strong capitalization and cash flow provide a cushion against short-term fluctuations in valuation. A focus on stocks with a demonstrated ability to pay increasingly higher dividends provides some stability in the investment contribution to earnings and can provide a floor to their valuation.

Reserve Risk Well Managed: Fitch believes CINF's reserves are adequate and well managed. The company reported favorable prior-year reserve development in each of the last 33 years. Capital exposure to reserve redundancies or deficiencies are relatively modest.

Strong Profitability: The company is well positioned to combat elevated inflation that is appearing in auto and commercial umbrella, with price increases and initiatives to improve pricing precision and loss experience related to claims and loss control practices. The GAAP combined ratio for the first nine months of 2022 was 99.2%, a deterioration of 9.4 percentage points over prior year and included 10.9 percentage points for catastrophe losses, which was partially offset by 2.8 percentage points of favorable loss reserve development.

Compressed Holding Company Notching: Holding company notching is compressed by one notch since financial leverage is expected to be maintained below 16% for the foreseeable future. The holding company also maintains a significant amount of cash and liquid assets. As of Sept. 30, 2022, the holding company had \$3.9 billion in assets of which \$3.6 billion was common stocks. Due to the low financial leverage and strong profitability, the company maintains high levels of fixed-charge coverage.

Ratings

Cincinnati Financial Corporation

Long-Term IDR	A
Senior Unsecured Long-Term Rating	A-

Subsidiaries

Insurer Financial Strength	A+
----------------------------	----

Outlook

Long-Term IDR	Stable
---------------	--------

Financial Data

Cincinnati Financial Corporation

(\$ Mil.)	2020	2021
Total Debt	842	843
Shareholders' Equity	10,789	13,105
Net Income	1,216	2,946
Combined Ratio (%)	98	88

Source: Fitch Ratings, S&P Global Market Intelligence.

Applicable Criteria

[Insurance Rating Criteria \(July 2022\)](#)

Related Research

[Fitch Ratings 2022 Mid-Year Outlook: Global Insurance \(June 2022\)](#)

Analysts

Gerald Glombicki
+1 312 606-2354
gerald.glombicki@fitchratings.com

Christopher Grimes
+1 312 368-3263
christopher.grimes@fitchratings.com

Rating Sensitivities

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

- A sustained GAAP combined ratio of 96% or better;
- A sustained P/C Prism score of 'Very Strong' or higher.

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

- A sustained combined ratio above 105% or worse;
- Failure to maintain a P/C Prism score in the 'Very Strong' category for a sustained period and a statutory operating leverage above 1.5x;
- CINF's holding company ratings benefit from narrow notching relative to the Insurer Financial Strength (IFS) rating versus standard notching. Narrow notching may revert to standard notching if financial leverage exceeds 15%.

Latest Developments

The company profile subscore was moved up to 'aa-' from 'a+' due to the company's better competitive positioning and successful integration of recent diversifying elements, such as Cincinnati Re and Cincinnati Global Underwriting Ltd.

The investments and liquidity subscore weight changed to a moderate influence from lower influence as the risky asset ratio increased.

Key Rating Drivers — Scoring Summary

Driver Levels	Operational Profile		Financial Profile				Asset/Liability Management	Reserve Adequacy	Reinsurance, Risk Mitigation & Catastrophe Risk	Other Drivers & Criteria Elements (see below)	Insurer Financial Strength
	Industry Profile & Operating Environment	Company Profile	Capitalization & Leverage	Debt Service Capabilities and Financial Flexibility	Financial Performance & Earnings	Investment and Liquidity Risk					
aaa							Driver Not Applicable				AAA
aa+											AA+
aa											AA
aa-											AA-
a+											A+
a											A
a-											A-
bbb+											BBB+
bbb											BBB
bbb-											BBB-
bb+											BB+
bb											BB
bb-											BB-
b+											B+
b											B
b-											B-
ccc+											CCC+
ccc											CCC
ccc-											CCC-
cc											CC
c											C
d or rd											D or RD

Other Drivers & Criteria Elements				
Provisional Insurer Financial Strength Rating				A+
Non-Insurance Attributes	Positive	Neutral	Negative	+0
Ownership / Group Support	Positive	Neutral	Negative	+0
Transfer & Convertibility / Country Ceiling	Yes	No	AAA	+0
Insurer Financial Strength Rating				Final: A+
IFS Recovery Assumption	Good			-1
Issuer Default Rating (IDR)				Final: n.a.

