

DEVK Deutsche Eisenbahn Versicherung

Key Rating Drivers

Strong Business Profile: DEVK Deutsche Eisenbahn Versicherung (DEVK) is well diversified, as it operates across all primary insurance lines and in international reinsurance. The medium-sized company is headed by non-life insurer DEVK Deutsche Eisenbahn Versicherung Sach- und HUK-Versicherungsverein a.G. Betriebliche Sozialeinrichtung der Deutschen Bahn (DEVK Non-Life) and life insurer DEVK Deutsche Eisenbahn Versicherung Lebensversicherungsverein a.G. Betriebliche Sozialeinrichtung der Deutschen Bahn (DEVK Life).

Core Strategic Status: Fitch Ratings views all DEVK-branded entities as “core” to DEVK and rates them based on the credit profile of the group as a whole. Fitch views Switzerland-based Echo Rückversicherungs-AG (Echo Re) as “very important” to DEVK as it represents the group’s reinsurance operations outside Europe. The key rating drivers of Echo Re’s ratings are discussed in a separate report.

Very Strong Capitalisation: We expect DEVK to maintain very strong capitalisation in 2020 and 2021. In Fitch’s Prism Factor-Based Capital Model (Prism FBM), DEVK scored ‘Extremely Strong’ at end-2019. We regard DEVK’s capitalisation as very strong with net leverage at 2.2x and operating leverage at 12.9x. Our view on capitalisation is supported by the group’s regulatory Solvency II ratio at end-2019 of 209% without transitional measures on technical provisions.

Strong Financial Performance: We expect a slightly improved net combined ratio for 2020. DEVK reported a strong German GAAP net combined ratio of 95.2% and an operating pre-tax return on equity of 9.8% for 2019. We expect DEVK to report lower profitability in 2020 due to the coronavirus pandemic and its implications on investment income.

The development of German motor premium rates will significantly influence DEVK’s underwriting profitability as the motor line generates more than half of DEVK Non-Life’s German gross written premiums (GWP) in primary insurance. We estimate that German motor GWP grew 4% in 2019 and expect slightly increasing premiums in both 2020 and 2021.

Very Strong Reserve Adequacy: Fitch believes DEVK Non-Life’s claims reserving buffers are strong enough for the insurer to withstand competitive pressures in Germany’s motor insurance market without a loss of market share or deterioration of capitalisation.

Rating Sensitivities

Coronavirus Pandemic Impact: A material adverse change in Fitch’s rating assumptions with respect to the impact of the coronavirus pandemic could lead to a downgrade. A positive rating action is prefaced by Fitch’s ability to reliably forecast the impact of the pandemic on DEVK’s and/or Echo Re’s financial profile.

Capital or Reserve Weakening: Key triggers for a downgrade of the DEVK group’s ratings include the Fitch Prism FBM score falling to low in the ‘Very Strong’ category or a significant weakening of reserving methodologies as shown by a large reduction in reserve redundancies.

Upgrade Is Unlikely: Key triggers for an upgrade include a substantial improvement in the market position of the DEVK group’s life operations.

Revision of Echo Re’s Strategic Importance: A reduction of the strategic importance of Echo Re to DEVK could lead to a downgrade of its rating. This could be manifested through a reduction in the importance of Echo Re within DEVK’s reinsurance operations or of reinsurance operations as a whole for DEVK. A significant increase in Echo Re’s strategic importance to DEVK could lead to an upgrade.

Ratings

DEVK Deutsche Eisenbahn
Versicherung Sach- und HUK-
Versicherungsverein a.G. Betriebliche
Sozialeinrichtung der Deutschen Bahn

Insurer Financial Strength Rating A+

DEVK Deutsche Eisenbahn
Versicherung
Lebensversicherungsverein a.G.
Betriebliche Sozialeinrichtung der
Deutschen Bahn

Insurer Financial Strength Rating A+

Echo Rückversicherungs-AG

Insurer Financial Strength Rating A-

See additional ratings on page 9.

