

Munich Reinsurance Company and Operating Subsidiaries

Key Rating Drivers

Most Favourable Company Profile: Fitch Ratings views Munich Reinsurance Company 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. Given Munich Re's 'Most Favourable' company profile within the global reinsurance sector, we score its company profile at 'aa+' under our credit factor scoring guidelines.

Very Strong Capitalisation: Munich Re's 'Very Strong' capitalisation is measured by Fitch's Prism Factor-Based Capital Model (Prism FBM), which scored 'Very Strong' based on reported numbers at end-2022. Fitch added back 50% of unrealised losses on bonds to available capital, reflecting its view that a large portion of those losses will be captured in shareholders' equity over time due to bonds approaching their par value as maturity nears.

The company's Solvency II (S2) ratio was 254% at end-1Q23 (end-2022: 260%), after deducting the full 2023 share buyback programme of EUR1 billion. Fitch expects Munich Re to maintain its capital strength in the medium term, assuming a normal level of losses.

Low Financial Leverage: Munich Re's financial leverage ratio (FLR) improved to 16% in 2022 from 17% in 2021 on retained earnings. This level is low in absolute terms and compared with peers and is supportive of the ratings. We expect the FLR to be largely unchanged at end-2023 as we do not expect new debt issues. In 2022, the repayment of two subordinated notes in May 2022 of GBP450 million and EUR900 million was offset by a green subordinated bond issue of USD1.25 billion in May 2022.

Strong Earnings: Fitch assesses Munich Re's earnings as 'Strong' and expects the company to maintain similar profitability in 2023. It benefits from very good premium rates in property and casualty (P&C) reinsurance and a rise in market interest rates. This should offset increasing inflationary pressures on claims and lower asset values.

Munich Re reported resilient results for 1Q23 with a combined ratio of 86.5% in P&C reinsurance (1Q22: 77.0%) and an annualised return on equity (ROE) of 17.3% (23.6%). P&C reinsurance results remained very strong despite a higher natural catastrophe burden due to the earthquake in Turkiye. Life and health reinsurance reported a 34% increase in the total technical result to EUR320 million thanks to a strong performance of financially motivated reinsurance.

Very Important Subsidiary: Europaeiske Rejseforsikring A/S's Insurer Financial Strength (IFS) rating of 'A+' / Stable reflects its ultimate 100% ownership by Munich Re and is classified as 'Very Important' to Munich Re under Fitch's insurance group rating methodology. The company has been part of Munich Re for decades and its rating benefits from a three-notch uplift from its standalone credit quality. The latter reflects its 'Very Strong' capitalisation, but is constrained by its small size.

Ratings

Munich Reinsurance Company

Insurer Financial Strength	AA
Long-Term IDR	AA-

Outlooks

Insurer Financial Strength	Stable
Long-Term IDR	Stable

Debt Ratings

Subordinated Long-Term Rating	A
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Please see page 10 for further ratings.

Financial Data

Munich Reinsurance Company

(EURm)	31 Dec 22	31 Dec 21
Total assets	298,570	312,405
Total equity and reserves	21,202	30,945
Total gross written premiums	67,134	59,567
Net income	3,432	2,933
Solvency II (%)	260	227

Note: Reported under IFRS.
 Source: Fitch Ratings, Munich Reinsurance Company

Applicable Criteria

[Insurance Rating Criteria \(July 2023\)](#)

Related Research

[European Reinsurance Dashboard: 1Q23 Results \(May 2023\)](#)

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Rating Sensitivities

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

A sustained improvement in the group's Prism FBM score to 'Extremely Strong' and in the group's net income ROE to above 12%.

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

A sustained material decline in the group's Prism FBM score to below 'Very Strong'.

A sustained decline in the group's net income ROE to below 7%.

Sustained deterioration in the group's FLR to above 25%.