Bar Chart Legend:

Vertical Bars = Range of Driver

Bar Colors = Relative Importance

- Higher Influence
- Moderate Influence
- Lower Influence

Bar Arrows = Driver Outlook

- ↑ Positive
- ↓ Negative
- ↕ Evolving
- Stable

Company Profile

Favorable Profile in U.S. Independent Agency Space

Fitch ranks CINF's overall business profile as moderate compared with U.S. non-life insurance organizations, and incorporates its well-established U.S. independent agency distribution, expanding geographic footprint and shift in business risk profile. The company possesses very good product diversification, but more moderate diversification by geography and distribution channel. Fitch scores business profile at 'aa-' under its rating guidelines.

Favorable Competitive Positioning

Competitive positioning is comprised of two subfactors: general and operating scale. Together, these factors aggregate into a favorable position. The company has a substantive business franchise within the sector and some competitive advantages that are, in part, derived from its franchise and expertise. Annualized net written premiums were \$7.5 billion and shareholders' equity was \$9.4 billion at Sept. 30, 2022. The company continually ranks among the top 25 largest writers in the industry.

CINF's established U.S. independent agency system played an important role in the company's success and management believes the company remains well positioned for ongoing independent agency consolidation. The company is focused on building long-term relationships, increasing its penetration of each existing agency's business, and quality claims handling and service. The company maintains a competitive and effective profit-sharing commission structure, paying among the highest commissions in the industry.

Moderate Business Risk Profile

The business risk profile is balanced by a breadth of well-established product offerings and exposure to regional natural catastrophes and weather-related events, including hurricanes, wind, hail, floods and winter storms, resulting in performance volatility, particularly in personal lines. Geographic expansion continued to lower CINF's concentration in the top 10 states, which made up 52% of P/C earned premium in 2021.

Favorable Diversification

The company is focused on standard market commercial products that agents can market to small and midsize businesses in their communities. The company established an excess and surplus (E&S) lines insurer and developed life insurance and annuity product offerings, exclusively for its independent agencies. The company also has a small assumed reinsurance division, Cincinnati Re, that was started in 2015 and Cincinnati Global, established in 1Q19, underwrites for Lloyd's of London Syndicate 318.

Moderate/Favorable Corporate Governance

The group structure, governance structure, financial transparency, and major civil or criminal issues or uncertainties all scored moderate/favorable, resulting in no changes to the company profile.

No material issues to the rating are noted. The board appears to have an appropriate amount of independence from management and seems reasonably involved in establishing the company's strategic direction. There appear to be no major audit-related issues or related-party transactions.

Ownership

Neutral Ownership

CINF is a publicly traded company formed in 1968. Public ownership is neutral to the rating.

Capitalization and Leverage

Very Strong Capitalization and Modest Financial Leverage

Fitch views capital as very strong and supportive of the current rating. Overall capital has a moderate influence in determining the company's ratings.

The score of Fitch's Prism economic capital model was 'Extremely Strong' at YE 2021 and supports growth opportunities. Factors that added to target capital are investment, catastrophe risk and underwriting exposures, but are offset, in part, by relatively low reserve and underwriting volatility. Available capital benefited from unrealized bond gains but excludes parent company cash and marketable investments.

The Cincinnati Life Insurance Company's total adjusted capital at \$306 million was modest at YE 2021, but supportive of the company's operating profile. RBC was strong at 250%. The risky asset ratio decreased to 90%, more in line with historical averages, from a reduction in the spike in below-investment-grade bonds in 2020.

Financial leverage was 8% as of Sept 30, 2022, slightly lower than historical five-year average due to a higher shareholders' equity. The company receives narrow notching on its Issuer Default Rating based on the low level of financial leverage. If this ratio were to go above 15%, normal notching would result in all holding company ratings being lowered one notch. The total financing and commitments ratio was low at 0.1x at YE 2021.

Financial Highlights

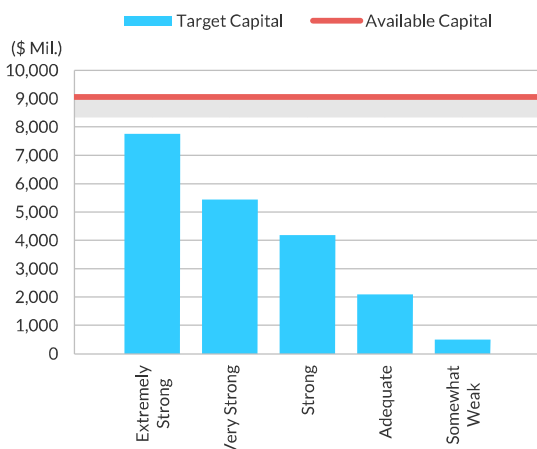
	2020	2021
Statutory Surplus (\$ Mil.)	5,838	7,247
Operating Leverage (x)	0.97	0.9
Net Leverage (x)	2.7	2.5
RBC (%)	317	333
Financial Leverage (%)	8	6

Note: Financial leverage is the only GAAP figure in this table and statutory surplus is of the combined non-life companies.
 Source: Fitch Ratings, S&P Global Market Intelligence.