Outlooks

Stable

Financial Data

DEVK Deutsche Eisenbahn
Versicherung

(EURm)	2019	2018
Total assets	20,895	20,003
Total equity	2,299	2,163
Gross written premiums	3,624	3,451
Net combined ratio	95.2	94.9
Total debt and hybrids	0	0

Note: Reported on a consolidated basis
Source: Fitch Ratings; DEVK

Applicable Criteria

Insurance Rating Criteria (August 2020)

Related Research

German Non-Life Insurance Dashboard:
Mid-Year 2020 Update (August 2020)
German Life Insurance Dashboard: Mid-Year
2020 Update (August 2020)
Fitch Ratings 2020 Outlook: German Non-Life
Insurance (December 2019)
Echo Rückversicherungs-AG
(September 2020)

Analysts

Dr Christoph Schmitt
+49 69 768076 121
christoph.schmitt@fitchratings.com

Dr Stephan Kalb
+49 69 768076 118
stephan.kalb@fitchratings.com

Key Credit Factors – Scoring Summary

DEVK Deutsche Eisenbahn Versicherung



Insurance Ratings Navigator
EMEA Composite

Factor Levels	Operational Profile				Financial Profile				Reinsurance, Risk Mitigation & Catastrophe Risk	Other Factors & Criteria Elements (see below)	Insurer Financial Strength
	Industry Profile & Operating Environment	Business Profile	Capitalization & Leverage	Debt Service Capabilities and Financial Flexibility	Financial Performance & Earnings	Investment and Asset Risk	Asset/Liability & Liquidity Management	Reserve Adequacy			
aaa											AAA
aa+	↑		↑					↑			AA+
aa									↑		AA
aa-					↓	↓					AA-
a+	↑	↑		↓		↓	↓			↓	A+ Stable
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 Factors & Criteria Elements				
Provisional Insurer Financial Strength				A+
Non-Insurance Attributes	Positive	Neutral	Negative	+0
Corporate Governance & Management	Effective	Some Weakness	Ineffective	+0
Ownership / Group Support	Positive	Neutral	Negative	+0
Transfer & Convertibility / Country Ceiling	Yes	No	AAA	+0
Insurer Financial Strength (IFS)				Final: A+
IFS Recovery Assumption	Good			-1
Issuer Default Rating (IDR)				Final: n.a.

Bar Chart Legend

Vertical Bars = Range of Rating Factor
 Bar Colors = Relative Importance
 ■ Higher Influence (Red)
 ■ Moderate Influence (Dark Blue)
 ■ Lower Influence (Light Blue)

Bar Arrows = Rating Factor Outlook
 ↑ Positive ↓ Negative
 ⇅ Evolving □ Stable

Latest Developments

- The coronavirus pandemic led to weak investment income in 1H20 due to DEVK’s significant equity investment exposure. Although capital markets have recovered since, we expect DEVK to report lower net income for 2020, although it will still be a positive number.

Industry Profile and Operating Environment (IPOE)

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

Business Profile

Strong Business Profile

Fitch ranks DEVK's business profile as 'moderate' compared to that of all other German composite insurance companies due to its moderate operating scale, favourable competitive positioning and favourable business risk profile. Given this ranking, Fitch scores DEVK's business profile at 'a' under its credit factor scoring guidelines.

DEVK's GWP increased by 5% to EUR3,624 million in 2019 (2018: EUR3,451 million). The five-year compound annual growth rate (CAGR) for 2015–2019 was 3%, in line with the German primary insurance market five-year CAGR of 3.1%. DEVK's GWP growth is supported by German motor market GWP growth, which was stronger than market growth in recent years.

DEVK has a strong market position in the motor line. Measured by GWP, it ranks ninth with a market share of 3.7%. Its market position in the highly profitable household contents line is sixth with a market share of 4.7%, while the overall market position in the liability line is 17th. DEVK primarily provides individual liability cover. Fitch estimates that DEVK was among the top five insurers by insured individuals in the following business lines: motor, contents and liability insurance in 2019.

