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Hannover Rueck SE

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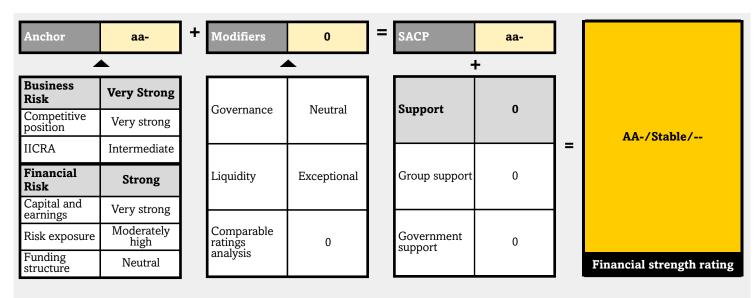
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Hannover Rueck SE



IICRA--Insurance Industry And Country Risk Assessment. SACP--Stand-alone credit profile.

Credit Highlights

Overview	
Key strengths	Key risks
One of the top global reinsurers, with very strong diversification by product and geography, a low-cost base, and selective and prudent underwriting capabilities.	Geopolitical and economic risks, capital market volatility, and inflation trends are adding uncertainty to financial targets.
Very strong capital under both our risk-based capital model and solvency requirements, with well-defined risk controls and solid reserves.	Potential volatility in capital and earnings because it covers large risks such as natural catastrophes.
Operating performance and earnings volatility compares favorably with peers.	

Hannover Rueck SE (Hannover Re) will remain one of the leading global reinsurers, owing to its very strong

diversification, robust growth, and low cost base. The group has a top-three position in the global reinsurance market and a strong brand image, supported by its robust underwriting and claim-settlement expertise. It also enjoys longstanding relationships with brokers and key clients, and has leading positions in some of the reinsurance treaties it underwrites globally. These competitive strengths are underlined by consistent and profitable premium growth of 13.4% on average over the past five years compared with about 7% for peers. S&P Global Ratings believes that the group will further demonstrate its competitive strengths by taking advantage of rising rates.

Large losses in 2022 negatively affected property/casualty (P/C) results, mainly offset by improving life/health (L/H) results and sound investment returns. Hannover Re reported a combined ratio (loss and expense) of 100.1% at year-end 2022, exceeding its 96% target. Heavy losses in 2022 from natural catastrophes exceeded the group's large loss budget of \in 1.4 billion by about \in 300 million and reserves related to potential claims from the Russia-Ukraine war negatively affected the group's P/C results. However, strong profits in the L/H financial solution and longevity business, as well as lower COVID-19 related claims offset lower P/C results. Additionally, sound investment income of

3.8% in 2022 and 2.7% in the first quarter of 2023, enabled the group to achieve a strong return on equity (ROE) of 14.3% and 20.8%. We believe that strong underwriting capabilities, a superior cost base compared with that of large peers, cautious reserving, and sound retrocession strategy will support the group's earnings in the forecast period. We expect the combined ratio will improve to 93%-95% and ROE to exceed 17% in 2023 based on IFRS 17 accounts.

We expect capitalization to remain at least very strong, despite a large decline in shareholders' equity of about 30% in 2022. The sharp increase in interest rates in 2022 caused unrealized losses of \in 4.8 billion, bringing shareholders' equity (including non-controlling interests) down to \in 8.7 billion from \in 12.8 billion at year-end 2021. However, we expect that close asset-liability matching mostly mitigated the negative effects on capitalization, as seen in the regulatory solvency ratio increasing to 261% on March 30, 2023, from 252% at year-end 2022 and 243% at year-end 2021. In the first quarter of 2023, shareholders' equity improved by 5.2% to \in 9.5 billion, compared to \in 9.1 billion at year-end 2022 (both IFRS 17 numbers). This was mainly due to a sound after tax result and a positive movement in unrealized gains/losses. Our expectations for Hannover Re's capital position are also based on strong prospective earnings of \in 1.6 billion- \in 1.9 billion over the next two years. We believe that retained earnings will finance growth, maintaining the group's capital adequacy at the 'AA' level, measured using S&P Global Ratings' risk-based capital model. The group's exposure to large tail risks, such as natural catastrophes, could lead to capital and earnings volatility. However, we believe Hannover Re remains sufficiently capitalized to cope with potential large man-made losses or natural catastrophes in 2023.

