AM Best
September 5, 2023
Market Segment Report

Global Reinsurers Face Challenges Even as Conditions Improve

BEST'S MARKET SEGMENT REPORT

Our Insight, Your Advantage™

Welcome to AM Best's annual report on the global reinsurance market.

For global reinsurers, the year 2022 marked a return to normalcy after a long stretch dominated by the COVID-19 pandemic. AM Best's outlook for the segment remains Stable. Most reinsurers have realigned their risk profiles, hoping to generate underwriting profits that had otherwise been elusive in recent years. There is optimism owing to steep price increases and tighter terms and conditions, but this has been tempered by underwriting, economic, social, and geopolitical factors.

In our annual listing of the world's 50 largest reinsurers, Munich Re once again retained the top spot. Berkshire Hathaway and SCOR switched fifth and sixth places from last year's ranking. Other notable changes include Odyssey Group Holdings jumping from #27 to #20 and Allied World Assurance rising from #44 to # 39 (both companies have the same ultimate parent company, Fairfax Financial Holdings). Currency exchange rates played a role in Top 50 moves.

Traditional reinsurance capital dropped sharply in 2022, although third-party capital was relatively flat. Traditional capital is expected to return to near-2021 levels in 2023. The cost of capital, meanwhile, is higher than its historical average owing to rising interest rates and equity market volatility.

For the insurance-linked securities (ILS) market, capital formation has been lukewarm. Catastrophe bond issuance has been a bright spot, as totals for the first half of 2023 have already surpassed full-year 2022 levels.

Life reinsurance capitalization is within target levels as block reinsurance transactions remain robust. Newer reinsurers are trying to make inroads into the segment, and the segment as a whole is analyzing the future role of artificial intelligence and other technology.

The demand for health reinsurance tends to be lower than for other lines owing to the short-term nature of obligations, pricing flexibility, and minimal catastrophe exposure. Nonetheless, there have been signs of growth recently in the US and Asia-Pacific markets.

Lloyd's ranks as the world's seventh-largest reinsurance provider by 2022 reinsurance gross premiums written and fourth-largest if life premiums are excluded. Reinsurance is Lloyd's largest segment, accounting for 33% of the market's 2022 GPW.

Markets in Latin America are particularly vulnerable to large-scale catastrophes, but activity has been relatively quiet in recent years, producing minimal insured losses. Reinsurers have adjusted their product offerings by raising deductibles, narrowing coverages, and seeking exclusions.

By contrast, elevated catastrophe activity in the Asia-Pacific region has reduced reinsurer appetite for catastrophe-exposed property business. Some reinsurers have pivoted to non-property business in pursuit of greater earnings diversification.

In the Middle East and North Africa, reinsurers reported strong premium growth owing to global pricing trends, inflation, new business opportunities, and corrective actions with respect to rates and terms and conditions.

Despite solid recent capital growth in Sub-Saharan Africa, capacity in the region is insufficient to meet market demand, with local reinsurers often relying on support from global reinsurers.

AM Best is committed to sharing our expertise to address the wide range of challenges that reinsurers face. I hope you find our latest report to be valuable to your understanding of AM Best's views on issues that impact the reinsurance industry, as well as our ratings, and welcome your thoughts. Please feel free to reach out to me or my colleagues with any questions.

Jim Gillard
Executive Vice President & Chief Operating Officer, AM Best

Copyright © 2023 A.M. Best Company, Inc. and/or its affiliates. ALL RIGHTS RESERVED. No portion of this content may be reproduced, distributed, or stored in a database or retrieval system, or transmitted in any form or by any means without the prior written permission of AM Best. While the content was obtained from sources believed to be reliable, its accuracy is not guaranteed. For additional details, refer to our *Terms of Use* available at the AM Best website: www.ambest.com/terms.

AM BEST SINCE 1899

BEST'S MARKET SEGMENT REPORT

Our Insight, Your Advantage™

Global Reinsurers Face Challenges Even as Conditions Improve

Optimism is being countered by an uncertain environment due to underwriting, economic, social, and geopolitical factors

Principal Takeaways

- AM Best expects reinsurers to generate underwriting profits despite high claims activity.
- Inflation concerns during 2022 prompted reserve strengthening actions by some key players.
- Reinsurers are under renewed pressures to meet their cost of capital.
- Current market dynamics should be sufficient to pressure reinsurers to maintain underwriting discipline.

AM Best's Stable outlook on the global reinsurance segment reflects a balancing act between positive and negative factors. Reinsurers generally have realigned their risk profiles and are in a strong position to generate the underwriting profits that had been elusive for a number of years. The current market appears to be one of the hardest experienced in decades. This cycle, however, is very different from previous ones. Price discovery has taken longer than expected. Claims patterns, as well as inflation and interest rate trends, have caught everyone by surprise. Optimism stemming from steep price increases and tighter terms and conditions is counterbalanced by an uncertain environment due to underwriting, economic, and geopolitical factors.

Following several years of disappointing results, reinsurers are under intense pressure to generate returns sufficient to meet their cost of capital. The year 2021 marked the start of recovery. In 2022, however, claims activity remained elevated, accompanied by concerns about inflation, triggering sizable reserve strengthening actions by some key players. Investment results were severely affected by unrealized losses on fixed-income securities, the direct result of rising interest rates that started at the beginning of 2022.

Some have suggested a capacity shortage in the global reinsurance segment. Others have theorized that reinsurers are reassuming their traditional role as a balance sheet protector rather than earnings stabilizer. The January 2023 renewals highlighted the mismatch between supply and demand. A sizable volume of demand remains unsatisfied. Moreover, we have not seen a meaningful influx of new capital from start-ups. Despite reduced balance sheets, however, global reinsurers' capital positions are strong. Some of the largest global players, while expanding, have not changed their active dividend payment policies or share buyback programs.

Recognizing the difference between "available" and "deployed" capacity is critical. "Available" capital is not under pressure—the largest, well-established global reinsurers either still hold plenty of "dry powder" or are very well positioned to raise capital without much difficulty. However, these well capitalized players have become much more selective allocating their capital, which pressures the deployment of capacity.

Since technical profitability started to improve and stabilize in 2021, the cost of capital has also risen materially. Higher risk-free interest rates, greater uncertainty owing to secondary perils and weather-related events, compounded by inflationary trends, have pressured return on equity

Table of Contents:

Top 50 12
Dedicated Capacity 18
Cost of Capital 24
US & Bermuda 29
Lloyd's Trends 32
European Big 4 36
ILS Market 39
Life/Annuity 45
Health 52
Asia-Pacific 61
Latin America 71
MENA 76
Sub-Saharan Africa 84

Analytical Contacts:

Carlos Wong-Fupuy, Oldwick
+1 (908) 882-2438
Carlos.Wong-Fupuy@ambest.com

Mathilde Jakobsen, Amsterdam
Tel: +31 20 308 5427
Mathilde.Jakobsen@ambest.com

Dan Hofmeister, Oldwick
+1 (908) 882-1893
Dan.Hofmeister@ambest.com

Antonietta Iachetta, Oldwick
+1 (908) 882-1901
Antonietta.Iachetta@ambest.com

2023-102.1

targets, which have almost doubled in a relatively short period. Profitability prospects are extremely promising, but a number of companies are still playing catch-up.

Optimism on expected margins is justified. Incumbents with a proven track record are in the best position to raise capital if there were to be a need. Potential start-ups face skepticism from investors in a segment where risk premium is elevated, given the volatile results from recent years. Consolidation is more likely than the emergence of a Class of 2023/24. Caution in deploying capital and underwriting discipline are critical for the medium to long term, but market participants are under pressure to innovate, expand their presence, and assert their role in an evolving economy in which today's emerging risks will soon become the dominant ones.

Current Cycle Is Different from Prior Ones

Hard cycles in the past were typically triggered by a major catastrophic event eroding a significant amount of capital available, affecting the solvency position of key players. Rates spiked rapidly to reflect those pressures, and new companies emerged to take advantage of harder market conditions. Capital was replenished until rates stabilized to more normal levels or softer conditions started to emerge, expected to happen over a short period of two to three years. Noteworthy, this process occurred following Hurricane Andrew in 1992; the 2001 terrorist attacks; and Hurricanes Katrina, Rita, and Wilma in 2005, leading to the emergence of new classes during these periods.