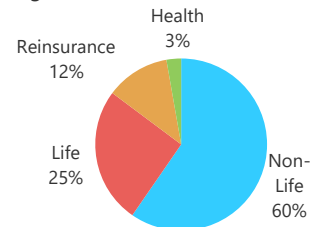
We regard the German non-life sector's business risk profile to be favourable on average, as reflected by historically strong underwriting performance and very high reserve adequacy. Due to its reserving standards and its focus on individual cover we believe that DEVK's business risk profile is slightly stronger than the German non-life sector.

Ownership

DEVK is a mutual insurance group owned by DEVK Non-Life's and DEVK Life's policyholders. We regard ownership as neutral to the ratings.

Premium Income

(By segments, 2019)



Source: Fitch Ratings, DEVK

Capitalisation and Leverage

Very Strong Capitalisation

We consider capitalisation to be very strong. DEVK scored 'Extremely Strong' in Fitch's Prism FBM model, based on end-2019 results. DEVK's high equity exposure is the main driver for Prism FBM's target capital.

DEVK's capitalisation benefits from its prudent reserving standards and Fitch estimates that the company has significant reserve redundancies on its balance sheet. Fitch has granted some capital credit for DEVK's claims reserve redundancies in Prism FBM.

DEVK reported a very strong regulatory group Solvency II ratio of 267% at end-2019 (2018: 332%). DEVK reports its Solvency II ratios, including transitional measures, on technical provisions. Without transitional measures, DEVK would still have reported a very strong group Solvency II ratio of 209% (2018: 264%; 2017: 221%). If life insurance contributes notably to the overall credit profile of a German insurance group, we primarily focus on the Solvency II ratio without transitional measures, which we believe provides a more realistic view of the underlying economics of the group's balance sheet.

DEVK reported very strong and stable non-life net leverage at 2.2x in recent years. At 12.9x, life operating leverage was very strong at end-2019.

Fitch Expectations

- DEVK will maintain very strong capitalisation over the next 12-24 months.
- At least 'Very Strong' Prism FBM Score over the next 12-24 months.
- Very strong net leverage and operating leverage over the next 12-24 months.

Debt Service Capabilities and Financial Flexibility

No Financial Leverage

DEVK has no debt outstanding, as is typical of German mutual insurers. We regard DEVK's financial flexibility in terms of external market access as strong.

Fitch Expectations

- Fitch expects there will be no need for external capital resources over the next 12-24 months.
- Strong financial flexibility to be maintained.

Financial Highlights

(%)	2019	2018
Group solvency ratio	267	332
Financial leverage ratio	0	0
Non-life net written premiums to equity (x) ^a	1.0	1.0
Non-life net leverage (x)	2.2	2.2
Life operating leverage (x)	12.9	12.8

^a Equity including claims equalisation reserve
Note: Reported on a consolidated basis
Source: Fitch Ratings; DEVK

Financial Performance and Earnings

Strong Profitability, Dependent on Germany's Competitive Motor Market

DEVK has had a very strong combined ratio in the past four years, although its focus on motor insurance constrains the overall profitability due to the high competitiveness of the German motor insurance market. As a mutual, DEVK accumulates its profits, resulting in a suppressed return on equity.

Motor accounts for more than half of DEVK's German non-life primary insurance GWP and is the main driver of DEVK's underwriting profitability. In line with the German motor market, DEVK's net combined ratio improved with the turnaround in premium rate levels since 2011.

Fitch expects motor premium growth to be low in 2020 and 2021. Increasing costs per claim in the German motor market will most likely more than offset the price increases. We expect DEVK's net combined ratio to be better or stable in 2020, benefitting from the pandemic-related shutdown.

DEVK achieved an operating ratio of 86.8% in 2019 (2018: 87.3 %). The ratio has been below 90% since at least 2008. Fitch regards this as strong and likely to be maintained in 2020 and beyond. The gap between the combined and operating ratio is influenced by DEVK's high amount of non-life investments – EUR7.3 billion compared to EUR2.4 billion of non-life net written premiums. Every percentage point of investment return in the non-life segment is reflected in a 3% decrease in the operating ratio compared with the combined ratio.