Fitch's Expectations

- Capital metrics will approximate current levels and financial leverage will remain below 15%.

2021 Prism Score – Cincinnati Insurance Group



(\$ Mil.)	2019	2020	2021
Prism Score	Extremely Strong	Extremely Strong	Extremely Strong
AC/TC at Prism Score (%)	101	109	117
AC/TC at Higher Prism Score (%)	N.A.	N.A.	N.A.
Statutory Surplus	5,620	5,838	7,247
Affiliated Investments	(41)	(48)	—
Unrealized Bond Gains/(Losses)	398	650	514
Other Adjustments	585	612	1,353
Available Capital (AC Base)	6,561	7,051	9,113
Target Capital Contributors (%)			
Underwriting	19	19	12
Reserves	8	10	12
Investments	31	31	30
Catastrophe	22	21	26
Other	19	19	20

AC – Available capital. TC – Target capital. N.A. – Not available. Note: Red line is AC base; shaded area represents the high and low of AC due primarily to unrealized bond

Source: Fitch Ratings, S&P Global Market Intelligence.

Debt Service Capabilities and Financial Flexibility

Very Strong Debt-Servicing Capacity

Financial flexibility and debt service capabilities are very strong. Overall capital has a low influence in determining the company's ratings.

GAAP fixed-charge coverage (FCC) benefits from modest use of financial leverage and relatively stable underwriting margin on a \$7 billion book of business. Fitch anticipates FCC will be in the low-double-digit range over the near term.

CINF could pay dividends of \$929 million in 2022 without seeking regulatory approval. This compares favorably with the modest amount of annual interest expense.

Financial Highlights

(\$ Mil.)	2020	2021
Holding Company Cash and Investments	3,916	5,099
Operating Cash Flow	1,491	1,981
Fixed-Charge Coverage (x)	14	25
Statutory Coverage Ratio (x)	11	18

Note: GAAP.

Source: Fitch Ratings, S&P Global Market Intelligence.

Fitch's Expectations

- GAAP Operating FCC will remain in the low double digits.
- The holding company will maintain at least one year's worth of expenses in cash.

Financial Performance and Earnings

Strong Operating Performance

Financial performance and earnings are considered strong and supportive of the current rating category. Overall profitability has a high influence in determining the ratings.

The GAAP combined ratio for 2021 improved 9.8 percentage points over 2020, driven by higher favorable loss reserve development, lower catastrophe losses and an improvement in the underlying core combined ratio. The GAAP combined ratio for the first nine months 2022 was 99.2%, a deterioration of 9.4 percentage points over the same period of 2021 and included 10.9 percentage points for catastrophe losses, which were partially offset by 2.8 percentage points of favorable loss reserve development.

Commercial lines, the largest segment by premium volume, reported a GAAP combined ratio of 83.8% for 2021, compared with 98.3% for 2020. The GAAP combined ratio for the first nine months of 2022 was a 99.3%, compared with 83.4% for the same period in 2021. The 15.9-percentage point increase includes an increase of 10.4 points in catastrophe losses, an increase of 5.5 points from current accident-year loss and loss expenses before catastrophe losses, and 3.8 points from commercial umbrella. The net effect of reserve development on prior accident years for the first nine months of 2022 was \$51 million, compared with \$276 million for the same period in 2021.

CINF's life segment typically contributes modestly to operating results because most of its investment income is included in the investment segment results. Included in the life insurance segment results is only investment income credited to contract holders. This segment reported a \$16 million loss in 2021 compared with an \$11 million profit in 2020, primarily due to less favorable mortality results as a result of higher death claims. The life insurance segment averaged an annual profit of less than \$1 million over the past five years.