Outlook: Stable

The stable outlook indicates that we expect the group will maintain its competitive advantage as a well-positioned, leading global reinsurer. Hannover Re will also benefit from price increases in the global P/C reinsurance business in 2023 and growth in its traditional and structured reinsurance products. We also assume earnings will remain sound in 2023-2024, which should let the group maintain capital securely above the 'AA' level.

Downside scenario

We might consider lowering the ratings over the next two years if capital adequacy fell significantly below the 'AA' level over our forecast horizon. This could occur because of large unexpected natural catastrophes, higher risk-capital charges than we expect, or a material erosion of underlying earnings. We could also take a negative rating action if Hannover Re's underwriting controls deteriorated, or if it assumed a riskier profile overall through heightened underwriting or investment risks.

Upside scenario

We assess the likelihood of an upgrade as remote over the next 12-24 months. This reflects continued challenging business conditions in the global reinsurance market, despite rate increases.

Key Assumptions

- We forecast 1.7% growth in GDP in 2023 in the U.S., 0.6% growth in the eurozone.
- In the U.S., we think inflation will drop to 4.3% in 2023 from 8.0% in 2022. Similarly, we forecast inflation in the

eurozone will fall to 5.8% in 2023 from 8.4% in 2022.

- Interest rates will continue to rise. Central banks' determination to bring down inflation suggests that policy rates need to go higher still. We estimate that the U.S. Federal Reserve's policy rate will peak at 3.7% in 2023 and the eurozone at 3.6%.
- The combination of challenges for the global reinsurance sector in the past few years has created a hard market in short-tail lines across regions, which we believe will continue throughout 2023. We maintain our negative view on the global reinsurance sector but think the tipping point is coming for a more stable sector view if reinsurers maintain discipline and demonstrate an ability to sustainably earn their cost of capital.

Hannover SEKey metrics							
	2024f*	2023f*	2022	2021	2020	2019	2018
S&P Global Ratings capital adequacy	Very Strong						
Gross premium written (Mil. €)	>26,000	~25.000	33,276	27,762	24,770	22,598	19,176
Net income (Mil. €)	1.700-1.900	1.600-1.800	1,543	1,300	919	1,373	1,146
Return on shareholders' equity (%)	>17	>17	14.3	10.6	7.9	13.1	12.2
Net investment yield (%)	>2.7	>2.4	3.8	3.3	3.0	3.3	3.5
P/C: Net combined ratio (%)	92-94	93-95	100.1	98.0	101.9	98.5	96.9
Reinsurance utilization (%)	N/A	N/A	10.0	10.5	9.9	10.0	9.3
Return on revenue (%)	N/A	N/A	6.6	5.7	4.0	7.3	7.5

f--S&P Global Ratings forecast. *forecast based on IFRS 17 figures. N/A--Not applicable.

Business Risk Profile: Very Strong

In our view, Hannover Re benefits from its diversified geographical footprint and broad business portfolio, offering P/C and life/health reinsurance. Furthermore, the group's competitiveness is underpinned by its well-established brand, and strong underwriting and claims services abilities. Within P/C reinsurance, similar to its global peers, we believe that Hannover Re is exposed to product risk, especially because of the unpredictable nature of natural catastrophes and large losses. We saw this risk demonstrated in recent years, when there were large natural catastrophe and pandemic market losses.

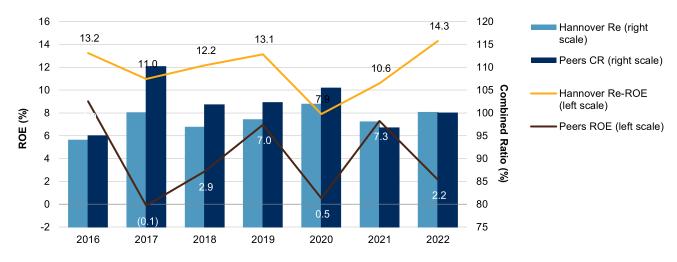
In our view, barriers to entry are higher for the group's life reinsurance operations, because the market is dominated by a handful of reinsurers. We believe the life reinsurance business has low industry risk, owing to its positive underlying earnings. These have less potential to increase capital and earnings volatility than the product risks in P/C reinsurance.