After the major losses of 2011 (Japan and New Zealand earthquakes, as well as Thailand floods) and 2012 (Superstorm Sandy), pricing across the board barely moved, other than in specific loss-affected areas. No new classes comparable to those of 1992, 2001, and 2005 emerged. The main difference in 2011 and 2012 was that the global reinsurance segment was awash with capital. An extended period of low interest rates that started after the global financial crisis of 2008 created the right conditions for the influx of insurance-linked securities (ILS) capital at a time when other attractive investment opportunities were limited. Between 2012 and 2018, ILS dedicated capacity grew from USD19 billion to USD95 billion (or from 6% to 22% of total dedicated reinsurance capacity), according to Guy Carpenter and AM Best estimates.

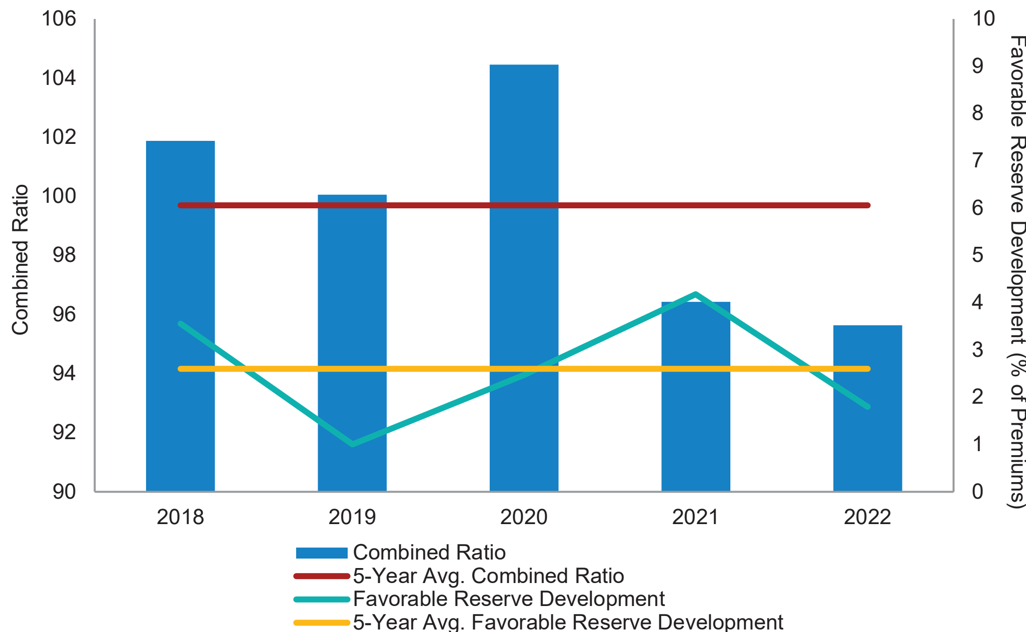
No Single Large Catastrophe Event

Early signs of the current hard market started to emerge after the large losses of 2017, when Hurricanes Harvey, Irma, and Maria occurred. Since then, however, we have seen a sequence of years of sustained claims activity, in contrast to previous hard cycles. This pattern cannot always be explained by isolated, catastrophic events, but largely by the accumulation of "secondary perils," exacerbated by the COVID-19 pandemic, a heightened risk environment, inflation due to monetary easing and supply-chain imbalances, and the Russia-Ukraine conflict. These events are much more difficult to model and price than other conventional risks. Despite heavy underwriting losses, the segment remained well capitalized. Pressure on reinsurers' financial strength ratings was typically driven not by capital concerns, but by technical underperformance.

No Sudden Spike in Rates

Unlike previous cycles, the price discovery path has taken longer than expected. The last six years have seen a slow, protracted process of reinsurers realigning their risk profiles, reallocating capital, re-underwriting, and repricing. Before the January 2023 renewals, the need for steady rate increases was widely accepted, but there was no consensus about their adequacy. In the past few years, there has been a shift toward non-cat risks, especially for carriers heavily affected by losses in previous years. Following the much harder market conditions since the start of 2023, there is renewed interest in property catastrophe risks, but with much tighter terms and conditions.

Exhibit 1
Global Reinsurance – Combined Ratios and Favorable Reserve Development



Source: AM Best data and research

No Class of 2023?

This time, the presence of third-party capital isn't entirely responsible for the lack of new entrants to the global reinsurance segment. During its early years, alternative capital was viewed as a direct competitor to traditional companies for property catastrophe risks. Low interest rates and the absence of other investment options made reinsurance risks attractive. The segment had plenty of capital due to the low cost of money, which supported relatively soft market conditions.

Today, ILS is an integral part of the market. Working with traditional players as a partner, third-party capital has been accepted as a key component of most major reinsurers' strategies. The absence of a meaningful influx of capital is not specific to the traditional sector but rather is shared with the ILS side. After the impressive five-fold increase between 2012 and 2018, alternative capacity has been flat at roughly USD95 billion.

AM Best believes that despite the severe decline in shareholders' equity due to unrealized investment losses in 2022, global reinsurers remain well capitalized. The argument that a shortage of capacity will lead to new company formations is debatable as available capital and a willingness to deploy it have become disjointed. After several years of disappointing financial results, reinsurers have become much more cautious about deploying their capital. A prudent approach is likely to preserve underwriting discipline for a longer period than in previous cycles.

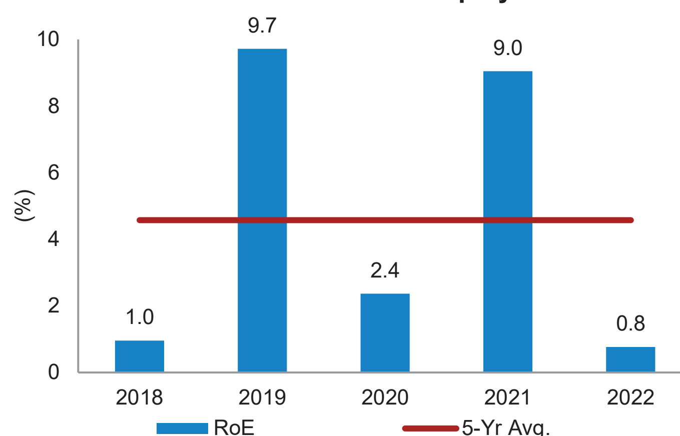
Operating Performance Starts to Improve Amid Challenges

Yearly global natural catastrophe losses in three of the last six years (2017, 2021, and 2022) have exceeded USD120 billion. For four consecutive years (2017-2020), the average combined ratio for AM Best's global reinsurance composite (which includes the 25 largest global reinsurance groups) exceeded the 100 break-even point (**Exhibit 1**). AM Best estimates an average return on equity over the 2018-2022 period for the segment in the 4.5%-5% range, at a time when the cost of capital was expected to be almost twice as much (**Exhibit 2**). Profitability improved in 2021, reflecting key players' shift away from the lower and medium layers of property cat risks; tightened contract wording; and the re-

deployment of capital toward casualty, specialty lines, and excess and surplus primary segments, a process that accelerated following Hurricanes Harvey, Irma, and Maria in 2017. Financial results were also boosted by the gradual rate increases and rallying stock markets.

The realignment and repricing of risk portfolios initiated in 2017 has been rather protracted, with rate adequacy remaining in doubt. The January 2023 renewals prompted the market to be more decisive about expected profit margins compensating for the amount of risk taken on balance sheets.

Exhibit 2
Global Reinsurance — Return on Equity



Source: AM Best data and research

Despite a much more cautious approach to underwriting, 2022 technical results, albeit mostly positive, were under pressure due to the unexpected severity and geographical spread of major weather events–Hurricane Ian, European winter storms, and other secondary perils such as severe convective storms in the US, hailstorms in France, and floods in Australia. This was exacerbated by reserve strengthening actions by some key players, owing to concerns about economic and social inflation, which were widely acknowledged starting in early 2022. (See **Appendices 1 to 5** for 2018 to 2022 market financial indicators.)

Profitability ratios slumped again in 2022, compounded by unrealized investment losses. The first half of 2023 has been more promising, with better results than the prior two years. Reinsurers' risk profile realignments have largely transferred the burden of a heavy cat loss for the first half of the year to primary writers.