Fitch Expectations

- Fitch expects the net combined ratio to improve in 2020 due to DEVK's focus on individual cover. On a normalised basis, excluding the impact of the coronavirus pandemic, Fitch expects the net combined ratio to be weaker than 95%.
- Fitch expects the 2020 return on equity to be 2%–4% due to weaker investment income.

Investment and Asset Risk

High Exposure to Risky Investments Mitigated by Very Strong Capitalisation

Equity investments have accounted for about 10% of DEVK's total investments in recent years and were 10.6% at end-2019 (end-2018: 12.0%). DEVK's proportion of equity investments still exceeds the German primary insurance market average, which was 5.8% of total invested assets at end-2019. However, when comparing with the non-life insurance industry's average of 8.1%, the gap becomes closer.

DEVK can afford its high equity proportion due to its very strong capitalisation. This view is supported by DEVK's risky assets ratio, which has been less than 75% (median level for 'A' category) in the past five years, a level that Fitch regards as strong. DEVK's unaffiliated equities ratio decreased to 47% in 2019, which Fitch regards also as strong. Overall, we regard DEVK's ability to withstand equity market shocks as very strong as long as it maintains its high level of capital resources.

However, significant equity market declines would be likely to lead to below-market-average investment returns for DEVK – as proven during the pandemic-related capital market turmoil in early 2020.

DEVK's fixed-income investments were of strong credit quality at end-2019. According to the consolidated annual report, 54.4% were 'AA' rated and better, 27.1% were 'A' rated, 16.3% were 'BBB' rated, and only 2.2% were unrated or non-investment-grade bonds.

Fitch Expectations

- Investment risk is to remain strong.
- Fitch expects the credit quality of fixed-income investments to remain strong, although slightly declining.
- The proportion of equity investments is to decrease slightly at end-2020.

Financial Highlights

(%)	2019	2018
Net combined ratio	95.2	94.9
Operating ratio	86.8	87.3
Operating pre-tax return on equity	9.8	9.6
Life asset growth	3.7	2.1
Non-life premium growth	7.1	5.6

Note: Reported on a consolidated basis
Source: Fitch Ratings; DEVK

Financial Highlights

(%)	2019	2018
Risky assets ratio	69	71
Unaffiliated common stocks ratio	47	53
Below-investment-grade bonds ratio	6	5
Investment return	3.5	2.9

Note: Reported on a consolidated basis
Source: Fitch Ratings; DEVK

Asset Liability and Liquidity Management

Strong Asset/Liability Management; Low Liquidity Risk

We regard DEVK's duration gap in life business as being of the 'A' category. We consider DEVK's risk arising from guaranteed interest rate policies as moderate.

DEVK's modified duration of assets is shorter than that of liabilities for the life segment, as is typical of a German life insurance operation, so it is exposed to reinvestment risk when bond yields fall. DEVK has increased its life asset duration and reduced the duration mismatch significantly since 2013. We regard DEVK's life duration gap to be in the 'A' category (Fitch's duration gap guideline range for the 'A' category is 1.5–2.9 years.).

German life insurers are obliged to make guaranteed investment rate (GIR) payments to policyholders. This can become a negative rating factor if low bond yields persist. However, Fitch considers DEVK as more resilient than many of its competitors in such a scenario. This is because DEVK's non-life operations contribute the majority of the group's earnings and the German funds for future appropriation ("free RfB") would probably be available to help cover GIR payments. Fitch expects that support for DEVK Life would likely be provided, if needed, by DEVK Non-Life.

Fitch considers liquidity risk to be low for DEVK because our key metrics for liquidity score very strong. The company has reported steady growth in recent years and its liquidity needs are covered by premium income. Due to the duration mismatch, additional liquidity from maturing bonds is available within the life segment. The high proportion of equity investments supports DEVK's liquidity position additionally.

Fitch Expectations

- Fitch expects the duration gap to remain below three years.
- Liquidity ratios are to remain very strong.
- Fitch expects the GIR payments to remain under pressure.