Latest Developments

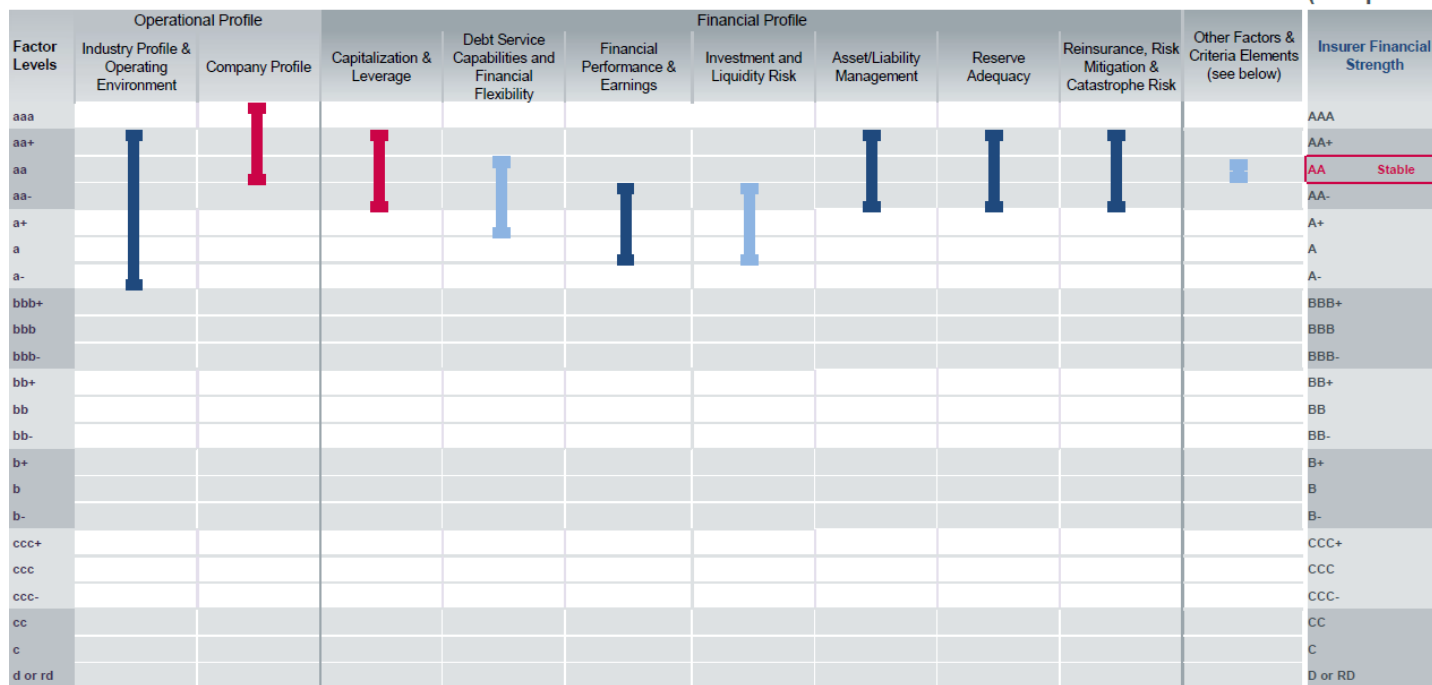
Munich Re's primary insurance group ERGO continued to support group results in 1Q23. Life and Health Germany reported a 6% increase in the total technical result to EUR258 million on the back of a higher contractual service margin release than a year ago. Property-Casualty Germany showed a much-improved combined ratio of 81.2% (1Q22: 106.3%) thanks to lower large losses. The discount effect reduced the combined ratio by about 4pp. ERGO International reported a deterioration in the combined ratio to 95.4% (1Q22: 88.7%) due to elevated large losses in Poland and elevated claims in legal protection.