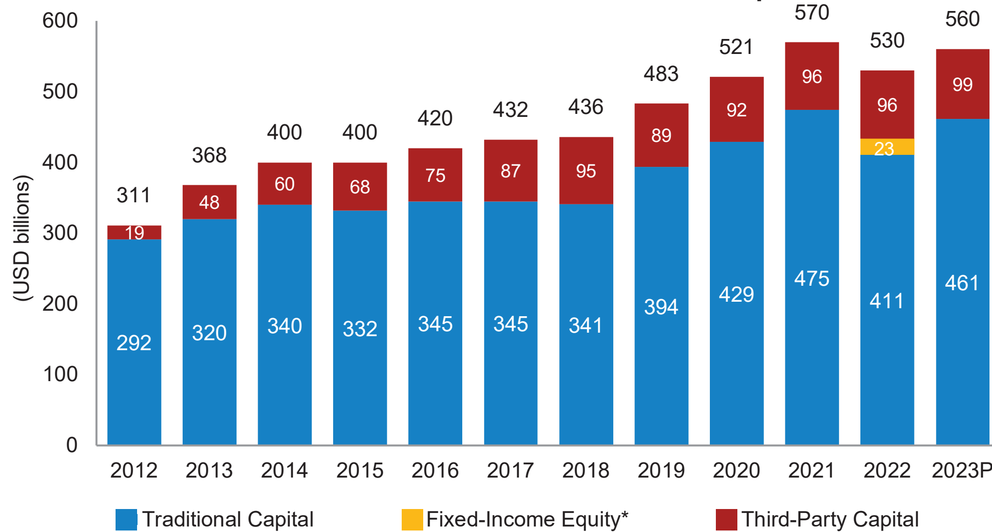
Although operating performance is improving, concerns about both economic and social inflation, central banks' contractionary monetary policies, asset market volatility, and the recent underperformance of the global reinsurance segment have translated into a higher cost of capital. Several companies are targeting return on equity metrics of around 15%, or even higher. After several underperforming years, despite the improvements, the segment is still catching up.

Resilient Capitalization Despite Shrinking Buffers

Central banks' monetary policy actions designed to combat inflation affected balance sheets significantly. AM Best estimates that rising interest rates drove a decline in shareholders' equity of almost 17% for the top 25 global reinsurance groups. We have calculated a similar reduction in the total amount of available capital for the whole segment, from USD475 billion to USD411 billion (**Exhibit 3**). Most of it has been in the form of unrealized investment losses on fixed-income holdings, the main asset class representing more than 60% of the average investment portfolio. Equity holdings were also materially affected, but they constitute less than 8% of the average portfolio and partially recovered in the first half of 2023. AM Best expects traditional reinsurance capital to return to near year-end 2021 levels, without considering any material additions of new capital, by the end of 2023.

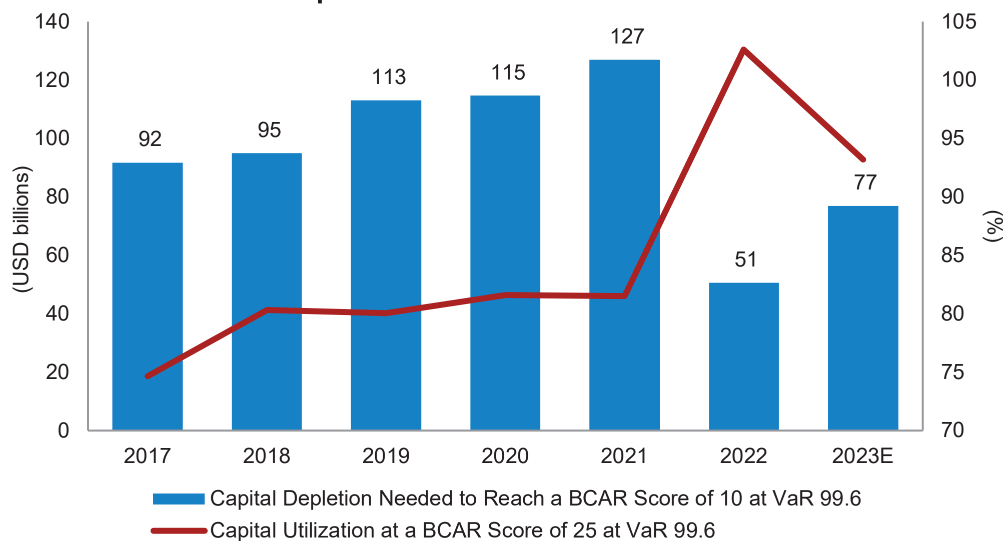
Despite the sharp reduction in shareholders' equity last year, the global reinsurers remain well capitalized. AM Best's balance sheet strength assessments for the top 50 global reinsurers have been virtually unaffected owing to the buffers in place before interest rates rose, the high quality of credit portfolios, tight asset liability management (ALM) strategies, and strong liquidity indicators. In cases

Exhibit 3
Global Reinsurance – Estimated Dedicated Reinsurance Capital



P=Projected
* For reinsurers that have ample cash liquidity to support potential shock losses, the fixed-income equity adjustment captures the amount of capital that AM Best anticipates will be recovered as bonds mature over time.
Source: AM Best data and research, Guy Carpenter

Exhibit 4
Global Reinsurance – Capital Utilization



Source: AM Best data and research

when a global reinsurer's rating has been under pressure, the main driver has been disappointing operating performance, not a weaker balance sheet.

A prolonged period of low interest rates helped keep available capital at very comfortable levels. In previous years, AM Best estimated that companies had 15% to 20% of capital above the minimum required to maintain Best's Capital Adequacy Ratio (BCAR) at the "strongest" level (**Exhibit 4**). During 2022, unrealized asset losses shrunk those buffers. Capital positions have become tighter, but balance sheet strength on an economic basis remains robust, as regulatory solvency indicators and AM Best assessments attest.

Despite the severe drop in available capital for the segment, AM Best does not perceive undue pressure on the balance sheet strength of any of the major reinsurance players. The credit quality of most global players' fixed-income portfolios is very high and of relatively short duration, and largely intended to be held to maturity. The outsized impact for some of the European Big Four reinsurers reflects the significant share of their life risks and the longer term of the assets backing their liabilities. Going forward, companies are expected to benefit from the higher investment returns. Broadly, most reinsurers' regulatory capital positions have absorbed this shock, while their capital management policies— dividend payments and share repurchase programs—remain largely unchanged.

AM Best has conducted liquidity stress tests on rated companies and examined their balance sheet strengths with and without adjustments for unrealized losses on fixed-income holdings. The BCAR scores of virtually all of the top 50 reinsurers continue to fall under the "strongest" and "very strong" categories; however, the balance sheet strength assessments remain unchanged. Operating performance concerns have led to rating actions, but none have been triggered by a deterioration in balance sheet strength.

Negative rating actions related to unrealized investment losses and weaker balance sheets affected mainly small primary writers that were geographically concentrated, had material exposures to property catastrophe risks, and depended heavily on reinsurance. The hard reinsurance market conditions significantly contributed to pressures on their capital position, since targeted, high credit quality reinsurance covers were not always available. Regulatory restrictions to increase premium rates added to the equation, with cedents in specific jurisdictions unable to share the higher reinsurance costs with policyholders.

Consolidation at the Top Is More Likely than a New Class of 2023

Despite historically high rates, depleted capital buffers, and primary writers unhappy with the risk retention levels they are being forced to hold, we do not expect a new class of global reinsurers to emerge anytime soon.

