FitchRatings

Insurance
Reinsurance
Europe

Munich Reinsurance Company

And Operating Subsidiaries

Key Rating Drivers

'Very Strong' Capitalisation: Fitch Ratings considers Munich Reinsurance Company (Munich Re)'s capitalisation as 'Very Strong', as measured by Fitch's Prism Factor-Based Capital Model (Prism FBM). This is based both on reported numbers as of end-2019 and pro-forma numbers incorporating Fitch's rating case assumptions in connection with the coronavirus pandemic. Fitch does not expect a material weakening of Munich Re's capital strength in the medium term, assuming a normal level of major losses.

Low Financial Leverage: Munich Re's financial leverage deteriorated to 18% in 2019 from 15% in 2018, but this level is still low in absolute terms and compared with peers. The pro-forma financial leverage ratio is 22%, and remains supportive of Munich Re's ratings.

Very Strong Financial Performance: Munich Re reported a strong set of results for 2019, with a net income return on equity (ROE) of 9.2% (2018: 8.4%) and a combined ratio of 101% (2018: 99%) for the property & casualty (P&C) reinsurance segment. Adjusting for reserve variations and major losses, the underlying combined ratio improved slightly to 99% from 100% in 2018.

Pandemic Losses a Short-Term Negative: The pro-forma ROE dropped to 5% as Munich Re is exposed to the pandemic, particularly through its mortality book and its event-cancellation and business-interruption policies. However, Fitch considers pandemic-related losses to be one-off in nature and expects an improvement in Munich Re's ROE to above 6% over the next 12-18 months, due to rising demand and improved pricing for reinsurance covers.

'Most Favourable' Business Profile: Fitch regards Munich Re as one of a select group of reinsurers that has the scale, diversity and financial strength to attract the highest quality business in the global reinsurance market. We rank Munich Re's business profile as 'most favourable' within the global reinsurance sector and, given this ranking, we score its business profile at 'aa+' under our credit factor scoring guidelines.

Rating Sensitivities

Adverse Change in Rating Assumptions: A material adverse change in Fitch's ratings assumptions with respect to the impact of the coronavirus pandemic could lead to a downgrade.

Weaker Capitalisation: A sustained material drop in the group's risk-adjusted capital position to below 'Very Strong', as measured by Fitch's Prism FBM, could lead to a downgrade.

Lower Profitability: A sustained drop in the group's net income ROE to below 6% could also lead to a downgrade.

Higher Financial Leverage: A sustained increase in the group's financial leverage ratio to above 25% could also lead to a downgrade.

Improved Capital and Earnings: A positive rating action would be prefaced by Fitch's ability to reliably forecast the impact of the coronavirus pandemic on the financial profile of both the reinsurance industry and Munich Re. A sustained improvement in the group's capitalisation to 'Extremely Strong', as measured by Fitch's Prism FBM, as well as a sustained improvement in the group's net income ROE to above 12% could lead to an upgrade.

Ratings

Munich Reinsurance Company

IFS Rating	AA
Long-Term Foreign-Currency IDR	AA-
Subordinated Debt	A
Senior Unsecured Debt (Issued by Munich Re America Corporation)	AA-

Note: See additional ratings on page 9.

Outlooks

IFS Rating	Stable
Long-Term Foreign-Currency IDR	Stable

Financial Data

Munich Reinsurance Company

(EURbn)	2018	2019
Total assets	270.2	287.6
Total equity	26.5	30.6
Gross written premiums	49.1	51.5
Net income	2.3	2.7
Combined ratio reinsurance (%)	99	101

Source: Fitch Ratings; Munich Reinsurance Company

Applicable Criteria

Insurance Rating Criteria (March 2020)

Related Research

Fitch Rtgs Defines Assumptions for Coronavirus Reviews of Insurance Companies (April 2020)

Global Reinsurance Dashboard: 2020 (May 2020)

Major European Reinsurers Resilient to Pandemic Review - 1Q20 Results Are Not Indicative for the Future (May 2020)