Key Rating Drivers – Scoring Summary

Munich Reinsurance Company



Insurance Ratings Navigator
Global Re (Composite)



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

Bar Chart Legend:	
Vertical Bars = Range of Factor	
Bar Colors = Relative Importance	
	Higher Influence
	Moderate Influence
	Lower Influence
Bar Arrows = Factor Outlook	
	Positive
	Negative
	Evolving
	Stable

Company Profile

Very Strong Company Profile

Fitch ranks Munich Re’s company profile as ‘Most Favourable’ compared to that of all other reinsurance companies due to its ‘Most Favourable’ competitive position, ‘Most Favourable’ diversification, ‘Favourable’ business risk profile and ‘Moderate/Favourable’ corporate governance. Given this ranking, Fitch scores Munich Re’s company profile at ‘aa+’ (‘Very Strong’) under its credit factor scoring guidelines.

Munich Re belongs to a small group of global reinsurers with the scale and financial strength to attract the highest-quality reinsurance business. It is the world’s largest reinsurer by premium volumes, with reinsurance gross written premiums totalling EUR48 billion in 2022. 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’.

It has the scale to use underwriting capacity in larger volumes than smaller peers across multiple classes. This is becoming more important because reinsurance is more often transacted with larger primary insurers placing centralised multi-risk covers through broker programmes. Leading these gives it more chance to influence pricing and terms and conditions. Munich Re 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 brokerages and receives business through captives or alternative risk-transfer initiatives.

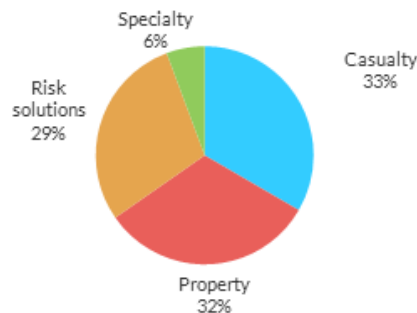
Munich Re is very well diversified both by product line and by geography. Through ERGO, it is active in primary insurance servicing both retail and commercial clients in Germany, where it holds a number four position, and more than 20 other countries. In addition to a sales network of 13,000 self-employed sales agents, ERGO has forged partnerships with a variety of brokers and engages in direct and digital business.

Company Profile Scoring

Business profile assessment	Most Favourable
Business profile sub-factor score	aa+
Corporate governance assessment	Moderate/Favourable
Corporate governance impact (notches)	0
Company profile factor score	aa+

Source: Fitch Ratings

Premium Split - Property and Casualty Re 2022



Source: Fitch Ratings, Munich Re

Premium Split - Munich Re Group 2022



Source: Fitch Ratings, Munich Re

Ownership

Neutral Ownership

Munich Re is a listed group with its shares held by institutional investors (76% at end-2022) and private investors (24%). Its shareholders are mainly European, with 45.7% of share capital held in Germany, 14.5% in the UK and 20.6% in the rest of Europe, with 18.2% held in North America.

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 on 2022 financials. Fitch added back 50% of unrealised losses on bonds to available capital, reflecting the agency's view that a large portion of those losses will be captured in shareholders' equity over time.

Munich Re's coverage of the solvency capital requirements under S2 remained very strong at 254% as of end-March 2023 (260% at end-2022, 227% at end-2021) after deducting the 2023 share buyback programme of EUR1 billion. This is well above the company's 175%-220% target range. Munich Re lifted the dividend per share to EUR11.6 (2022: EUR11.0).

Munich Re's FLR is also supportive of the rating category. The FLR improved to 16% at end-2022 from 18% at end-2021 thanks to retained earnings. This is low both in absolute terms and compared with peers. In 2022, the repayment of two subordinated notes in May 2022 of GBP450 million and EUR900 million, respectively, was offset by a green subordinated bond issue of USD1.25 billion in May 2022.

Munich Re's total financing commitments (TFC) ratio rose to 0.9x at end-2022 (end-2021: 0.5x) because of a lower shareholders' capital on the back of high unrealised losses on bonds reported under IFRS 4. It 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.