Reserve Adequacy

Very Strong Reserve Adequacy

Based on DEVK's Solvency II reporting, DEVK accounted for large claims reserve redundancies, which far exceeded the German non-life market average at end-2019.

DEVK reported strong prior year reserve adjustments (PYRAs), averaging 7.5% between 2015 and 2019 – consistently more than 7% of the prior-year reserve. This means that the PYRA contributed EUR200 million to gross income for each year during the period 2015–2019.

As DEVK reports under German GAAP, its PYRA can be directly compared with the German non-life market average. Based on Fitch's analysis, the German non-life insurance market had an average PYRA of 6.6% for 2015–2019, falling below DEVK's average.

Fitch believes DEVK's high PYRA indicates strong non-life claims reserve adequacy overall, which mitigates risks associated with the high proportion of motor business on DEVK's books.

The claims reserve redundancies support DEVK in withstanding motor competition. While initially higher reserves increase liabilities, the offsetting amount increases the company's investments, and DEVK benefits from higher investment income. Additionally, reserving methods can be adapted to be more flexible, taking into account the existing reserve cushion and the motor market's pricing environment.

Fitch Expectations

- We expect very strong reserve adequacy to be maintained.
- We expect loss reserve development to contribute notably to gross income.
- Claims reserve redundancy is expected to decrease slightly.

Financial Highlights

(%)	2019	2018
Liquid assets to policyholder liabilities (life)	83	84
Liquid assets to loss and loss adjustment expense reserves (non-life)	180	185
Cash and cash equivalents to technical reserves	2.5	2.2

Note: Reported on a consolidated basis
Source: Fitch Ratings; DEVK

Financial Highlights

(%)	2019	2018
Loss reserve development to surplus	-8.9	-9.1
Loss reserve development to net earned premiums	-8.6	-8.8
Net technical reserves to net earned premiums	122	123
Change in the ratio	-1	0
Prior year reserve adjustment to prior year reserve	7.7	7.9

Note: Reported on a consolidated basis
Source: Fitch Ratings; DEVK

Reinsurance, Risk Mitigation and Catastrophe Management

Catastrophe Risks Limited by Adequate Reinsurance Programme

DEVK focuses on individual cover in primary insurance, which limits catastrophe risk. Its reinsurance strategy includes ceding larger risks and purchasing adequate excess cover. Extensive aggregate excess-of-loss cover is bought for the primary and reinsurance operations, which limits DEVK's one-in-250-year probable maximum loss to 15% of its non-life capital. Fitch considers DEVK's catastrophe risk to be low – DEVK falls into the 'AA'-category under Fitch's median value for probable maximum losses.

The credit quality of DEVK's reinsurers is strong. The 20 largest reinsurers' ratings by ceded premiums were all in the 'AA' or 'A' categories.

Fitch Expectations

- Fitch expects catastrophe risk to remain low.
- Credit quality of reinsurers is expected to remain strong.

Appendix A: Peer Analysis

Well-Positioned Within Peers Group

Compared with insurance group peers ALTE LEIPZIGER Lebensversicherung auf Gegenseitigkeit (Alte Leipziger), NÜRNBERGER Beteiligungs-Aktiengesellschaft (Nürnberger), Provinzial Holding AG (Provinzial) and SIGNAL IDUNA Allgemeine Versicherung Aktiengesellschaft's insurance group (Signal Iduna) below, DEVK holds the strongest market position in motor business while it has the weakest in life, in our view. However, DEVK's ability to compensate for the German guaranteed interest rate risk is better than peers', which is reflected in DEVK's asset/liability management and liquidity score being the strongest within its peer group. Its reserve adequacy is also at the high end of peers. Ownership raises Provinzial's Insurer Financial Strength (IFS) rating by one notch.