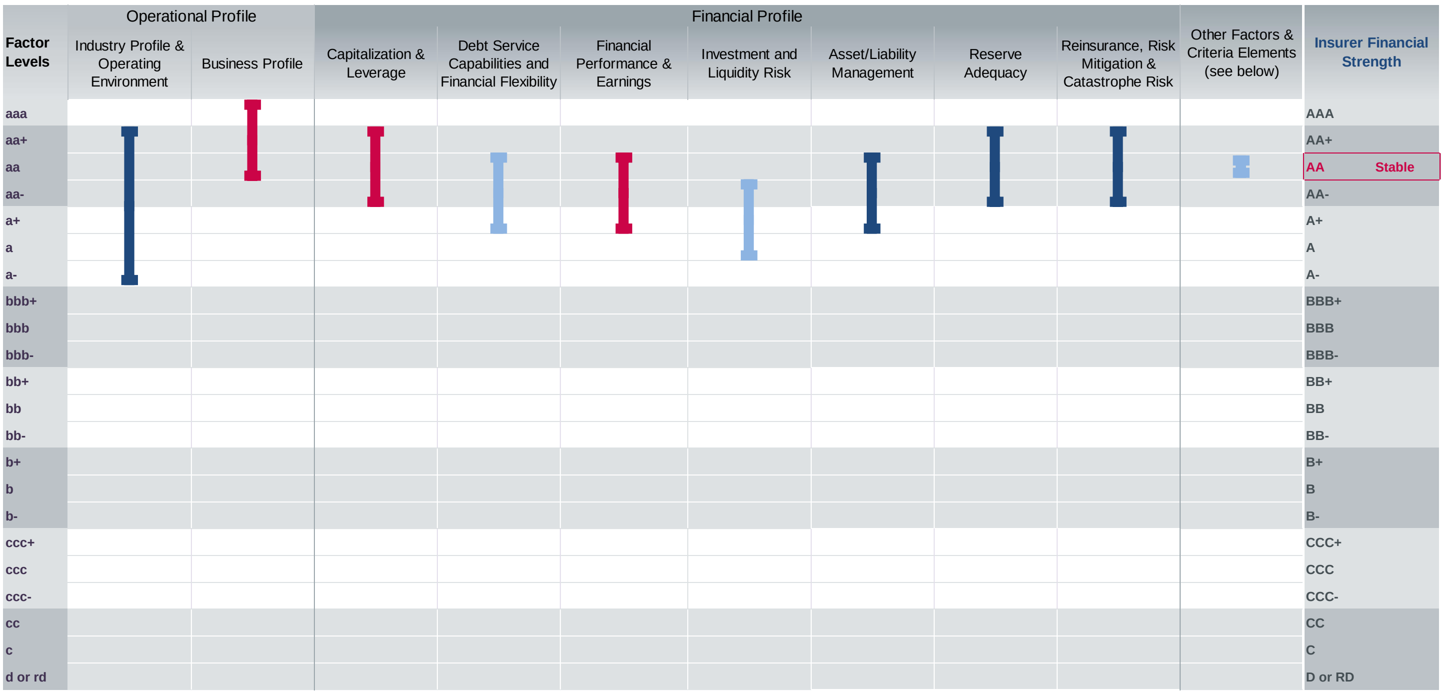
Global Reinsurance Sector Will Not Earn Cost of Capital in 2020 (May 2020)

Analysts

Robert Mazzuoli
+49 69 768076 167
robert.mazzuoli@fitchratings.com

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

Key Credit Factors – Scoring Summary



Other Factors & Criteria Elements				
Provisional Insurer Financial Strength				**AA**
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:	**AA**
IFS Recovery Assumption	**Good**			-1
Issuer Default Rating (IDR)			Final:	**AA-**

Bar Chart Legend

Vertical Bars = Range of Rating Factor
Bar Colors = Relative Importance
Higher Influence
Moderate Influence
Lower Influence
Bar Arrows = Rating Factor Outlook
⇧ Positive ⇩ Negative
⇳ Evolving ▫ Stable

Latest Developments

- Munich Re performed in line with Fitch's expectations in 2019 and did not breach any of the pre-established rating sensitivities.
- Munich Re reported an ROE of 3% in 1Q20 due to EUR800 million of claims related to to event-cancellation policies. Fitch believes pandemic-related claims will negatively affect 2020 results, but considers them to be one-off in nature and expects an improvement in Munich Re's ROE to above 6% over the next 12-18 months due to rising demand and improved pricing for reinsurance covers.

