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Ratings

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Munich Reinsurance Co.

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Munich Reinsurance Co.

SACP* Assessments				SACP*		Support		Ratings
Anchor	aa-	Modifiers	0	aa-		0		Financial Strength Rating
Business Risk		ERM and Management	0	Liquidity	0	Group Support	0	AA-/Stable/--
Very Strong								
Financial Risk		Holistic Analysis	0	Sovereign Risk	0	Gov't Support	0	
Strong								

*Stand-alone credit profile.
See Ratings Detail for a complete list of rated entities and ratings covered by this report.

Major Rating Factors

Strengths	Weaknesses
• Extremely strong franchise with a global leading position in property/casualty (P&C) and life reinsurance business. • Superior regional and product diversification, including sizeable primary insurance operations under the ERGO brand. • Robust capital adequacy under regulatory requirements, and based on S&P Global Ratings' capital model, above the 'AA' level, backed by effective enterprise risk management (ERM) and very strong reserve adequacy.	• Exposure to tail risk such as natural catastrophes, with the potential for earnings volatility, as experienced in 2017. • Weaker competitive position and earnings contribution of the primary operation (ERGO insurance group), although both are improving.

Rationale

Our ratings on Germany-based Munich Reinsurance Co. and its core operating companies (collectively, Munich Re) reflect the group's extremely strong franchise, coupled with robust and conservative financial capabilities. Munich Re is a global reinsurance group offering life and P&C reinsurance in which it has a global market leading position with extremely diverse regional and business line diversification and lead account capabilities. Besides its market-leading position in reinsurance, it owns a sizable primary insurance operation, ERGO, with operations in Germany, Europe, and Asia across P&C, life, and health business.

The ratings also reflects the group's robust capital adequacy both under its internal model and Solvency II, as well as under our capital model. However, we also consider that the global reinsurance sector is inherently more volatile than many other insurance sectors.

Munich Re has built a strong capital buffer to safeguard its business against adverse market developments, such as outsized catastrophe losses, as in 2017, by diversifying the portfolio across various business lines and regions. The group manages volatility through stringent risk limits management, group reinsurance optimization, and robust ERM strategy.

Outlook: Stable

The stable outlook reflects our view that the group will defend its extremely strong competitive position by:

- Leveraging moderate price increases in global P&C reinsurance business in 2018;
- Optimizing growth opportunities in structured reinsurance;
- Capturing increasing earnings potential from the primary insurance operations; and
- Maintaining capital adequacy securely in the 'AA' range in 2018-2020.

Downside scenario

We regard the possibility of a downgrade as remote over the next two years. However, we might consider a negative action if Munich Re's capital adequacy fell below the 'AA' level in our capital model over a prolonged period. This could occur, for example, as a result of materially higher investment charges, combined with unexpectedly large natural catastrophes or other large claims events, and prolonged weakened earnings well below our base-case assumptions.

Upside scenario

We do not anticipate raising the ratings over our forecast horizon. The global P&C reinsurance sector continues to face challenging business conditions, and Munich Re's diversification benefits have not fully translated into bottom-line earnings. Furthermore, we note only moderate price increases in P&C reinsurance in 2018. We might consider raising the rating only if we saw a significantly more favorable pricing environment on a sustained basis in P&C reinsurance lines. An upgrade would also hinge on the group's ability to sustain a sizable earnings contribution from its primary insurance operations.

Macroeconomic Assumptions

- Moderate global economic growth and inflation.
- Long-term risk-free rates increasing to 3.1% in the U.S. and to 1.0% in Germany in 2018.

Key Metrics

Munich Reinsurance Co. Key Metrics

	--Year ended Dec. 31--							
	2020f	**2019f**	**2018f**	**2017**	**2016**	**2015**	**2014**	**2013**
Gross premiums written (mil. $)	>50,000	>50,000	>50,000	49,115	48,851	50,374	48,848	51,060
Net income	~2300-2800	~2300-2800	~2300-2800	375	2,580	3,122	3,170	3,333
Fixed-charge coverage (x)*	>10	>10	>10	1.2	13.1	14.1	11.7	12.6

Munich Reinsurance Co. Key Metrics (cont.)								
	--Year ended Dec. 31--							
	2020f	2019f	2018f	2017	2016	2015	2014	2013
Financial leverage (%)	<15	<15	<15	6.5	9.7	9.3	10.1	9.9
S&P capital adequacy	Very strong	Very strong	Very strong	Very strong	Extremely strong	Extremely strong	Extremely strong	Extremely strong
P/C: Net combined ratio (%)*	96-98	96-98	96-98	109.2	96.4	92.4	93.6	93.5
P/C: Net expense ratio (%)	N/A	N/A	N/A	33.2	32.9	33.4	33.0	31.4
P/C: Net loss ratio (%)	N/A	N/A	N/A	76.0	63.5	59.1	60.5	62.0
Return on Shareholder's Equity (%)	8-9	8-9	8-9	1.2	8.2	10.2	11.2	12.4
Common equity (mil. $)	N/A	N/A	N/A	28,198	31,785	30,965	30,289	26,188
Reinsurance utilization (%)	N/A	N/A	N/A	4.0	3.5	3.7	3.3	3.2
Return on revenue (%)	N/A	N/A	N/A	(2.7)	3.8	5.2	3.0	5.6
Net investment yield (%)	2.7-2.9	2.7-2.9	2.7-2.9	3.5	3.5	3.6	3.3	3.7