Financial Highlights

(x)	31 Dec 22	31 Dec 21
TFC/total equity	0.6	0.6
Net leverage	8	5.4
Gross leverage	8.3	5.6
Asset leverage	18.2	11.5
Net financial leverage (goodwill supported) (%)	16.1	17
Regulatory capital ratio (%)	260	227

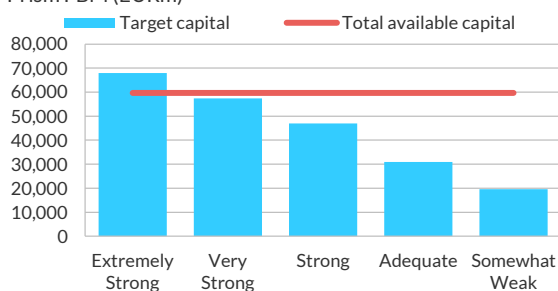
Source: Fitch Ratings, Munich Re

Fitch's Expectations

- Munich Re to maintain its capital strength over the next 12 to 24 months thanks to prudent risk management and assuming a normal level of catastrophe activity.
- Munich Re's FLR to remain largely unchanged at end-2023 as the company is unlikely to issue new debt in 2023.

Capitalisation Adequacy

Prism FBM (EURm)



Source: Fitch Ratings

Financial Highlights

	2022	2021
Prism score	Very Strong	Very strong
Prism total AC (EURm)	59,694	59,737
Prism AC/TC at Prism score (%)	104	108
Prism AC/TC at higher Prism score (%)	88	91

AC - Available capital. TC - Target capital
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 category.

We expect capital management actions, in particular share repurchase programmes, to be dependent on the level of major loss activity as well as business opportunities. Munich Re initiated another EUR1 billion share-buyback programme in 2023 and lifted the dividend per share to EUR11.6 (2022: EUR11.0), which supports our assessment of financial flexibility.

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.

Munich Re's five-year average fixed-charge coverage ratio, including realised and unrealised gains and losses, of 17x is very strong.

Financial Highlights

(x)	31 Dec 22	31 Dec 21
Fixed-charge coverage ratio (including gains and losses)	19.8	16.9
Fixed-charge coverage ratio (excluding gains and losses)	24.4	7.5

Source: Fitch Ratings, Munich Re

Financial Performance and Earnings

Strong Financial Performance

Fitch considers Munich Re's financial performance and earnings to be strong, with diversified sources of income and supportive of the current rating category, despite a high-inflation environment and the tightening of monetary policy.

Munich Re reported better results for 2022 than the previous year. The reported combined ratio in P&C reinsurance amounted to 96% (2021: 100%) and the Fitch-calculated ROE reached 13.2% (2021: 9.7%). P&C Re benefited from lower major losses, better pricing and higher business volumes. The net result of life and health reinsurance recovered to EUR737 million (2021: EUR325 million) thanks to lower Covid-19 claims of EUR344 million (2021: EUR785 million), a better investment income and a favourable claims experience beyond Covid-19.

Munich Re's primary insurance unit ERGO recorded an increase in net income to EUR826 million in 2022 (2021: EUR605 million), thanks a better operating result as well as a one-off of about EUR200 million in Life & Health Germany. Property-Casualty (P-C) Germany reported a better combined ratio of 90.6% (2021: 92.4%) thanks to a robust operating performance and a significant increase in premium income. ERGO International reported a worse combined ratio of 94.3% in 2022 (2021: 92.9%) due to margin pressure in Poland and the Dutch legal protection business.

For 1Q23, under the new accounting standard IFRS 17, Munich Re reported a net profit of EUR1,271 million equalling an annualised reported ROE of 17.3%. P&C Re reported a combined ratio of 86.5%, which contained 16.4pp for major losses. Munich Re booked nominal claims of EUR600 million for the earthquake in Turkiye and Syria. ERGO's net income was EUR219 million. P-C Germany's technical result was much improved on lower major losses, while ERGO International suffered from elevated claims in Poland and legal protection.

Financial Highlights

(%)	31 Dec 22	31 Dec 21
Net income return on equity (Fitch-calculated)	13.2	9.7
Pre-tax operating profit return on equity	16.9	6.9
Combined ratio reinsurance	96	100
Combined ratio (ERGO Germany)	91	92
Combined ratio (ERGO International)	94	93
Operating ratio	94	97

Source: Fitch Ratings

Fitch's Expectations

- The company to maintain a similar profitability level in 2023 compared to 2022. Munich Re benefits from very good price levels in property and casualty reinsurance (P&C Re) and a pick-up in market interest rates. This should offset increasing inflationary pressures on claims and lower asset values.