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

'Most Favourable' Business Profile

Fitch ranks Munich Re's business profile as 'most favourable' compared to that of all other reinsurance companies as Munich Re belongs to a small group of global reinsurers with the scale and financial strength to attract the highest quality reinsurance business in the market. Given this ranking, Fitch scores Munich Re's business profile at 'aa+' under its credit factor scoring guidelines.

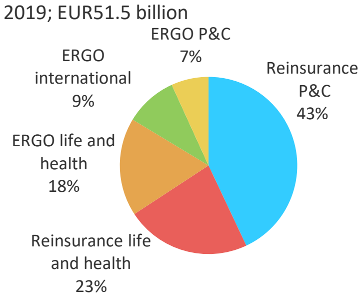
Measured by premium volumes, Munich Re is the world's largest reinsurer, with reinsurance gross written premiums totalling EUR33.8 billion in 2019. The reinsurance segment, of which the P&C business is the largest within the group, is strengthened by a franchise that Fitch assesses as very strong.

Munich Re has the scale to deploy underwriting capacity in larger volumes than smaller peers across multiple classes. This is becoming more important because reinsurance is more commonly being transacted with larger primary insurers that place centralised multi-risk covers through global broker programmes. Being able to lead programmes gives Munich Re a greater ability to influence pricing and terms and conditions. Munich Re typically occupies one of the strongest and most secure positions on reinsurance panels. The group's reinsurance business comes directly from primary insurers or through brokers. It has strong partnerships with leading broker firms and receives business from large clients through captives or alternative risk-transfer initiatives.

Munich Re is very well diversified both by product line and by geography. Through ERGO Group AG, it is active in primary insurance servicing both retail and commercial clients. In addition to its own sales network of 11,500 self-employed sales agents, ERGO has forged partnerships with a variety of brokers and engages in direct and digital business.

Gross Written Premiums

2019; EUR51.5 billion



Source: Fitch Ratings, Munich Re

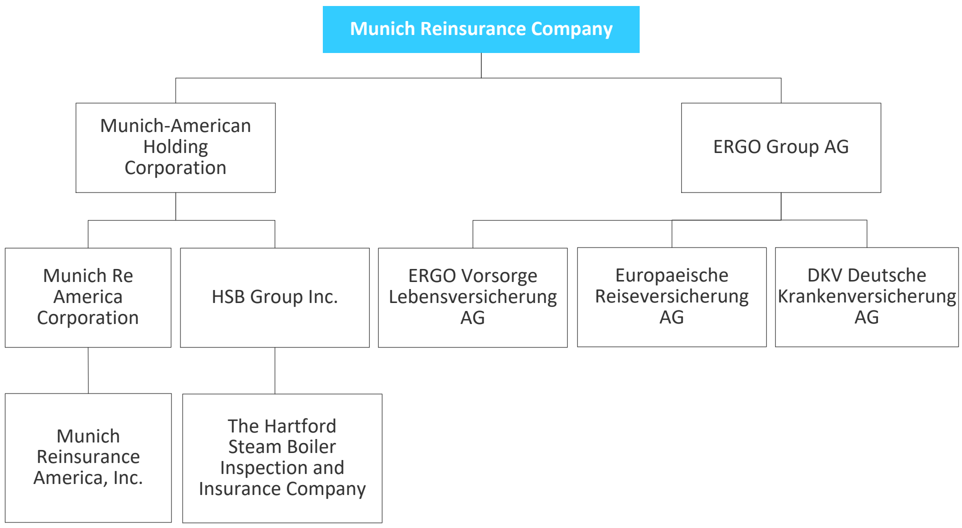
Ownership

Munich Re is a listed group, with the majority of its shares held by institutional investors (79.7% at end-February 2020) and private investors (20.3%).

Shareholders are mainly European, with 40.3% of share capital held in Germany, 13.9% in the UK and 22.1% in the rest of Europe, while 23.4% are held in North America.

Group Structure

(Showing entities rated by Fitch)



Wholly owned subsidiaries
Source: Fitch Ratings, Munich Re annual report

Capitalisation and Leverage

Very Strong Capitalisation and Leverage

Fitch views Munich Re's risk-adjusted capitalisation as very strong and supportive of its rating level. Prism FBM score was 'Very Strong' based both on reported numbers as of end-2019 and pro-forma numbers.