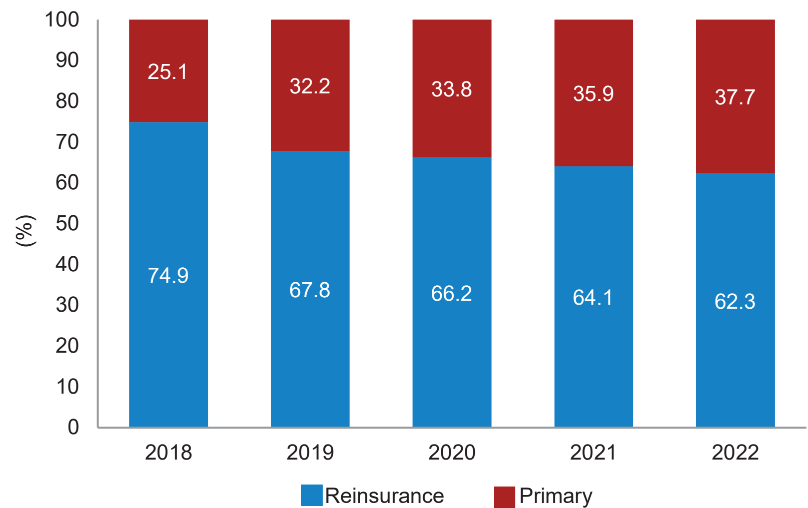
First, rate increases are the result of sustained technical underperformance rather than a sudden decline in available capital. Second, the current decline in shareholders' equity, while considerable, is manageable to the extent that asset liability management and liquidity measures remain sound. AM Best believes this is broadly the case across the segment. Third, in previous years, primary writers' ability to generate healthy profit margins at the same time reinsurers struggled to do so was arguably attributable to the availability of low-cost reinsurance. Risk retention levels had been unchanged at levels too low despite claims inflation and rising frequency. Gradually, reinsurers became exposed to working layers they may not have intended to assume in the first place. A prolonged period of low interest rates, scarce investment opportunities, and pressure to deploy excess capital by reinsurers contributed to the problem.

Reinsurers have been shifting their capital away from property catastrophe risks, by either moving up in the protection tower and tightening terms and conditions or diversifying into lines considered more stable or profitable such as casualty or specialty. Pure reinsurers, for which property catastrophe risks are dominant, have become rare.

The shift from reinsurance to primary business is not new. Back in 2015, AM Best reported that the gross premiums written reinsurance share of the largest, publicly traded Bermuda and European groups had declined from 68% to 60% between 2004 and 2014. This trend seemed more pronounced after the large losses in 2011-2012, when, in a market with abundant capital, reinsurance rates barely moved. For the 25 most important global reinsurance groups, we have re-estimated that share, based on net premiums earned, to have dropped, from 75% to 62%, between 2018 and 2022 (**Exhibit 5**).

A diversified business model is the best way to manage the cycle and optimize profit margins. Steep rate increases at the January 2023 renewals have continued into the year, albeit at a slower pace. Whether those who were most vocal about diminishing their property catastrophe exposures will follow through remains to be seen. Even if property cat reinsurance exposures were to expand, tighter terms and conditions and avoiding lower working layers are here to stay.

Exhibit 5
Global Reinsurance — Primary Insurance vs. Reinsurance NPE Allocations



Source: AM Best data and research

Capitalization levels remain solid, but investor fatigue in both the traditional and ILS markets is real. Given the short-term and floating-rate nature of the underlying securities, ILS funds have not been materially affected by higher interest rates. However, total volumes have stalled since 2018. AM Best does not expect material new additions to net alternative capacity over the short term, even with much better pricing terms. Years-long disappointing operating results and rising interest rates have created conditions that make other options more attractive than reinsurance, especially on a risk-adjusted basis.

The prospects for an influx of net capital sufficient to translate into a Class of 2023 are limited while these conditions hold. Investors will likely demand a strong commitment to underwriting discipline, as well as flexibility to adjust to changing conditions in the business cycle. Well established, diversified companies with a proven track record are better positioned to succeed in this effort than start-ups pressured to meet top-line targets.

The Protection Gap, Insurability, Affordability, and Innovation

The reinsurance segment plays a key role in ensuring effective capital management by protecting cedents' balance sheets from claims volatility. From a market perspective, this is much more efficient than simply smoothing–or even propping up–technical results to benefit primary writers who may have become overdependent on reinsurance. Volatility at the right price is at the core of reinsurance, but volatility implies a combination of bad and good years, not simply heightened loss frequency. AM Best welcomes reinsurers' cautious approach to allocating capital. We are confident that the current market dynamics sufficiently pressure the segment to maintain underwriting discipline.

Reinsurers provide technical support and expertise to the insurance market to develop new products and narrow the protection gap, defined as the difference between economic and insured losses. In its 2023 sigma report, Swiss Re estimated the global catastrophe protection gap at USD151 billion—much higher than the average USD110 billion of global insured cat losses between 2017 and 2021, a very active claims period by historical standards.

These numbers refer only to traditional property catastrophe risks. As knowledge and technology become even more dominant components of the global economy, new and often complex risks emerge. In a 2021 paper, McKinsey estimated a 60/40 split between tangible and intangible investments in

the US and in ten European countries, a major change from 25 years ago, when the split was closer to 30/70. Intangible investments include intellectual property, research, technology, software, and human capital. Cyber, intellectual property, and reputational risk are examples of covers whose importance is rising, but several others have been emerging or developing.

The protection gap likely will widen owing to climate trends, which make weather-related events harder to predict, as well as emerging risks related to the knowledge economy, for which comprehensive insurance solutions are not yet obvious. And closing that gap remains a challenge. Insurability becomes an issue if frequency or severity is too high, prevention measures are too costly or impractical, modeling resources are insufficient, or even when a technical price can be confidently estimated but is unaffordable.

One way to narrow that gap is through public-private initiatives. These may involve compulsory covers to prevent adverse selection, funding or mandatory prevention measures, centralized data gathering systems to assess risk, or subsidized premiums. A number of catastrophe-related programs—floods, earthquakes, crop, and microinsurance—operate that way.

Public participation has some obvious restrictions, including political will and limited funding. Soon after the start of the COVID-19 pandemic, a number of European insurers and associations suggested a government-sponsored scheme with private sector participation. The initial enthusiasm was short-lived. In discussions with a number of key market participants, we heard views that a catastrophic cyber event would be too big to be covered without government involvement.

Regardless of public sector initiatives, the risk environment for the global economy has become more complex. Even as capital is being cautiously deployed, reinsurers are trying to keep pace with those developments and take advantage of new opportunities. Innovation is key. A knowledge- and technology-based economy clearly implies emerging risks—as well as technology-based solutions.

These solutions are being increasingly applied to risk prevention, which may be key to determining whether a risk is insurable or not. The same can be said about modeling, which, while continuously evolving, has been applied to natural catastrophe perils. Its principles are now being extended to cyber risks and product liability. Even if not mechanical pricing tools, they are an invaluable resource to better understand the nature of risks and guide investor appetite.

Finally, innovation does not always have to be directly linked to technology. The ILS markets have shown that, through clever product design, it is possible to slice and dice risks and determine the elements that should be self-retained, insured, reinsured, or transferred to the capital markets or a government-sponsored backstop. Ongoing refinements may help widen the scope of coverage to new risks, while catering to different types of investor appetites and expanding the role of the segment in the broader economy.

Global Reinsurance Composite

AM Best constructs a Global Reinsurance Composite by aggregating reinsurers across the global market, leveraging the group financial statements for the 25 largest reinsurers groups. The list of companies comprising the composite is reviewed annually to reflect mergers and acquisitions or other impactful events. To keep data consistent year over year, previous years' data is adjusted when companies are added/removed from the composite.

The same methodology is applied to the European Big Four, Lloyd's, US & Bermuda, and the Asia-Pacific Composite. They represent the group level financials of major reinsurers in those markets.

Appendix 1

Global Reinsurance – Global Market Financial Indicators

	5-Yr Avg	2022	2021	2020	2019	2018
NPW Growth (Total) (%)	7.7	9.4	8.2	10.1	8.2	2.4
NPW Growth (P/C only) (%)	9.9	13.7	11.7	9.8	7.8	6.6
Reinsurance % of NPE	67.1	62.3	64.1	66.2	67.8	74.9
Shareholders' Equity Growth (%)	-0.4	-17.0	0.9	7.3	11.8	-5.0
Loss Ratio	67.8	65.9	65.5	72.8	66.8	68.0
Expense Ratio	31.9	29.7	30.9	31.6	33.2	33.9
Combined Ratio	99.7	95.6	96.4	104.5	100.1	101.9
Reserve Development – (Favorable)/Unfavorable (%)	-2.6	-1.8	-4.2	-2.5	-1.0	-3.6
Net Investment Ratio[1]	10.9	6.5	10.2	9.7	17.3	10.8
Operating Ratio	88.8	89.1	86.2	94.8	82.8	91.1
Return on Equity (%)	4.6	0.8	9.0	2.4	9.7	1.0
Return on Revenue (%)	3.6	0.6	7.1	1.9	7.4	0.9
NPW (P/C only) to Equity (End of Period)	86.2	116.4	85.0	76.7	75.0	77.8
Net Reserves to Equity (End of Period)	259.1	300.0	247.3	245.1	240.0	263.0
Gross Reserves to Equity (End of Period)	302.6	361.1	293.7	283.4	270.7	303.9