Financial Highlights

(\$ Mil.)	2020	2021
Net Income	1,216	2,946
Unrealized Gains on Securities Held	841	2,278
Pretax Operating Income	712	1,262
Operating ROE (%)	7	11
GAAP Combined Ratio (%)	98.1	88
Points on Combined Ratio from Prior-Period Reserve Development	(2.3)	(7)
Catastrophe Points on Combined Ratio	12.1	8
P/C Segment Operating Ratio (%)	86.9	77.3

Note: GAAP.
Source: Fitch Ratings, S&P Global Market Intelligence.

Fitch's Expectations

- High-single-digit operating ROEs over the near term are expected.

Investment and Asset Risk

Strong Investment Profile

Investments and liquidity are viewed as strong and supportive of the current rating category. Overall investments and liquidity have a moderate influence in determining the company's current ratings.

CINF's allocation to equities remains nearly double industry norms. While the company's long-term capital position would be affected by prolonged changes in market valuation, the very strong capitalization and cash flow provide a cushion against short-term fluctuations in valuations.

The risky asset ratio is among the highest in Fitch's rated universe. The company is cognizant of the risk associated with equities, but views this risk as a long-term way to enhance capital. Further, the stock portfolio is diversified and provides liquidity even in a down market. The company actively backs reserves with high-grade fixed-income securities.

Fitch believes CINF has ample liquidity to cover its insurance reserves through its high-quality fixed-income portfolio. The effective duration of the fixed maturity portfolio was 4.8 years at YE 2021, compared with the duration of P/C loss and loss adjustment expense reserves of approximately 3.1 years. In addition, cash generation remains solid. At Sept. 30, 2022, the fixed maturity portfolio had an average rating of 'A'. Below-investment-grade bonds and unrated securities represented 4.5% and 15.9% of the portfolio, respectively.

Financial Highlights

	2020	2021
Cash and Invested Assets (\$ Mil.)	22,442	25,805
Investment Leverage (x)	2.1	2.0
Risky Asset Ratio (%)	82	85.0
Risk-Weighted Liquidity Ratio (%) ^a	180	193
Investment Yield (%)	3.1	3.0

^aStatutory. Note: GAAP.

Source: Fitch Ratings, S&P Global Market Intelligence.

Fitch's Expectations

- The company will maintain a high risky asset ratio that approximate current levels.

Reserve Adequacy

Very Strong Reserve Strength

Reserve adequacy is supportive of the current rating category. Overall reserve adequacy has a moderate influence in determining the company's ratings.

The company has had 33 years of consecutive favorable loss reserve development. Fitch's analysis of Schedule P loss reserves at YE 2021 indicates the company's reserve strength is similar to past years. CINF's statutory P/C reserve leverage is relatively moderate as is the exposure to capital of any reserve redundancies or deficiencies.

As of YE 2021, the company carried net reserve of approximately \$6.9 billion, which is in reasonable range for reserves of \$6.5 billion on the low end to \$7.0 billion on the high end according the 10-K filing. The company establishes initial reserves at levels where redundancies are more likely than deficiencies and tends to remain well into the upper half of actuarially estimated range of net reserves.

Financial Highlights

(\$ Mil.)	2020	2021
Loss and LAE Reserves	6,176	6,706
Reserve Leverage (x)	1.1	0.9
Prior-Year Reserve Development	(118)	(395)
Reserve Development/Net Premiums Earned (%)	(2.1)	(6.6)
Reserve Development/Policyholders' Surplus (%)	(2.1)	(6.8)

Note: Statutory accounting principles.

Source: Fitch Ratings, S&P Global Market Intelligence.

Fitch's Expectations

- Conservative reserve philosophy will remain despite fluctuations in reserve experience.

Reinsurance, Risk Mitigation and Catastrophe Risk

Reasonable Reinsurance Protection Limits Large Losses

Fitch views reinsurance, risk mitigation and catastrophe risk to be strong and supportive of the current rating category. Overall, this category has a moderate influence in determining the company's ratings.

The company incurred \$497 million in catastrophe losses in 2021, with the largest event being a \$168 million loss from flood, hail and wind events in the Northeast and South during Aug. 29-Sept. 2, 2021. Given the company's geographic footprint, the majority of catastrophe losses are in the Midwest.

The company's property catastrophe reinsurance treaty essentially provides coverage for up to \$800 million in losses, with the company retaining the first \$100 million of loss and varying portions of the layers, which aggregate into an additional \$199 million of risk retained if a full loss were to occur. The company has several other reinsurance programs all designed to offset the impact to capital while simultaneously providing a cost-effective transfer of risk.

The credit quality of the company's reinsurers is generally good with ratings in the 'A' category or higher.

Fitch's Expectations

- Reinsurance recoverables will remain relatively modest compared with capital.
- The bulk of recoverables will continue to be from highly rated reinsurers.