Munich Re's coverage of the solvency capital requirement under Solvency II remained very strong at 237% as of end-2019 (245% as of end-2018) and at 212% at the end of 1Q20, well within the 175%-220% target range. Nevertheless, Munich Re decided to suspend the current share-buyback programme to protect its balance sheet against coronavirus pandemic-related losses and to seize potential business opportunities.

Munich Re's financial leverage is also supportive of the rating category. Financial leverage increased to 18% at end-2019 from 15% at end-2018, but this is still low in absolute terms and compared with peers. The pro-forma financial leverage ratio is 22%, supportive of Munich Re's ratings. The slight increase was due to lower shareholders' capital that was adjusted for unrealised gains on the available-for-sale bond portfolio.

Munich Re's total financing commitments (TFC) ratio improved slightly to 0.4x at end-2019 from 0.5x at end-2018 as a result of a higher shareholders' equity base. Munich Re's end-2019 TFC ratio fell within the 'medium' range when considered in the broader context of the reinsurance sector. Overall, the level of TFC is neutral to Munich Re's ratings.

Fitch Expectations

- Despite the coronavirus pandemic, Fitch does not believe that there will be a material weakening of Munich Re's capital strength over the next 12-24 months, assuming a normal level of catastrophe activity.
- Fitch expects Munich Re's financial leverage ratio and TFC ratio to remain broadly unchanged over the next 12-24 months.

Financial Highlights

(EURm)	2018	2019
Solvency II ratio (%)	245	237
Net leverage (x)[a]	3.2	3.0
Financial leverage ratio (%)	15	18
Net premiums written/equity (x)	1.0	0.9
Total financing and commitments ratio (x)	0.5	0.4

[a] Sum of non-life net written premiums and net technical reserves, divided by total equity
Source: Fitch Ratings; Munich Re

Debt Service Capabilities and Financial Flexibility

Very Strong Coverage and Financial Flexibility

Fitch considers Munich Re's financial flexibility and debt service capabilities to be very strong and supportive of the rating.

Munich Re's five-year average fixed-charge coverage ratio (FCC), excluding realised and unrealised gains and losses, of 10x is very strong and supportive of the rating.

Fitch believes that future capital management actions, in particular share repurchase programmes, are dependent on the level of major loss activity. In 2019, Munich Re repurchased EUR1 billion of shares, but the reinsurer suspended the repurchase programme in 2020. Since 2006, the reinsurer has returned more than EUR20 billion to its shareholders through share buy-backs and dividends.

Munich Re has very stable market access and a long history of funding from diverse sources, including debt and equity markets, as well as through the use of alternative capital-management tools, such as catastrophe bonds and other risk-transfer products.

Fitch Expectations

- Fitch expects Munich Re to have a weaker FCC ratio in 2020 due to pandemic-related losses, but to maintain a very strong FCC thereafter.
- Fitch expects Munich Re to resume its share repurchase programme once the uncertainty related to the pandemic has abated, assuming an average level of natural catastrophe losses.

Financial Highlights

(%)	2018	2019
FCC ratio[a]	16.3	8.3

[a] Excluding realised and unrealised gains and losses.
Source: Fitch Ratings; Munich Re

Debt Maturities

(As of June 2020)	(m)
2026	USD334
2027	USD67
2041	EUR1,000
2042	EUR900
2042	GBP450
2049	EUR1,250

Source: Fitch Ratings; Munich Re

Financial Performance and Earnings

Very Strong Financial Performance

Fitch considers Munich Re's financial performance and earnings to be very strong, with diversified sources of income and supportive of the current rating category, despite the uncertainty related to pandemic losses.

Munich Re reported a strong set of results for 2019, with a net income ROE of 9.2% (2018: 8.4%) and a combined ratio of 101% (2018: 99%) for the P&C reinsurance segment. Adjusting for reserve variations and major losses, the underlying combined ratio improved slightly to 98%-99% from 100% in 2018, reflecting a moderately hardening reinsurance market. The pro-forma ROE dropped to 5%, however, driven by pandemic-related technical losses and financial market volatility.

Munich Re reported a weaker technical result on its life and health reinsurance book in 2019 than in 2018. This was because of a reserve strengthening of the Australian business and a higher claims expenditure on the Canadian portfolio.