[1] Net investment ratio based on PC NPE.
Ratios may vary slightly due to rounding.
Source: AM Best data and research

Appendix 2

Global Reinsurance – US & Bermuda Market Financial Indicators

	5-Yr Avg	2022	2021	2020	2019	2018
NPW Growth (Total) (%)	15.0	15.7	20.5	9.0	11.0	18.7
NPW Growth (P/C only) (%)	14.9	17.6	19.8	9.2	11.0	16.7
Reinsurance % of NPE	65.3	58.1	62.7	66.0	68.4	71.4
Shareholders' Equity Growth (%)	2.7	-9.4	5.6	7.9	14.5	-5.2
Loss Ratio	67.3	64.4	65.9	71.4	65.5	69.4
Expense Ratio	30.6	28.5	30.1	30.5	31.8	32.4
Combined Ratio	98.0	92.9	96.0	101.9	97.3	101.7
Reserve Development – (Favorable)/Unfavorable (%)	-3.4	-1.8	-6.2	-3.3	-2.1	-3.7
Net Investment Ratio[1]	8.2	6.6	7.9	7.9	10.4	8.2
Operating Ratio	89.8	86.3	88.1	94.0	86.9	93.5
Return on Equity (%)	4.7	-2.4	10.8	4.4	12.1	-1.5
Return on Revenue (%)	5.5	-2.9	12.3	5.7	14.4	-2.2
NPW (P/C only) to Equity (End of Period)	68.8	91.1	70.2	61.0	60.2	61.4
Net Reserves to Equity (End of Period)	124.1	144.3	119.5	115.8	119.5	121.3
Gross Reserves to Equity (End of Period)	168.0	207.0	170.5	157.2	144.3	160.9

[1] Net investment ratio based on PC NPE.
Ratios may vary slightly due to rounding.
Source: AM Best data and research

Appendix 3
Global Reinsurance – European Big Four Market Financial Indicators

	5-Yr Avg	2022	2021	2020	2019	2018
NPW Growth (Total) (%)	5.10	6.03	1.91	12.14	8.18	-2.75
NPW Growth (P/C only) (%)	8.58	12.31	6.03	12.93	7.47	4.15
Reinsurance % of NPE	88.32	88.50	88.30	90.30	88.50	86.00
Shareholders' Equity Growth (%)	-8.78	-37.77	-6.77	3.23	9.98	-12.59
Loss Ratio	70.1	70.7	68.3	73.8	69.6	68.1
Expense Ratio	30.7	29.0	29.8	30.2	31.8	32.6
Combined Ratio	100.8	99.7	98.1	103.9	101.4	100.7
Reserve Development – (Favorable)/Unfavorable (%)	-1.97	-1.02	-3.34	-2.09	-0.17	-3.25
Net Investment Ratio[1]	15.8	9.57	14.22	12.49	26.48	16.09
Operating Ratio	84.98	90.12	83.83	91.45	74.91	84.61
Return on Equity (%)	6.4	8.3	8.1	2.4	7.2	5.8
Return on Revenue (%)	3.0	3.1	3.9	1.2	3.6	3.4
NPW (P/C only) to Equity (End of Period)	116.5	198.0	109.7	96.5	88.2	90.2
Net Reserves to Equity (End of Period)	540.4	792.8	508.4	473.7	440.3	486.9
Gross Reserves to Equity (End of Period)	568.6	837.4	535.4	493.9	461.2	515.0

[1] Net investment ratio based on PC NPE.
Ratios may vary slightly due to rounding.
Source: AM Best data and research

Appendix 4
Global Reinsurance – Lloyd's Market Financial Indicators

	5-Yr Avg	2022	2021	2020	2019	2018
NPW Growth (Total) (%)	4.5	8.7	9.4	4.2	3.2	-2.8
NPW Growth (P/C only) (%)	4.5	8.6	9.5	4.3	3.2	-3.0
Reinsurance % of NPE	33.2	35.1	37.0	33.0	30.0	31.0
Shareholders' Equity Growth (%)	6.0	-1.0	7.2	15.0	12.3	-3.5
Loss Ratio	63.5	57.5	58.0	73.2	63.4	65.4
Expense Ratio	37.0	34.4	35.5	37.2	38.7	39.2
Combined Ratio	100.5	91.8	93.5	110.3	102.1	104.6
Reserve Development – (Favorable)/Unfavorable (%)	-2.5	-3.6	-2.1	-1.8	-0.9	-3.9
Net Investment Ratio[1]	4.9	-1.3	5.5	6.5	10.0	3.9
Operating Ratio	95.6	93.2	88.0	103.8	92.1	100.6
Return on Equity (%)	1.4	-1.9	6.6	-2.9	9.0	-3.7
Return on Revenue (%)	1.4	-2.6	8.2	-3.1	8.6	-3.9
NPW (P/C only) to Equity (End of Period)	84.7	87.2	79.5	77.8	85.8	93.4
Net Reserves to Equity (End of Period)	132.7	130.0	121.9	129.4	133.2	149.2
Gross Reserves to Equity (End of Period)	201.7	204.3	189.6	194.2	199.9	220.4

[1] Net investment ratio based on PC NPE.
Ratios may vary slightly due to rounding.
Source: AM Best data and research

Appendix 5

Global Reinsurance — Asia-Pacific Market Financial Indicators

	5-Yr Avg	2022	2021	2020	2019	2018
NPW Growth (Total) (%)	10.3	5.4	7.7	12.9	23.3	2.2
NPW Growth (P/C only) (%)	10.7	8.1	6.4	14.4	17.2	7.2
Reinsurance % of NPE	93.2	94.3	94.0	93.4	93.4	91.0
Shareholders' Equity Growth (%)	4.2	-9.5	0.6	18.0	8.3	3.6
Loss Ratio	73.1	75.3	73.9	73.9	72.3	70.3
Expense Ratio	27.9	25.5	27.3	27.5	28.9	30.1
Combined Ratio	101.0	100.8	101.1	101.3	101.2	100.4
Net Investment Ratio[1]	6.4	5.5	7.0	7.0	6.5	6.0
Operating Ratio	94.6	95.3	94.1	94.3	94.7	94.4
Return on Equity (%)	4.8	1.8	7.0	5.0	5.4	4.8
Return on Revenue (%)	2.9	1.0	4.1	2.9	3.2	3.2
NPW (P/C only) to Equity (End of Period)	162.2	193.1	161.7	152.9	157.7	145.7
Net Reserves to Equity (End of Period)	215.3	270.7	222.3	194.5	196.3	192.4
Gross Reserves to Equity (End of Period)	273.3	337.2	279.8	253.7	250.9	245.0

[1] Net investment ratio based on PC NPE.

Ratios may vary slightly due to rounding.

Source: AM Best data and research

World's 50 Largest Reinsurers

Munich Re once again sits atop the largest reinsurer rankings

Principal Takeaways

- Munich Re held on to the top spot in 2022, followed by Swiss Re, Hannover Rück SE, and Canada Life Re, the same as in 2021.
- For many reinsurers, premium growth was driven primarily by strong rate increases, not exposure growth.
- Exchange rate fluctuations have become a concern, as currency translation losses have impacted premium volume for a number of reinsurers.

Pricing in 2022 remained strong for the reinsurance segment, as measured by AM Best's annual ranking of the world's 50 largest reinsurance groups. Total gross reinsurance premiums written increased by 2.6% to USD363.6 billion, from USD354.4 billion in 2021. For many reinsurers, premium growth was driven primarily by strong rate increases, not exposure growth. Nevertheless, global investment market turmoil and more frequent and severe global catastrophe losses, compounded by severe secondary peril losses, resulted in many reinsurers failing to meet their cost of capital in recent years. Reinsurers' boards of directors and senior management continued to be under pressure to improve operating performance, to bridge the gap between the industry's operating performance and the escalating cost of capital, given the sharp rise in the risk-free rate. The equity risk premium of reinsurers is expected to increase given that operational volatility has worsened. All of these factors have resulted in significant hardening of premium rates, as well as terms and conditions, in the reinsurance market. Premium rate increases have continued for both property and casualty reinsurance lines in 2023 and will likely do so through 2024.