Peer Comparison

(As at September 2020)	IFS rating	Business profile	Capitalisation	Debt service	Financial performance	Investment and asset risk	ALM and liquidity	Reserve adequacy	Reinsurance and risk mitigation
DEVK	A+	a	aa	a	a+	a+	a	aa	aa-
Alte Leipziger	A+	a+	aa	a	a	aa	bbb	aa-	a+
Nürnberger	A+	a+	aa-	a	a+	bbb+	bbb+	a+	a+
Provinzial	AA-	a+	aa-	a	a	a+	a-	aa-	a
Signal Iduna	A	a+	a	a	a-	a	bbb+	a+	a

Navigator scores as per 30 September 2020

Source: Fitch Ratings

Appendix B: Other Ratings Considerations

Below is a summary of additional ratings considerations that are part of Fitch's ratings criteria.

Group IFS Rating Approach

Fitch views all DEVK-branded entities as "core" to DEVK, as defined in the agency's insurance rating methodology, and has applied its insurance group rating methodology to assign an 'A+' IFS rating to these entities, based on a combined group assessment.

Fitch views Echo Re as "very important" to DEVK as it represents the group's reinsurance operations outside Europe. Echo Re's rating incorporates a three-notch uplift from its standalone profile (for more detail see the separate [rating report on Echo Re](#)).

Notching

For notching purposes, the regulatory environment of Germany is assessed by Fitch as being Effective, and classified as following a Group Solvency 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.

Operating company debt

Not applicable.

Holding company IDR

Standard notching was applied between the implied insurance operating company and holding company IDRs for a group solvency regulatory environment.

Holding company debt

Not applicable.

Hybrids

Not applicable.

IFS – Insurer Financial Strength. IDR – Issuer Default Rating
Source: Fitch Ratings

Short-Term Ratings

Not applicable.

Hybrid – Equity/Debt Treatment

Not applicable.

Corporate Governance and Management

Corporate governance and management are adequate and neutral to the rating.

Transfer and Convertibility Risk (Country Ceiling)

None.

Criteria Variations

None.

Rated DEVK Entities

DEVK Deutsche Eisenbahn Versicherung
Sach- und HUK-Versicherungsverein a.G. Betriebliche
Sozialeinrichtung der Deutschen
Bahn

DEVK Deutsche Eisenbahn Versicherung
Lebensversicherungsverein a.G. Betriebliche
Sozialeinrichtung der Deutschen Bahn

DEVK Rückversicherungs- und Beteiligungs-
Aktiengesellschaft – DEVKRE

DEVK Allgemeine Versicherungs-
Aktiengesellschaft

DEVK Allgemeine Lebensversicherungs-
Aktiengesellschaft

DEVK Rechtsschutz-Versicherungs-
Aktiengesellschaft

DEVK Krankenversicherungs-
Aktiengesellschaft

Echo Rückversicherungs-AG

Insurer Financial Strength Ratings:
DEVK-branded entities: A+
Echo Rückversicherungs-AG: A-

Appendix C: Environmental, Social and Governance Considerations

Credit-Relevant ESG Derivation

DEVK Deutsche Eisenbahn Versicherung has 7 ESG potential rating drivers

- DEVK Deutsche Eisenbahn Versicherung 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.
- DEVK Deutsche Eisenbahn Versicherung 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.
- DEVK Deutsche Eisenbahn Versicherung 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	7	issues	3		
not a rating driver	2	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	2	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

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; Business Profile; Reserve Adequacy	4
Labor Relations & Practices	2	Impact of labor negotiations, including board/employee compensation and composition	Corporate Governance & Management	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	Business 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	Corporate Governance & Management; Business 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	Corporate Governance & Management	4
Group Structure	3	Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership	Corporate Governance & Management; Ownership	3
Financial Transparency	3	Quality and timing of financial reporting and auditing processes	Corporate Governance & Management	2
				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.

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' - 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 our 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.

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: [HTTPS://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS](https://fitchratings.com/understandingcreditratings). IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEB SITE AT WWW.FITCHRATINGS.COM. 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. FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF THIS SERVICE FOR RATINGS FOR WHICH THE LEAD ANALYST IS BASED IN AN EU-REGISTERED ENTITY CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH WEBSITE.

Copyright © 2020 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. 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.