Munich Re's primary insurance unit ERGO recorded a profit of EUR440 million in 2019 – an increase from EUR412 million in 2018. The better result was driven by the much-improved technical results of P&C Germany, which reported a combined ratio of 92% (2018: 96%).

Results for 1Q20 were negatively affected by pandemic-related losses. The combined ratio of P&C reinsurance rose to 106% in 1Q20 from 97% in 1Q19, driven by EUR800 million of incurred claims caused in particular by event cancellations. Volatile financial markets reduced the net income of the ERGO Life and Health Germany segment to EUR5 million from EUR63 million in 1Q19. Profits in life and health reinsurance also declined significantly in 1Q20 as a result of higher claims in North America.

Fitch Expectations

- Fitch considers pandemic-related losses to be one-off in nature and expects an improvement in Munich Re's ROE to above 6% during the next 12-24 months due to rising demand and improved pricing for reinsurance covers.

Financial Highlights

(%)	2018	2019
Net income (EURm)	2,309	2,724
Combined ratio (CR) reinsurance	99	101
CR primary insurance Germany	96	92
CR primary insurance intl.	95	94
ROE	8	9

Source: Fitch Ratings; Munich Re

Investment and Asset Risk

Low Investment and Asset Risk

Fitch views Munich Re's investment and asset risk as low, due to its prudent investment strategy and strong liquidity.

Munich Re's investment portfolio consists largely of highly rated fixed-interest instruments and loans, which made up 80% of total investments as of end-2019. Munich Re's exposure to equity investments slightly increased to 7.1% of total investments, in part due to revaluation effects, from 6.2% at end-2018 before hedging, and to 6.4% from 5.2% at end-2018 after hedging. Unaffiliated equities totalled a low 45% of shareholders' funds (end-2018: 40%).

Munich Re is taking on slightly more risk on its fixed-income portfolio but its overall credit quality remains strong. At end-2019, 67% of fixed-income securities were rated 'AA' or 'AAA' (end-2018: 68%), and 53% of the fixed-income portfolio is invested in government or semi-government bonds of high credit quality.

Munich Re is exposed to credit risk in its corporate bond (13% of the fixed-income portfolio) and covered bond (21%) portfolios. Of the overall fixed-income portfolio, 8% was not rated or rated below investment-grade at end-2019.

Fitch Expectations

- Fitch expects Munich Re to retain its conservative strategy on investment risk.

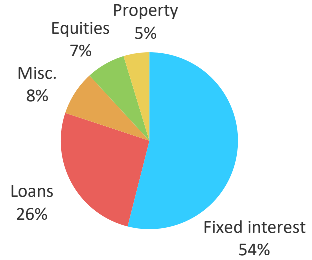
Financial Highlights

(%)	2018	2019
Risky assets to equity	74	75
Non-investment-grade bonds to equity	24	21
Unaffiliated shares to equity	40	45
Investment in affiliates to equity	10	9

Source: Fitch Ratings; Munich Re

Investment Portfolio

2019; EUR247 billion



Source: Fitch Ratings, Munich Re

Asset Liability and Liquidity Management

Very Strong Asset Liability and Liquidity Management

Fitch views Munich Re's asset and liability management risk as low, due to its very strong liquidity and sophisticated asset and liability matching.

Fitch regards liquidity in Munich Re's investment portfolio as very strong. Of the group's EUR247 billion portfolio, EUR133 billion (54%) is composed of highly liquid fixed-income securities. At end-2019, Munich Re held 5% of its investments in real estate and 26% in loans, which are fairly illiquid. However, Munich Re has sufficient investment-grade bonds and cash to cover its technical reserves despite the large loan portfolio. The Fitch-calculated liquid-assets-to-policyholder-liabilities ratio was 68% in 2019 (2018: 66%).

Fitch views Munich Re's efforts to keep the duration gap of life assets and liabilities low at group level as being positive for the rating, reducing Munich Re's exposure to interest rate risk. At end-2019, the duration of life assets and liabilities at group level had been fairly closely matched, with an asset duration of 8.4 years and liabilities of 9.0 years. The company runs a largely neutral economic currency position. Under IFRS, however, a stronger US dollar and weaker euro tend to benefit shareholders' equity and can also benefit the profit and loss account.