In our view, Hannover Re has demonstrated its ability to take advantage of increasing reinsurance prices across business lines, as well as structured reinsurance deals, backed by the group's strong reputation. Additionally, inflation trends, high loss experience, and volatile capital markets encouraged firmer prices in 2022 and 2023 year-to-date. The group's competitive strength has been evidenced by a strong increase in gross written premiums (GWP) of 20% in 2022 and a five-year average of 13.4% compared with a five-year average of about 7% for its peers. We expect Hannover Re will take further advantage of rate hardening in the P/C reinsurance market further improving its

technical profitability. For 2023, we expect reinsurance revenues under IFRS 17 to exceed €25 billion. The decline in volume compared with IFRS 4 numbers is driven by the accounting change, as reinsurance commissions are not included in the revenue definition.

The group's above-average growth rates did not reduce its earnings generation capacity, having demonstrated a consistently higher ROE than the peer average over the past five years (see chart 1). Operating performance was hindered by high net large losses exceeding the company's budget by \in 300 million in 2022. However, the lower amount of COVID-19-related losses and strong investment result increased net earnings by 18,7% to \in 1.5 billion in 2022 including minority interests. For 2023, we expect earnings will increase to \in 1.6 billion- \in 1.8 billion. We expect the combined ratio to improve to 93%-95% reflecting higher reinsurance rates offsetting claims increases from high inflation, as well as a positive discounting impact on P/C technical liabilities following the accounting change to IFRS 17. We also expect that strong life earnings and sound investment results from inflation-linked bonds and higher investment yields will positively contribute to the group's overall profits.

Chart 1



Hannover Re's operating performance resilient compared with top global reinsurers

Source: S&P Global Ratings. Peers include Munich Re, Swiss Re, Lloyds and SCOR Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

In our view, Hannover Re benefits from a lower-than-average administration expense ratio, which also bolsters the group's competitive strength. The group's diverse business mix is a further positive factor. Hannover Re's retrocession strategy helped it withstand recent large natural catastrophes. Nevertheless, its reinsurance utilization ratio is somewhat higher than that of some peers, which suggests greater reliance on retrocession capacity.

Financial Risk Profile: Strong

At year-end 2022, Hannover Re still held capital adequacy above the 'AA' confidence level, based on our risk-based model despite a material decline in shareholders' equity driven by a decline in fixed-income valuations due to higher interest rates. Moreover, the group reported a favorable Solvency II ratio of 252% in 2022, further supporting our view of its capitalization. We believe Hannover Re will maintain capitalization at the 'AA' level in 2023-2024. We expect that close asset-liability matching will positively affect capitalization, as seen in the regulatory solvency ratio increase to 261% at March 31, 2023. Furthermore, we believe Hannover Re remains sufficiently capitalized to cope with further possible large man-made losses or natural catastrophe events.

In 2022, the group reported increased earnings of $\in 1.5$ billion and ROE of 14.3% despite a higher combined ratio of 100.1% in 2022 compared with 98.0% in 2021. Improving L/H results and strong ordinary investment income supported by real estate income, higher interest rates and strong inflation-linked bonds returns offset the lower P/C profitability. Hannover Re has been able to outperform its peer group's ROE over the past five years. We expect the group will generate an ROE of more than 17% in 2023-2024 under IFRS 17, assuming a normal level of natural catastrophes and large losses, supported by strong reserving. In our view, the group will generate earnings of $\in 1.6$ billion- $\in 1.9$ billion in 2023 and 2024. However, geopolitical and economic risks, capital market volatility, and inflation trends are adding uncertainty to financial targets. We expect investment returns to exceed 2.4% to support net earnings in 2023, contributing to the group's ability to finance its growth ambitions.

Hannover Re's financial risk profile is supported by very strong and prudent reserves, which we consider in our assessment of its capital. We also view positively its good internal economic capital model.

The group is exposed to tail risks from severe natural catastrophes, man-made claims, and pandemics, which could cause some volatility in capital and earnings. The group's large loss budget increased to \in 1.725 billion for 2023 compared with \in 1.4 billion for 2022 and \in 1.1 billion for 2021. The increasing large-loss budget reflects the higher business volume, rather than a change in risk appetite, which remains broadly stable. In our view, Hannover Re has adequately managed these events, as demonstrated recently, thanks to its beneficial cost base, diversified portfolio, strong modeling and risk controls, very strong and prudent reserving, and an effective and comprehensive retrocession program.

The group has a well-diversified investment portfolio and maintains a conservative stance on its investments via relatively low-risk asset allocation, limits for foreign currency exposure, and prudent diversification by sectors and single obligors. More than 90% of Hannover Re's fixed-income portfolio is allocated to investment-grade securities.