*Includes reinsurance and primary insurance. f--forecast. N/A--Not applicable. Source: S&P Global Ratings.

Business Risk Profile: Very Strong

Munich Re enjoys the benefit of a well-spread portfolio across all regions and segments, including global P&C reinsurance, life reinsurance, and global health insurance; a sound business position in the German primary market in life and P&C; as well as a leading market position in the German health market and in some smaller primary insurance operations, including in Turkey, Poland, and Austria. In our view, life reinsurance business is exposed to low industry risk, owing to a positive earnings trend and high barriers to potential new entrants. However, volatility is higher in P&C reinsurance business with exposure to natural-catastrophe events. This assessment includes our view on Munich Re's primary life and health insurance operations in Germany. Our view of high risk in the German life insurance industry is influenced by asset-liability risks due to long life insurance contracts with guarantees, and political risks in the health segment.

Munich Re has a market-leading position in the global P&C and life reinsurance markets, accompanied by a significant presence in all primary insurance lines. In our view, Munich Re's highly recognized brand, presence, and expertise in the global reinsurance market are credentials that are difficult to replicate. This is further supported by Munich Re's ability to leverage moderate price increases in global P&C reinsurance business in 2018, as well as the group's access to large so-called structured reinsurance deals that boosted growth to a strong 18%, after renewals in January this year, and about 8% after renewals in April. Such deals appear accessible to Munich Re and some larger peers, but not to the majority of peers in the reinsurance sector, underpinning Munich Re's competitive advantages.

The group's global presence in its various business lines, and the unique diversification by lines of business compared with reinsurance peers', makes it less vulnerable to adverse developments in individual markets. We believe that earnings among the group's P&C reinsurance, life reinsurance, and primary insurance businesses are well diversified.

The contribution from primary business ERGO has been improving but remains lower than from other segments.

Financial Risk Profile: Strong

Munich Re's capital adequacy, albeit decreased as per our calculations, remained robust in 2017 despite the drop in net income, unchanged dividends of about €1.3 billion, and share buybacks of €1 billion. The group's internal model and Solvency II ratio stood at 244% in 2017, securely above the group's target range of 175%-220%. The group's capitalization was firmly in the 'AA' range in our capital model at year-end 2017, and we assume it will remain in this range in 2018-2020. Nevertheless, the financial risk profile is supported by the group's very strong and prudent reserves, which we partly incorporate in our assessment of the group's capital, as well as some benefit arising the internal economic capital model (ECM), which we view as sound.

The groups capital and earnings remain volatile because of their exposure to P&C reinsurance natural catastrophe exposure as demonstrated in 2017, with catastrophe losses of €3.7 billion reducing the group's return on equity (ROE) to 1.3% (8.1% in 2016). Although we consider that the group's exposure to catastrophe risk could remain a source of material capital and earnings volatility, we think that Munich Re is less vulnerable to this than most reinsurers, thanks to its diversified risk profile, strong modeling capabilities, and relatively low catastrophe risk exposure. We do not expect the overall risk profile to change materially in the next two years.

We forecast gradual earnings increases for the group's primary operations in 2018-2020 to €250 million-€450 million following further restructuring, in particular in German life business and further cost-efficiency measures. This earnings upside, moderate price increases in P&C reinsurance in 2018, and steady profit generation from life/health reinsurance should enable the group to post net income of €2.3 billion-€2.8 billion in 2018-2020, an ROE of 8%-9%, and a consolidated combined (loss and expense) ratio of 96%-98%. These figures include assumed catastrophe losses of about 8% in P&C reinsurance and about 4% of run-off profits from prior-years' reserving in P&C reinsurance. We also assume the net investment yield will be 2.7%-2.9%.

The group's access to capital markets as a publicly listed company and its track record of debt issuance, along with positive market indicators and low financial leverage, will remain a potential opportunity to raise additional funding, if required. At year-end 2017, the financial leverage was below 10% and we assume it will remain below 10% in 2018-2020. We also assume fixed-charge coverage will recover to securely above 10x, after 1x in 2017 caused by large catastrophe losses last year.