World's Top Four Reinsurers the Same as Last Year

The four largest reinsurers in the year-end 2022 ranking were the same as in 2021 (**Exhibit 1**). Munich Re, which rose to first place in 2020, held on to the top spot. For year-end 2022, the carrier posted reinsurance GPW growth of 9.6%, as Munich Re's reinsurance business continued to benefit from persistent hard market conditions. Growth was driven largely by the significant premium rate growth in the group's property/casualty business. Non-life premiums grew 12.6% in 2022, and life premiums, a more modest 2.6%. The group reported that the key growth drivers in its non-life segment were broad-based across its global book of reinsurance business.

Swiss Re, the second-largest reinsurer for 2022, experienced slight growth in its P/C reinsurance premium while its life and health reinsurance premium remained flat. The 2.7% growth in P/C reinsurance premium was primarily the result of reinsurance rate increases. Swiss Re noted that, despite a slight drop in nominal life and health segment reinsurance premium for 2022, factoring out foreign exchange rate volatility would have yielded moderate premium growth.

Munich Re and Swiss Re together accounted for 25.1% of the top 50 GPW in 2022, up from 24.3% in 2021. This growth is especially notable given the euro's depreciation. The 10 largest reinsurers on the list accounted for 69.4% of total reinsurance GPW, up from 67.9% at year-end 2021, and slightly higher than the 68.5% at year-end 2020. Despite this concentration, the global

Analytical Contacts:
Christopher Pennings, Oldwick
+1 (908) 882-2237
Christopher.Pennings@ambest.com

Dan Hofmeister, Oldwick
+1 (908) 882-1893
Dan.Hofmeister@ambest.com

Carlos F. Wong-Fupuy, Oldwick
+1 (908) 882-2438
Carlos.Wong-Fupuy@ambest.com

Steve Chirico, Oldwick
+1 (908) 882-1694
Steven.Chirico@ambest.com

2023-102.2

Exhibit 1

Top 50 Global Reinsurers, Ranked by Unaffiliated Gross Premium Written, 2022

(USD millions)[1]

		Reinsurance Premiums Written				Total Share-holders'	Ratios[3]		
		Life & Non-Life		Non-Life Only					
Ranking	Company Name	Gross	Net	Gross	Net	Funds[2]	Loss	Expense	Combined
1	Munich Reinsurance Company	51,331	48,550	36,729	35,290	22,638	66.5	29.7	96.2
2	Swiss Re Ltd.	39,749	37,302	23,763	22,826	12,809	74.2	28.2	102.4
3	Hannover Rück SE[4]	35,528	29,672	25,884	21,637	9,339	71.9	27.9	99.8
4	Canada Life Re	23,414	23,414	N/A	N/A	23,863	N/A	N/A	N/A
5	Berkshire Hathaway Inc.[5]	22,147	22,147	16,962	16,962	480,617	66.1	20.3	86.4
6	SCOR S.E.	21,068	17,055	10,695	8,782	5,481	84.1	29.1	113.2
7	Lloyd's[6, 7]	18,533	14,162	18,533	14,162	47,766	63.6	30.8	94.4
8	China Reinsurance (Group) Corporation	16,865	15,395	7,688	7,207	13,675	68.2	28.1	96.4
9	Reinsurance Group of America Inc.	13,823	13,052	N/A	N/A	4,145	N/A	N/A	N/A
10	Everest Re Group Ltd.	9,316	8,983	9,316	8,983	8,441	69.2	27.1	96.4
11	RenaissanceRe Holdings Ltd.	9,214	7,196	9,214	7,196	9,111	68.5	29.1	97.6
12	PartnerRe Ltd.	8,689	7,544	7,015	5,899	6,288	59.0	27.6	86.7
13	Korean Reinsurance Company	7,804	5,797	6,129	4,195	2,227	82.3	15.9	98.2
14	Arch Capital Group Ltd.	6,948	4,924	6,948	4,924	12,910	64.9	27.3	92.2
15	MS&AD Insurance Group Holdings, Inc.[8, 9, 12]	5,153	N/A	5,153	N/A	13,503	N/A	N/A	98.7
16	General Insurance Corporation of India[8]	4,519	4,108	4,332	3,927	8,211	90.3	17.6	107.9
17	Sompo International Holdings, Ltd.	4,119	3,715	4,119	3,715	8,461	60.0	30.1	90.1
18	MAPFRE RE, Compania de Reaseguros S.A.[10]	3,849	3,273	3,201	2,631	2,020	70.4	26.7	97.1
19	Assicurazioni Generali SpA	3,822	3,822	1,372	1,372	19,365	70.8	30.4	101.2
20	Odyssey Group Holdings, Inc.	3,721	3,595	3,721	3,595	5,302	69.7	26.0	95.7
21	AXA XL	3,385	2,812	3,385	2,812	9,334	74.2	32.6	106.8
22	R+V Versicherung AG[11]	3,158	3,158	3,158	3,158	2,560	73.3	25.5	98.8
23	Validus Reinsurance, Ltd.	3,080	2,529	3,080	2,529	3,307	63.4	31.3	94.8
24	Pacific LifeCorp	2,995	2,546	N/A	N/A	6,728	N/A	N/A	N/A
25	The Toa Reinsurance Company, Limited[8, 9]	2,931	2,397	2,090	1,661	2,282	77.8	30.8	108.6
26	Liberty Mutual[13]	2,921	2,567	2,921	2,567	22,208	75.4	32.5	107.8
27	AXIS Capital Holdings Limited	2,629	1,885	2,629	1,885	4,640	71.9	27.2	99.1
28	Peak Reinsurance Company Ltd	2,295	1,758	2,113	1,587	1,198	85.7	20.0	105.8
29	Taiping Reinsurance Co. Ltd[9]	2,276	2,035	1,763	1,545	1,417	64.5	38.1	102.6
30	Caisse Centrale de Reassurance	2,206	2,007	2,002	1,813	3,183	152.0	11.8	163.7
31	Qianhai Reinsurance Co., Ltd.	1,841	740	410	319	489	73.8	26.5	100.3
32	Aspen Insurance Holdings Limited	1,807	1,426	1,807	1,426	2,358	61.5	31.5	93.1
33	QBE Insurance Group Limited	1,784	1,580	1,784	1,580	8,992	53.3	6.3	59.6
34	Tokio Marine & Nichido Fire Insurance Co., Ltd.[8, 14]	1,656	1,321	1,656	1,321	16,317	N/A	N/A	95.8
35	Deutsche Rueckversicherung AG	1,610	1,096	1,517	1,043	340	65.4	30.1	95.5
36	American Agricultural Insurance Company	1,556	479	1,556	479	691	80.0	16.6	96.6
37	SiriusPoint Ltd.	1,521	1,200	1,521	1,200	2,083	70.6	35.0	105.5
38	IRB - Brasil Resseguros S.A.	1,493	940	1,284	758	771	103.6	23.1	126.6
39	Allied World Assurance Company Holdings, AG	1,492	1,388	1,492	1,388	4,595	76.9	25.1	102.0
40	Convex Group Limited	1,423	1,139	1,423	1,139	2,266	67.1	17.9	85.0
41	Markel Group Inc.	1,231	1,168	1,230	1,167	13,128	61.2	30.9	92.1
42	Chubb Limited	1,095	943	1,095	943	50,540	72.7	29.9	102.6
43	W.R. Berkley Corporation[15]	1,081	997	1,081	997	6,748	61.3	28.4	89.7
44	Core Specialty Insurance Holdings, Inc.	1,043	777	1,043	777	1,118	82.1	15.9	98.0
45	Hiscox Ltd	1,038	268	1,038	268	2,417	54.8	30.9	85.6
46	Somers Group Holdings, Ltd.	1,019	855	1,019	855	772	71.3	29.2	100.5
47	African Reinsurance Corporation	952	773	861	695	990	59.4	34.9	94.3
48	DEVK Re Group	848	759	841	752	2,614	72.4	27.1	99.4
49	Lancashire	842	629	842	629	1,268	71.0	26.4	97.5
50	Nacional de Reaseguros, S.A.	737	610	619	493	469	72.9	31.2	104.1

[1] All non-USD currencies converted to USD using foreign exchange rate at company's fiscal year-end.

[2] As reported in the group's annual statement.

[3] Non-Life only.