ERGO has derivatives in place to protect the life operations against reinvestment risk in a sustained low interest-rate environment. As interest rates fall, the value of these receiver swaptions rises and offsets the increased economic value of the liabilities caused by interest-rate falls, providing additional protection against further declines in interest rates. The duration gap of ERGO was 0.7 years as of end-2019, a low level compared to primary insurance peers in Germany.

Financial Highlights

(%)	2018	2019
Liquid assets to policyholder liabilities	66	68
Duration gap (years)	0.7	0.6

Source: Fitch Ratings; Munich Re

Fitch Expectations

- Fitch expects no major changes in Munich Re's asset liability and liquidity management over the next 12-24 months

Reserve Adequacy

Very Strong Reserve Adequacy

Fitch considers Munich Re's non-life reserving to be very prudent and supportive of the rating category. Munich Re's reserving approach, which has been undertaken consistently and has led to a positive reserve experience for the last 10 years, is credit-positive in Fitch's analysis.

Fitch views Munich Re's reserve adequacy as positive, indicating that reserves are towards the higher end of the best-estimate range. In 2019, Munich Re released reserves equal to 5.6% of net earned premiums in P&C reinsurance despite rising social inflation in US casualty.

Fitch regards asbestos and environmental liabilities as an important area of uncertainty in relation to reserves and believes that this source of risk could limit future earnings. Munich Re's combined asbestos and environmental three-year survival ratio at end-2019 improved to 17.8x from 16.3x at end-2018, which is still towards the lower end of the range for the industry. The survival ratio is the number of years that current reserves will suffice if average future payments equal average current payments.

Financial Highlights

(%)	2018	2019
Loss reserves/current-year incurrred losses	3	3
Change in loss reserves/earned premium ratio	-4	2
One-year development/prior-year equity	-7	-6
One-year development/prior-year loss reserves	-4	-6

Source: Fitch Ratings; Munich Re

Fitch Expectations

- Fitch expects Munich Re to maintain its prudent reserving standards, which should continue the trend of positive prior-year development

Reinsurance, Risk Mitigation and Catastrophe Management

Material but Manageable Exposure to Catastrophe Risk

Fitch views Munich Re's reinsurance, risk management and catastrophe risk exposure management as strong and supportive of the current rating category.

Munich Re uses limited retrocession coverage or other forms of risk mitigation compared to peers, which means that net losses remain closer to gross losses and have a bigger impact on earnings than for some peers.

For its peak exposures, some of Munich Re's losses are covered by retrocession and catastrophe bonds, resulting in net exposure of EUR6.3 billion (2018: EUR5 billion) for a return period of 200 years for an Atlantic hurricane and EUR5.9 billion (2018: EUR4.9 billion) for a North American earthquake.

The increase in net exposures in 2019 was driven mainly by strong growth in catastrophe-exposed lines of business due to the improving pricing environment.

Munich Re is active in supplementing its retrocession programme through the use of alternative capital-market instruments, which help diversify the group's risk management programme.

Overall, Munich Re's tail risk is manageable due to its highly geographically diversified catastrophe portfolio and strong capital position. Fitch regards the current retrocessional programme as effective. The security of the retrocessionaires remains strong.

Munich Re's risk-management function is advanced and has proved effective in monitoring and mitigating investment risk in response to varying economic conditions. Risk management has a central role within the organisation, and Fitch expects progress in enterprise risk management to aid in the identification, quantification and control of risks.

Fitch Expectations

- Fitch expects Munich Re's prudent risk management and conservative reinsurance purchasing to continue over the next 12-24 months.

Financial Highlights

(x)	2018	2019
Net written premiums/gross written premiums	96	94

Source: Fitch Ratings; Munich Re

Appendix 1: Peer Analysis

Very Well-Diversified Business Profile

Munich Re has sizeable primary operations, which accounted for over a third of its net written premiums in 2019. This reduces the usefulness of some comparative ratios that Fitch uses to assess the reinsurer against its closest peers due to the difference in business mix.

Munich Re's average reinsurance combined ratio between 2015 and 2019 was 100%, which is in line with its natural peer group. Munich Re's regulatory solvency and financial leverage ratios are similar to those of multinational primary insurance groups and of other large European reinsurers.