In our view, Hannover Re has a track record in accessing the capital markets, as demonstrated by its recent hybrid issuances. Financial leverage increased to 34.1% as of 2022 compared with 26.4% in 2021. The increase is mainly due to the decline in shareholders' equity on the back of rapidly rising interest rates. Higher earnings since 2021 supported a fixed charge coverage ratio of 17.1x.

Other Key Credit Considerations

Liquidity

We expect Hannover Re's liquidity to remain exceptional over the next two years. The group has ample liquidity sources available, mainly premium income and a highly liquid asset portfolio. Moreover, there are no refinancing risks, in our view.

Group support

Our assessment of Hannover Re reflects its stand-alone characteristics. The group is 50.2%-owned by ultimate parent Talanx AG, and the rest of its shares are widely held. We understand that Hannover Re's strategy, capital management, and cash flows are highly independent from Talanx AG.

Environmental, social, and governance

ESG Credit Indicators



N/A--Not applicable. ESG credit indicators provide additional disclosure and transparency at the entity level and reflect S&P Global Ratings' opinion of the influence that environmental, social, and governance factors have on our credit rating analysis. They are not a sustainability rating or an S&P Global Ratings ESG Evaluation. The extent of the influence of these factors is reflected on an alphanumerical 1-5 scale where 1 = positive, 2 = neutral, 3 = moderately negative, 4 = negative, and 5 = very negative. For more information, see our commentary "ESG Credit Indicator Definitions And Applications," published Oct. 13, 2021.

Hannover Re's exposure to environmental and social risks is consistent with that of the global insurance industry and broadly in line with global reinsurance peers. Environmental factors are a moderately negative consideration in our analysis of Hannover Re. However, it has built a strong capital buffer and an effective retrocession to safeguard its business against adverse market developments, including high catastrophe losses like those seen in recent years, and by diversifying its portfolio across various business lines and regions. We view the group's exposure to losses from extreme weather as a source of potentially material capital and earnings volatility. We also take into account the group's option to reprice its catastrophe contracts annually, which should mitigate the potential increase in claims stemming from natural catastrophes, in part due to climate change. Given the group's strong risk management and modeling capabilities, we think it is unlikely to experience losses greater than its risk tolerance.

Through its life reinsurance business, Hannover Re is exposed to social factors such as changes in demographic trends. Greater longevity and other mortality trends can increase insurance liabilities. That said, this is a common problem for life reinsurers. We anticipate that Hannover Re's diversification in its global book of business and the variety of life insurance products it offers will mitigate risks.

Standards for corporate governance are typically high in Germany and in many of the other countries where Hannover Re has material exposure. We do not foresee any material governance issues that could affect the ratings. We think the management team has a consistent and successful track record of strategic planning, strong execution, and

transparent, demanding, and sophisticated financial management. Hannover Re also has a strong track record of meeting its financial and strategic targets.

Enterprise risk management

We consider Hannover Re's enterprise risk management (ERM) program an important consideration in our ratings analysis, particularly given the global diversity of the group's business and the potential volatility in capital and earnings from exposure to natural catastrophes and pandemics. Hannover Re benefits from stringent risk controls and a well-established ERM framework. We also factor in our assessment of the group's good economic capital model.

Accounting

We base our analysis primarily on audited financial data prepared in accordance with IFRS. Hannover Re from 2023 will apply IFRS 9/17 in its group reporting. Our base-case assumptions for 2023 and 2024 are based on IFRS 9/17 while 2018-2022 ratios are based on IFRS 4. Gross written premiums will no longer be reported under IFRS 17, with gross insurance contract revenue taking its place.

Related Criteria

- General Criteria: Hybrid Capital: Methodology And Assumptions , March 2, 2022
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings , Oct. 10, 2021
- Criteria | Insurance | General: Insurers Rating Methodology, July 1, 2019
- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Insurance | Property/Casualty: Assessing Property/Casualty Insurers' Loss Reserves , Nov. 26, 2013
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- 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

Appendix

Hannover ReCredit metrics history					
Ratio/Metric	2022	2021	2020	2019	2018
S&P Global Ratings capital adequacy	Very Strong				
Total invested assets	56,481	55,965	48,767	47,394	42,007
Total shareholder equity	8,748	12,756	11,839	11,354	9,542
Gross premiums written	33,276	27,762	24,770	22,598	19,176
Net premiums written	29,956	24,857	22,328	20,345	17,398
Net premiums earned	29,673	24,144	21,361	19,730	17,289
Reinsurance utilization (%)	10.0	10.5	9.9	10.0	9.3
EBIT	2,087	1,735	1,214	1,853	1,597