[4] Net premium written data not reported; net premium earned substituted.

[5] Berkshire Hathaway completed its acquisition of Alleghany Corp. on October 19, 2022, and, per US GAAP accounting rules, incurs premiums and expenses only after the acquisition.

[6] Lloyd's premiums are for reinsurance only. Premiums for certain groups in the rankings also may include Lloyd's Syndicate premiums when applicable.

[7] Shareholders' funds includes Lloyd's members' assets and Lloyd's central reserves.

[8] Fiscal year ended March 31, 2023.

[9] Net asset value used for shareholders' funds.

[10] Premium data excludes intragroup reinsurance.

[11] Ratios are as reported and calculated on a gross basis.

[12] Ratios are based on the group's operations.

[13] Ratios are based on Liberty Mutual Insurance Europe SE financial statements.

[14] Ratios are based on the group's domestic business.

[15] Ratios include monoline excess business in addition to reinsurance.

N/A = Information not applicable or not available at time of publication.

Source: AM Best data and research

World's 50 Largest Reinsurers Ranking – Methodology

AM Best's ranking of leading global reinsurers has evolved over time, but the primary intention of the Top 50 exercise is to isolate a reinsurer's business profile using gross premiums written as the metric. To obtain the most accurate figures possible, we make a number of assumptions and adjustments as we navigate through different financial statements, accounting standards, and segment reporting. Capturing only third-party business and excluding affiliated or intragroup reinsurance are perhaps the most essential adjustments.

In reports prior to 2021, AM Best had included primary premiums in the calculation of reinsurance GPW if the percentage was below what AM Best deemed a material threshold (25%). Since 2021, AM Best has excluded all non-reinsurance premium.

AM Best converts all reporting currencies to USD using the foreign exchange rate as of the date of companies' financial statements. Currency exchange rate fluctuations have a meaningful impact on companies' rankings.

Finally, when financial statements and supplements do not provide a proper breakdown of reinsurance premiums, AM Best obtains data directly from the reinsurer. In these instances, the data may be unaudited.

reinsurance market remains highly competitive (**Exhibit 2**).

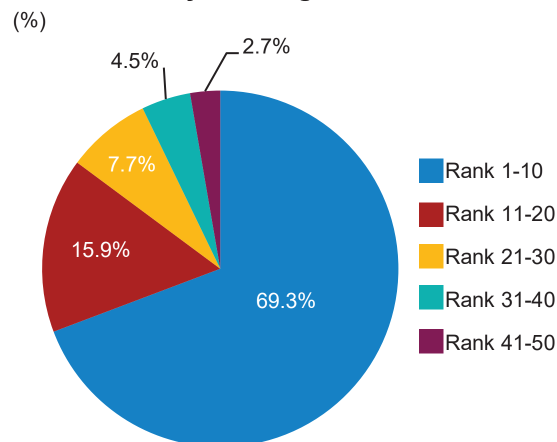
With a 13% increase in premium volume, Hannover Rück SE maintained its number three position. Growth was driven by the group's P/C segment, up 18.9% year over year, supported by favorable pricing trends.

Canada Life Re remained in fourth place. GPW in US dollars declined 0.5% YoY, driven by depreciation of the Canadian dollar. With constant exchange rates, GPW grew 5.4% YoY. Canada Life Re was one of the more notable rises last year, moving from eighth to fourth place, the first time a solely life reinsurance group made the Top 4.

Exhibit 2

Global Reinsurance – Life and Non-Life GPW Distribution by Ranking, Year-End 2022

(%)



Distribution percentages vary slightly due to rounding.
Source: AM Best data and research

Global reinsurers have become somewhat concerned about exchange rate fluctuations. Foreign exchange losses have had a dampening effect on premium volume for Munich Re, as well as many other large reinsurance groups. The foreign currency movements with the greatest impact on global reinsurers in 2022 were the Japanese yen, which depreciated by 8.1% against the US dollar; South Korea's won, which depreciated by 6.2%; the euro, which depreciated by 5.7%; and the Canadian dollar, which depreciated by 5.6%. In contrast, the Brazilian real appreciated by 6.8% against the US dollar.

Sharp Increase in Risk-Free Rate Hurts Balance Sheets

The global reinsurance market has been under significant operating pressure for a number of years, as returns from both the liability and the asset sides of the balance sheet have been significantly below the global reinsurance industry's cost of capital. This was exacerbated by the sharp increase in the risk-free rate in 2022. Many factors came together in 2022 to continue to apply upward pressure on reinsurance rates. The demand for reinsurance from ceding companies is growing primarily because of the inflationary environment. At the other end, the deployment of reinsurance capacity has contracted owing to a confluence of factors such as ongoing catastrophic losses (supplemented by the sharp increase in secondary perils), mark-to-market investment losses, and the operational pressure to generate relevant returns. Until the deployed capacity and demand for reinsurance converge, reinsurance premium rates will continue to be pressured upward. The global reinsurance industry has experienced significant premium rate increases but *not* the influx of capital expected in a reinsurance market out of equilibrium. If substantial net amounts of traditional capital were to enter the industry, there could be a change to the order of the Top 50 Global Reinsurers in the future. However, this is not a scenario that we consider very likely at the moment.

Changes to Rankings 5-10

In contrast to the top four positions, there was some movement among the companies comprising the remainder of the top 10 for year-end 2022. Berkshire Hathaway moved from sixth place to fifth (displacing SCOR), as Berkshire Hathaway's gross life and non-life premium grew 11.3% YoY, driven partially by its acquisition of Alleghany Corporation, which was completed in late 2022. This included Transatlantic Holdings, Inc., which was ranked #14 last year based on year-end 2021 financial statements. GPW for Transatlantic Holdings, Inc. was USD6 billion in 2021.

Lloyd's experienced a small premium decline, although it was mostly driven by the 10.1% depreciation of the pound against the US dollar. Using constant exchange rates for the current and prior year, gross premiums grew approximately 7.2%.

SCOR fell from fifth to sixth place. Its GPW grew 5.7% YoY but largely trailed the growth of the non-life reinsurers in the top 5, resulting in Berkshire Hathaway moving up above SCOR in this year's ranking. SCOR's non-life premiums grew 14.8% while life premiums contracted by 2.3%. Consistent with other non-US top reinsurers, results in 2022 were dampened by foreign exchange depreciation.

GPW for the top 10 reinsurers, including the impact of currency depreciation, grew 4.7%. At exchange rates consistent with those used in 2021, the GPW for the top 10 reinsurers grew 9.5%.

There was significant movement in the rankings below the top 10, driven primarily by shifts in reinsurance portfolios' mix, as companies sought to reduce operating performance volatility and balance sheet vulnerability or increase their exposures to certain lines as rates became increasingly attractive.

The companies with two biggest ranking improvements both have the same ultimate parent: Fairfax Financial Holdings, Ltd. Odyssey Group Holdings, Inc. rose from #27 at year-end 2021 to #20, while Allied World Assurance Company Holdings, AG rose from #44 to #39. Odyssey's GPW grew 30.9%, driven largely by its P/C lines of business in the US, which benefited from new business, expanded relationships with existing clients, and improved pricing. Allied World's GPW grew 24.3% YoY, benefiting from the hard reinsurance market and improved terms and conditions

Multiple companies had smaller but still notable movements. Tokio Marine rose from #38 to #34, with GPW increasing 11.6%, albeit dampened by the 8.0% depreciation of the Japanese yen against the US dollar. Using foreign exchange rates consistent with year-end 2021, non-life GPW rose 21.5% YoY.

Five companies moved up three positions. Arch moved from #17 to #14, driven by 36.4% growth in non-life GPW. MS&AD moved from #18 to #15, driven by 17.3% growth in non-life GPW, albeit dampened by the 8.0% depreciation of the yen. Sompo International Holdings moved from #20 to #17, driven by 6.9% GPW growth. MAPFRE Re moved from #21 to #18, with 3.5% premium growth. Finally, Assicurazioni Generali SpA rose from #22 to #19, with 4.1% premium growth.

Fidelis, a Bermuda-based specialty lines company (and a new entrant in 2021), dropped out of the Top 50. Its GPW for third-party reinsurance has declined as the company is working to reduce its catastrophe exposure. Fidelis had significant property catastrophe losses in both 2021 and 2022, with a combined ratio over 110 in both years. Several other players in the market have signaled plans to diminish their property catastrophe exposure, which may cause significant shifts in future rankings.