Appendix A: Peer Analysis

Peer Comparison

Click [here](#) for a report that shows a comparative peer analysis of key rating driver scoring.

Appendix B: Industry Profile and Operating Environment

Industry Profile and Operating Environment (IPOE)

Click [here](#) for a link to a report that summarizes the main factors driving the above IPOE score.

Appendix C: Other Rating Considerations

Below is a summary of additional ratings considerations that are part of Fitch's *Insurance Rating Criteria*.

Group Insurance Financial Strength (IFS) Rating Approach

Fitch considers the rated entities of CINF to be Core. As such, all are assigned the group rating. These entities share common management, resources and brand. Only normal regulatory barriers exist to dividend movement between entities and up to the parent. Fitch believes the entity has adequate financial strength to support its operating subsidiaries and management is willing to do so, although no formal support agreements are in place. All operating companies rating are based on a combined group assessment.

Notching

For notching purposes, the regulatory environment of the U.S. is assessed by Fitch as being Effective, and classified as following a Ring-Fencing approach.

Notching Summary

IFS Ratings

A baseline recovery assumption of Good applies to the IFS rating, and standard notching was used from the IFS "anchor" rating to the implied operating company IDR.

Holding Company IDR

Nonstandard notching was applied between the implied operating company and holding company IDRs. A one-notch adjustment was made for favorable leverage and unusual holding company cash and marketable securities position.

Holding Company Debt

A baseline recovery assumption of Below Average was applied to the senior unsecured notes. Standard notching relative to the IDR was used.

IFS - Insurer Financial Strength. IDR - Issuer Default Rating.

Debt Maturities

(\$ Mil., as of Dec. 31, 2021)

2022	—
2023	—
2024	—
2025	—
2026 and Later	793
Total	793

Source: Fitch Ratings, S&P Global Market Intelligence.

Transfer and Convertibility Risk (Country Ceiling)

None.

Criteria Variations

None.

Appendix D: Environmental, Social and Governance Considerations

Credit-Relevant ESG Derivation

Cincinnati Financial Corporation has 8 ESG potential rating drivers

- Cincinnati Financial Corporation has exposure to underwriting/reserving exposed to asbestos/hazardous materials risks but this has very low impact on the rating.
- Cincinnati Financial Corporation has exposure to underwriting/reserving exposed to environmental and natural catastrophe risks; impact of catastrophes on own operations or asset quality; credit concentrations but this has very low impact on the rating.
- Cincinnati Financial Corporation has exposure to compliance risk; treating customers fairly; pricing transparency; privacy/data security; legal/regulatory fines; exposure to insured and own cyber risk but this has very low impact on the rating.
- Cincinnati Financial Corporation has exposure to social responsibility and its effect on brand strength; increased vulnerability due to credit concentrations 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	8	issues	3	
not a rating driver	1	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	3	Underwriting/reserving exposed to asbestos/hazardous materials risks	Capitalization & Leverage; Financial Performance & Earnings; Reserve Adequacy; Reinsurance, Risk Mitigation & Catastrophe Risk	2
Exposure to Environmental Impacts	3	Underwriting/reserving exposed to environmental and natural catastrophe risks; impact of catastrophes on own operations or asset quality; credit concentrations	Capitalization & Leverage; Financial Performance & Earnings; Reserve Adequacy; Reinsurance, Risk Mitigation & Catastrophe Risk; Investment & Asset Risk	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	1	n/a.	n/a.	5
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Compliance risk; treating customers fairly; pricing transparency; privacy/data security; legal/regulatory fines; exposure to insured and own cyber risk	Industry Profile & Operating Environment; Company Profile; Reserve Adequacy	4
Labor Relations & Practices	2	Impact of labor negotiations, including board/employee compensation and composition	Company Profile	3
Employee Wellbeing	1	n/a.	n/a.	2
Exposure to Social Impacts	3	Social responsibility and its effect on brand strength; increased vulnerability due to credit concentrations	Company Profile; Investment & Asset Risk; Financial Performance & Earnings; Reinsurance, Risk Mitigation & Catastrophe Risk	1

Governance (G)

General Issues	G Score	Sector-Specific Issues	Reference	G Scale
Management Strategy	3	Operational implementation of strategy	Company Profile	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	Company Profile	4
Group Structure	3	Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership	Company Profile; Ownership	3
Financial Transparency	3	Quality and timing of financial reporting and auditing processes	Company Profile	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.

ESG Considerations

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.

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.