Hannover ReCredit metrics history (cont.)							
Ratio/Metric	2022	2021	2020	2019	2018		
Net income (attributable to all shareholders)	1,543	1,300	919	1,373	1,146		
Return on revenue (%)	6.6	5.7	4.0	7.3	7.5		
Return on shareholders' equity (reported) (%)	14.3	10.6	7.9	13.1	12.2		
P/C: net combined ratio (%)	100.1	98.0	101.9	98.5	96.9		
P/C: net expense ratio (%)	28.2	28.7	29.1	29.5	30.0		
P/C: return on revenue (%)	5.9	8.4	5.5	9.3	11.2		
EBITDA fixed-charge coverage (x)	17.1	16.6	11.9	17.5	14.5		
EBIT fixed-charge coverage (x)	15.3	15.5	10.6	16.6	13.7		
Financial obligations / EBITDA adjusted	2.4	2.4	2.5	1.8	1.6		
Financial leverage including pension deficit as debt (%)	34.1	26.4	23.0	25.1	22.8		
Net investment yield (%)	3.8	3.3	3.0	3.3	3.5		
Net investment yield including investment gains/(losses) (%)	3.7	3.7	3.5	3.9	3.7		

Business And Financial Risk Matrix

Business	Financial risk profile							
risk profile	Excellent	Very Strong	Strong	Satisfactory	Fair	Marginal	Weak	Vulnerable
Excellent	aa+	aa	aa-	a+	a-	bbb	bb+	b+
Very Strong	aa	aa/aa-	aa-/a+	a+/a	a-/bbb+	bbb/bbb-	bb+/bb	b+
Strong	aa-/a+	a+/a	a/a-	a-/bbb+	bbb+/bbb	bbb-/bb+	bb/bb-	b+/b
Satisfactory	а	a/a-	a-/bbb+	bbb+/bbb	bbb/bbb-	bb+/bb	bb-/b+	b/b-
Fair	a-	a-/bbb+	bbb+/bbb	bbb/bbb-	bbb-/bb+	bb/bb-	b+/b	b-
Weak	bbb+/bbb	bbb/bbb-	bbb-/bb+	bb+/bb	bb/bb-	bb-/b+	b/b-	b-
Vulnerable	bbb-/bb+	bb+/bb	bb/bb-	bb-/b+	b+/b	b/b-	b-	b-

Note: Where table indicates two possible outcomes, we determine the anchor as follows: For financial risk profiles that we assess as satisfactory or stronger, we consider the relative strength of both the business risk and financial risk profiles within the cell. This is based on a holistic assessment of the relative strengths of the rating factors of the business risk profile and financial risk profile. For financial risk profiles that we assess as fair or weaker, we typically place more weight on the relative strength of the rating factors of the financial risk profile.

Ratings Detail (As Of July 31, 2023)*					
Operating Companies Covered By This Report					
Hannover Rueck SE					
Financial Strength Rating					
Local Currency	AA-/Stable/				
ssuer Credit Rating	AA-/Stable/				
E+S Rueckversicherung AG					
Financial Strength Rating					
Local Currency	AA-/Stable/				
ssuer Credit Rating					
Local Currency	AA-/Stable/				

Ratings Detail (As Of July 31, 2023)*(cont.)	
Hannover Life Reassurance Co. of America	
Financial Strength Rating	
Local Currency	AA-/Stable/
Issuer Credit Rating	
Local Currency	AA-/Stable/
Hannover Life Reassurance Co. of America (Bermuda) Ltd.	
Financial Strength Rating	
Local Currency	AA-/Stable/
Hannover Life Re of Australasia Ltd.	
Financial Strength Rating	
Local Currency	AA-/Stable/
Issuer Credit Rating	
Local Currency	AA-/Stable/
Hannover Re (Bermuda) Ltd.	
Financial Strength Rating	
Local Currency	AA-/Stable/
Issuer Credit Rating	
Local Currency	AA-/Stable/
Hannover Reinsurance Africa Ltd.	
Financial Strength Rating	
Local Currency	AA-/Stable/
Hannover Re (Ireland) DAC	
Financial Strength Rating	
Local Currency	AA-/Stable/
Issuer Credit Rating	
Local Currency	AA-/Stable/
Hannover Re South Africa Ltd.	
Financial Strength Rating	
Local Currency	AA-/Stable/
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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