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 75% of total investments as of end-2022. Its allocation to equity investments remained almost unchanged at 8.5% of total investments at end-2022. Unaffiliated equities totalled a low 43% of shareholders' funds (end-2021: 47%).

The company's exposure to credit risk remained largely unchanged in 2022 and its overall credit quality was strong. At end-2022, 64% of fixed-income securities were rated 'AA' or 'AAA' (end-2021: 65%), 12% 'A' (2021: 13%) and 13% 'BBB' (2021: 13%). 52% of the fixed-income portfolio was invested in government or semi-government bonds of high credit quality (2021: 55%).

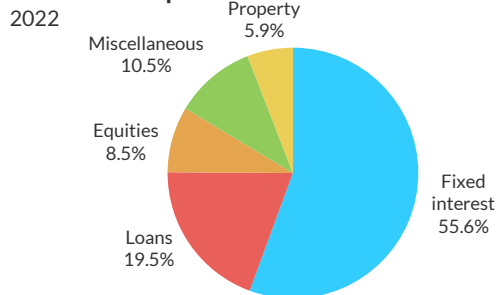
Munich Re is predominantly exposed to credit risk in its corporate bond (15% of the fixed-income portfolio) portfolio. Of the overall fixed-income portfolio, 12% was not rated or rated below investment grade at end-2022 (end-2021: 10%).

Financial Highlights

(%)	31 Dec 22	31 Dec 21
Risky assets/capital (total)	97	83
Unaffiliated shares/capital (total)	43	47
Non-investment-grade bonds/capital (total)	29	26
Investments in affiliates/capital (total)	25	11

Source: Fitch Ratings, Munich Re

Investment Split



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.

We regard liquidity in Munich Re's investment portfolio as very strong. At end-2022, of the group's EUR223 billion portfolio, EUR124 billion (55.6%) was highly liquid fixed-income securities. In addition, out of the EUR49 billion of financial assets classified as loans, EUR40 billion were either government and semi-government securities or covered bonds, all of which Fitch considers liquid.

ERGO has derivatives in place to protect the life operations against interest rate risk. Interest rate swaptions are the main instruments employed. The positive duration gap of ERGO increased to 0.7 years at end-2022 (end-2021: 0.3 years), as rising interest rates decreased the duration of its insurance liabilities more strongly than the one of its fixed-income assets.

Financial Highlights

	31 Dec 22	31 Dec 21
Total liquid assets/non-life loss reserves (%)	247	305
Duration gap group (years)	0.4	0.4

Source: Fitch Ratings, Munich Re

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 more than the past 10 years, is credit positive in Fitch's analysis.

We view Munich Re's reserve adequacy as very strong, indicating that reserves have consistently been significantly above the S2 best-estimate. In 2022, Munich Re released reserves equal to 4.0% (2021: 4.0%) of net earned premiums in P&C reinsurance. At the same time, the reinsurers increased reserving levels in answer to rising levels of inflation. A special inflation scenario reserve was created and the company published an indication for EUR1.3 billion of additional inflation impact for underwriting year 2022 and prior years.

Fitch believes that Munich Re can live up to this challenge due to its strong track record in setting reserves prudently, and expects any extra-reserving requirements to not affect earnings negatively in 2023.

Financial Highlights

(%)	31 Dec 22	31 Dec 21
Reserve development/prior-year capital	-8.2	-4.6
Reserve development/prior-year loss reserve	-4	-2.5
Net technical reserves/net written premiums	213	228
Net loss reserves/incurred losses (x)	2.6	2.7

Source: Fitch Ratings, Munich Re

Reinsurance, Risk Mitigation and Catastrophe Risk

Material, but Manageable Exposure to Catastrophe Risk

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

For risk mitigation purposes, Munich Re uses limited retrocession coverage or alternative-capital instruments compared to peers, which means that net losses remain closer to gross losses and have a bigger impact on earnings than for some peers. Nevertheless, Munich Re's tail risk is unlikely to substantially weaken capital due to its highly geographically diversified catastrophe portfolio and strong capital position.