Peer Comparison

(USDm, As of 2019)	IFS Rating[a]	Net written premiums	Shareholders' equity	Combined ratio reinsurance (%)	ROE (%)	Financial leverage ratio (%)
Munich Re	AA/Stable	54,367	34,245	101	10	18
Berkshire Hathaway Inc.	AA+/Stable	62,811	428,563	100	21	8
Lloyd's of London	AA-/Rating Watch Negative	32,732	39,394	103	9	0
Swiss Re	A+/Stable	39,649	31,037	108	3	23
Hannover Rueck SE	AA-/Stable	22,787	12,717	99	13	23
SCOR SE	AA-/Stable	13,526	7,127	97	7	22
Partner Reinsurance Company Ltd.	A+/Negative	6,909	7,270	100	14	20

Combined ratio: Net losses and loss-adjustment expenses divided by net premiums earned plus underwriting expenses divided by net premiums earned
Shareholders' equity is organisation-wide equity and therefore depends on the company's reporting practices; it may include equity that supports operations other than P&C reinsurance operations
Financial statement figures for some European reinsurers have been translated into US dollars using year-end or 12-month average rates of exchange, as appropriate. This has led to some exchange-rate distortion between financial years
[a] Denotes operating company IFS rating
IFS – Insurer Financial Strength rating
Source: Fitch Ratings, company annual reports, financial supplements, and SEC filings

Appendix 2: Other Ratings Considerations

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

Group IFS Rating Approach

The entities listed in the margin are considered 'Core' entities under Fitch's group rating methodology. The operating entities share the same Insurer Financial Strength (IFS) ratings based on Fitch's evaluation of the strength of the group as a whole.

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 operating company Issuer Default Rating (IDR).
Operating company debt
Outstanding senior unsecured debt issued by Munich Reinsurance America Corporation (MRAC) has been rated using a baseline recovery assumption of 'Average'. Based on standard notching, the rating is therefore aligned with the IDR of MRAC.
Hybrids
For all outstanding subordinated note issues, a baseline recovery assumption of 'Below Average' and a non-performance risk assessment of 'Moderate' was used. Notching of minus 2 was applied relative to the IDR, which was based on minus 1 for recovery and minus 1 for non-performance risk.

Source: Fitch Ratings

Core Rated Insurance Entities

Munich Reinsurance Company IFS: AA
Munich Re America Corporation Long-Term IDR: AA-
Munich Reinsurance America, Inc. IFS: AA
Hartford Steam Boiler Inspection and Insurance Company IFS: AA
ERGO Group AG Long-Term IDR: AA-
DKV Deutsche Krankenversicherung AG IFS: AA
ERGO Vorsorge Lebensversicherung AG IFS: AA
Europaeische Reiseversicherung AG IFS: AA

Source: Fitch Ratings

Short-Term Ratings

Not applicable.

Hybrid – Equity/Debt Treatment

Fitch regards the subordinated debt in the table below as 100% capital within its capital adequacy ratio and as 100% debt within its financial leverage ratio calculation.

Hybrids Treatment

Hybrid	Amount	CAR Fitch (%)	CAR reg. override (%)	FLR debt (%)
Munich Reinsurance Company				
XS0608392550, call 2021, 2041	EUR1,000m	0	100	100
XS0764278528, call 2022, 2042	EUR900m	0	100	100
XS0764278288, call 2022, 2042	GBP450m	0	100	100
XS1843448314, call 2029, 2049	EUR1,250m	0	100	100

CAR – Capitalisation ratio: FLR – Financial leverage ratio. N.A. – Not applicable.
For CAR, % shows portion of hybrid value included as available capital, both before (Fitch %) and the regulatory override.
For FLR, % shows portion of hybrid value included as debt in numerator of leverage ratio
Source: Fitch Ratings

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.

Appendix 3: Environmental, Social and Governance Considerations

FitchRatings **Munich Reinsurance Company**

Insurance Ratings Navigator
Global Re (Composite)

Credit-Relevant ESG Derivation

Munich Reinsurance Company has 8 ESG potential rating drivers

- Munich Reinsurance Company has exposure to underwriting/reserving exposed to asbestos/hazardous materials risks but this has very low impact on the rating.
- Munich Reinsurance Company 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.
- Munich Reinsurance Company 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.
- Munich Reinsurance Company 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

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 Priniciples 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

The highest level of ESG credit relevance, if present, is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity(ies), either due to their nature or to the way in which they are being managed by the entity(ies). 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.