Other Assessments

Munich Re's experienced management team displays a good track record of financial discipline and managing the group through difficult market environments, such as the 2008 financial crisis, the ongoing challenges for P&C reinsurance business, still-low interest rates, and large catastrophe losses in 2017. We believe the recent announcement of an internal replacement for the retiring CFO underlines Munich Re's well-established succession planning. With the designated CFO being a long-standing member of the group's management, we do not anticipate a material change in our base-case assumptions.

We assess Munich Re's ERM framework as very strong, reflecting our positive view on risk culture, risk controls, risk models, emerging risk management, strategic risk management, and capital model. As a global and diversified group, the importance of enterprise risk management for Munich Re is high, in our view. Munich Re is a complex group operating in many geographies and diverse lines of business. The group faces catastrophe risks in the reinsurance division, significant exposure to financial losses in primary insurance, and exposure to global and regional economic cycles. We do not expect the group will experience losses beyond its risk tolerance over the rating horizon. The group's economic capital model is robust, fully integrated, and used to steer business decisions. The model governance structure is strong and supported by extensive documented analytics and process.

The group maintains exceptionally high liquidity to address any concerns. We do not expect any refinancing issues, and we believe the group is capable of managing unexpectedly large claims or a sudden rise in life insurance lapses.

Other Considerations

Factors specific to the holding company

The ratings on ERGO Group AG and Munich Re America Corp. reflect these companies' group status as intermediate, non-operating holding companies. The wider notching for Munich Re America Corp. reflects our view of greater structural subordination within insurance groups in the U.S. compared with those outside the U.S.

Accounting considerations

Munich Re prepares its financial statements under International financial Reporting Standards. The group has a track record of rigorously impairing goodwill early, since operating performance no longer meets group standards. For Solvency II group reporting, the group does not use any matching adjustment, volatility adjustment, third-country equivalence, or transitional measures.

In our analysis of capital adequacy, we recognize partial credit for:

- Credit on deferred-tax liabilities relating to the claims equalization reserve;
- Equity credit for hybrid securities up to the level recognized in regulatory solvency capital;
- An adjustment to the standard duration mismatch on the back of a positive assessment of asset-liability management risk-controls;
- 50% of loss-reserve redundancy; and
- Some benefit from our review of Munich Re's ECM.

Related Criteria

- General Criteria: Guarantee Criteria, Oct. 21, 2016
- Criteria - Insurance - Property/Casualty: Assessing Property/Casualty Insurers' Loss Reserves, Nov. 26, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- Criteria - Insurance - General: Enterprise Risk Management, May 7, 2013

- Criteria - Insurance - General: Insurers: Rating Methodology, May 7, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- Criteria - Insurance - General: A New Level Of Enterprise Risk Management Analysis: Methodology For Assessing Insurers' Economic Capital Models, Jan. 24, 2011
- Criteria - Insurance - General: Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model, June 7, 2010
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Insurance - General: Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Ratings Detail (As Of August 9, 2018)	
Operating Companies Covered By This Report	
Munich Reinsurance Co.	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	AA-/Stable/--
Junior Subordinated	A
American Alternative Insurance Corp.	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
D.A.S. Legal Expenses Insurance Co. Ltd.	
Financial Strength Rating	
Local Currency	A+/Stable/--
Issuer Credit Rating	
Local Currency	A+/Stable/--
DAS Rechtsschutz AG	
Financial Strength Rating	
Local Currency	A/Stable/--
Issuer Credit Rating	
Local Currency	A/Stable/--
DKV Deutsche Krankenversicherung AG	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
ERGO Versicherung AG	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--

Ratings Detail (As Of August 9, 2018) (cont.)	
Great Lakes Insurance SE	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Great Lakes Insurance SE (Australia Branch)	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Munich American Reassurance Co.	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Munich Reins America Inc.	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Munich Reinsurance Co. of Africa Ltd.	
Financial Strength Rating	
Local Currency	A-/Stable/--
Munich Reinsurance Co. of Australasia Ltd.	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Munich Reinsurance Co. of Canada	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Munich Re of Bermuda, Ltd.	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Munich Re of Malta PLC	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Munich Re Trading LLC	
Issuer Credit Rating	
Local Currency	A+/Stable/--

Ratings Detail (As Of August 9, 2018) (cont.)	
New Reinsurance Company Ltd	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Princeton Excess & Surplus Lines Insurance Co.	
Financial Strength Rating	
Local Currency	AA-/Stable/--
Issuer Credit Rating	
Local Currency	AA-/Stable/--
Temple Insurance Co.	
Financial Strength Rating	
Local Currency	A+/Stable/--
Issuer Credit Rating	
Local Currency	A+/Stable/--
Related Entities	
ERGO Group AG	
Issuer Credit Rating	
Local Currency	A/Stable/--
Munich Re America Corp.	
Issuer Credit Rating	
Local Currency	A-/Stable/--
Senior Unsecured	A-
Domicile	Germany

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

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