In 2022, Munich Re increased its peak cover exposures to natural catastrophe events, such as Atlantic hurricanes (EUR10 billion net of retro compared to EUR8 billion in 2021 for a return period of 200 years), as the company deemed pricing to be attractive.

Financial Highlights

(%)	31 Dec 22	31 Dec 21
Reinsurance recoverables/ capital	24.3	16.4
Net written premiums/gross written premiums	95.7	95.4
Reinsurers' share of earned premiums	4.3	4.6

Source: Fitch Ratings, Munich Re

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 summarises 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

The entities listed in the table below are considered 'Core' entities under Fitch's group rating methodology. The operating entities share the same IFS ratings based on Fitch's evaluation of the strength of the group as a whole. The US-based entities listed below unite most of the primary and reinsurance business in the US, which is the most important market for Munich Re outside Germany. ERGO Group AG and its key subsidiaries represent a third of the group's premium volume, provide strong diversification benefits, and have been an integral part of the group's strategy for decades.

Europaeiske Rejseforsikring A/S's IFS rating of 'A+' reflects its ultimate 100% ownership by Munich Re and is classified as 'Very Important' to Munich Re under Fitch's insurance group rating methodology. The company has been part of Munich Re for decades and its rating benefits from a three-notch uplift from its standalone credit quality. The latter reflects its 'Very Strong' capitalisation, but is constrained by the small size of the company.

Core entities	Type	Rating	Outlook
Munich Re America Corporation	Long-Term IDR	AA-	Stable
Munich Reinsurance America, Inc.	IFS	AA	Stable
Hartford Steam Boiler Inspection and Insurance Company	IFS	AA	Stable
ERGO Group AG	Long-Term IDR	AA-	Stable
DKV Deutsche Krankenversicherung AG	IFS	AA	Stable
ERGO Vorsorge Lebensversicherung AG	IFS	AA	Stable
ERGO Reiseversicherung AG	IFS	AA	Stable

Source: Fitch Ratings, Munich Re

Notching

For notching purposes, Fitch assesses the regulatory environment of Germany 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'. The rating is therefore aligned with the IDR of MRAC

Holding company IDR

Not applicable.

Holding company debt

Not applicable.

Hybrids

For all outstanding subordinated note issues, a baseline recovery assumption of 'Below Average' and a non-performance risk assessment of 'Moderate' were used. Notching of -2 was applied relative to the IDR, which was based on -1 for recovery and -1 for non-performance risk.

IFS – Insurer Financial Strength. IDR – Issuer Default Rating

Source: Fitch Ratings

Debt Maturities

As of end-May 2023	(m)
2026	USD334
2027	USD67
2041	EUR1,250
2042	EUR1,000
2042	USD1,250
2049	EUR1,250

Source: Fitch Ratings; Munich Re

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 Re				
XS1843448314, call 2029, 2049	EUR1,250m	0	100	100
XS2221845683, call 2031, 2041	EUR1,250m	0	100	100
XS2381261424, call 2032, 2042	EUR1,000m	0	100	100
US62582PAA84, call 2031, 2042	USD1,250m	0	100	100

CAR – Capitalisation ratio; FLR – Financial leverage ratio.

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

Recovery Analysis and Recovery Ratings

Not applicable.

Transfer and Convertibility Risk (Country Ceiling)

None.

Criteria Variations

None.

Appendix D: Environmental, Social and Governance Considerations

Credit-Relevant ESG Derivation

Credit-Relevant ESG Derivation			Overall ESG Scale	
Munich Reinsurance Company has 8 ESG potential rating drivers	key driver	0	issues	5
<ul style="list-style-type: none"> 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. 	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/takeholder 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 "low" 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, either due to their nature or to the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit <http://www.fitchratings.com/essg>.

SOLICITATION & PARTICIPATION STATUS

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

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