Pacific LifeCorp fell from #19 to #24, after rising eight spots last year, driven by a decline of 26.9% in reinsurance assumed. However, overall insurance premiums, according to its consolidated GAAP statements, fell only 13%. Pacific Life ceded less premium in 2022; direct premiums rose 12.9%, offsetting some of the decline on a consolidated basis.

AXA XL fell from #16 to #21, owing primarily to the company's decision to pull back from the property catastrophe reinsurance business as it looks to minimize volatility in its book of business.

Looking forward, it can be expected that Renaissance Re will have a notable ranking change once its acquisition of Validus from AIG is completed. Based on year-end 2022 information, Renaissance Re was #11, up one spot from #12 at year-end 2021, displacing Partner Re. Validus Re moved up slightly, from #24 to #23 YoY. In combination, the two entities had gross life and non-life premiums written of USD12.3 billion at year-end 2022. Consolidated, Renaissance Re would be ranked tenth.

Lancashire came in at #49. Its year-end 2021 data included primary insurance, which, starting in 2021, should have been excluded from the total, according to our methodology. The recast data for year-end 2021 removes Lancashire from last year's Top 50 ranking. Reinsurance GPW, in fact, grew 50% YoY on a comparable basis. The year-end 2022 data for Lancashire excludes primary insurance.

Two new ventures entered the Top 50 list this year. Convex Group Limited, at #40, is a Bermuda-based specialty (re)insurance group with subsidiaries in the UK, Bermuda, Luxembourg, and Guernsey, that was founded in 2019 with USD1.7 billion of initial committed capital. The group wrote USD1.4 billion of gross premium in 2022. Data for Convex in years prior to 2022 were not provided.

Core Specialty Insurance Holdings, Inc., at #44, is a newly recapitalized carve-out of StarStone, which was launched in December 2020, following extensive expansion of equity funding and new executive hires. The company wrote just over USD1 billion in 2022 in mostly multi-peril crop reinsurance. Data for Core Specialty in years prior to 2022 were not provided.

Top 15 Non-Life and Top 10 Life Global Reinsurers

Two sub-rankings for non-life and life comprise reinsurance groups that have a global footprint or business profile (**Exhibits 3 and 4**). These groups not only have diverse product offerings, but also generally maintain a strong geographic spread of risk and provide material capacity to numerous different markets. Although they may not always be dominant market leaders outside of their domestic space, they have all significantly expanded their presence beyond their traditional jurisdictions, seeking geographic and product diversification.

There is no set rule to determine when or how a reinsurer is considered to be global. As market dynamics ebb and flow, so too can a group's profile. Given that some of the world's largest reinsurance groups continue to enter new markets, we expect they will be added to these lists in due time.

In 2022, the list of the top 10 global life reinsurance groups was largely static, with only one change: Korean Reinsurance Company displaced Partner Re for tenth place. Korean Re grew its life reinsurance portfolio significantly, by 52.0%. As of year-end 2022, approximately 60% of Korean Re's life reinsurance premium was sourced in Korea, with the remaining 40% from overseas.

Among the top 15 global non-life reinsurance groups, Hannover Rück overtook Swiss Re for #2 after nearly tripling Swiss Re's non-life premium growth. Most of the changes centered around companies ranked between #11 and #15. Arch Capital Group rose from #15 to #11, displacing Korean Re, which fell slightly, from #11 to #12. Two companies included in last year's top 15 fell off the list this year: AXA XL, which pulled back from property catastrophe reinsurance, and Transatlantic Holdings, Inc., which was consolidated into Berkshire Hathaway. New entrants to the Top 15 include Odyssey Group Holdings Inc., ranked #15, and Sompo International Holdings, Ltd., ranked #14.

Exhibit 3

Top 15 Global Non-Life Reinsurance Groups

(USD millions)

		Non-Life Only		Total Share-holders'	Combined
Ranking	Company Name	Gross	Net	Funds	Ratio
1	Munich Reinsurance Company	36,729	35,290	22,638	96.2
2	Hannover Rück SE	25,884	21,637	9,339	99.8
3	Swiss Re Ltd.	23,763	22,826	12,809	102.4
4	Lloyd's	18,533	14,162	47,766	94.4
5	Berkshire Hathaway Inc.	16,962	16,962	480,617	86.4
6	SCOR S.E.	10,695	8,782	5,481	113.2
7	Everest Re Group Ltd.	9,316	8,983	8,441	96.4
8	RenaissanceRe Holdings Ltd.	9,214	7,196	9,111	97.6
9	China Reinsurance (Group) Corporatior	7,688	7,207	13,675	96.4
10	PartnerRe Ltd.	7,015	5,899	6,288	86.7
11	Arch Capital Group Ltd.	6,948	4,924	12,910	92.2
12	Korean Reinsurance Company	6,129	4,195	2,227	98.2
13	General Insurance Corporation of India	4,332	3,927	8,211	107.9
14	Sompo International Holdings, Ltd.	4,119	3,715	8,461	90.1
15	Odyssey Group Holdings Inc.	3,721	3,595	5,302	95.7

Source: AM Best data and research

Exhibit 4

Top 10 Global Life Reinsurance Groups

(USD millions)

		Life Only		Share-holders'
Ranking	Company Name	Gross	Net	Funds
1	Canada Life Re	23,414	23,414	23,863
2	Swiss Re Ltd.	15,986	14,476	12,809
3	Munich Reinsurance Company	14,602	13,260	22,638
4	Reinsurance Group of America Inc.	13,823	13,052	4,145
5	SCOR S.E.	10,373	8,273	5,481
6	Hannover Rück SE	9,645	8,035	9,339
7	Berkshire Hathaway Inc.	5,185	5,185	480,617
8	Pacific LifeCorp	2,995	2,546	6,728
9	Assicurazioni Generali SpA	2,450	2,450	19,365
10	Korean Reinsurance Company	1,675	1,601	2,227

Source: AM Best data and research

AM BEST SINCE 1899

BEST'S MARKET SEGMENT REPORT

Our Insight, Your Advantage™

Dedicated Reinsurance Capital Fluctuates amid Volatile Market Dynamics

Traditional reinsurance capital declined from USD475 billion at year-end 2021 to USD411 billion at year-end 2022

Principal Takeaways

- Traditional reinsurance capital dropped sharply from year-end 2021 to year-end 2022, but is expected to revert to near-2021 levels in 2023.
- Third-party capital remains relatively flat year over year.
- Significant mark-to-market valuation declines occurred in 2022 for both equity and fixed-income market values.
- Reinsurers are upbeat owing to positive changes in reinsurance rates, as well as improved terms and conditions.

For the past 11 years, AM Best has estimated the amount of global capital dedicated to supporting the reinsurance market. This estimate is a joint effort based on AM Best's estimate of traditional reinsurance capital and Guy Carpenter's estimate of third-party capital.

The global reinsurance market has evolved at varying paces in recent years. In prior reports, AM Best has noted the gradual alignment of interests among traditional reinsurance, third-party, and primary writers. This shifted traditional reinsurance capital toward other lines of business such as primary and specialty insurance, and set a new standard for the prototypical start-up reinsurer. Pure-play reinsurers have become a rarity in the market, and recent price-to-book multiples indicate that investors favor a more balanced organization with more stable operating performance, which is accomplished by writing a mix of volatile and stable business. We expect this trend to continue as reinsurers seek to further diversify, reduce bottom-line volatility, and consolidate throughout the hard market cycle.

In 2022, the market was impacted by significant investment mark-to-market valuation declines in both equity and fixed-income values. Total equity assets among AM Best's global reinsurance composite companies decreased 23.9% in 2022, while total fixed-income assets were down 6.7%. Fixed-income asset values would have decreased more but were partially offset by the redeployment of cash into new, higher-yielding bonds. Although some of the equity devaluation has been recouped in 2023, most reinsurers continue to hold significant mark-to-market losses on their fixed-income portfolios due to the global rising interest rate environment. These losses remain largely unrealized, as organizations have thus far maintained adequate liquidity to allow losses to pull to par over time. Still, the rapid mark-to-market loss increases the industry's capital sufficiency risk, especially if an extreme loss event occurs before underwater bonds recover the market value. Despite efforts by some market participants to scale back their catastrophe exposures in 2022 and 2023, the rapid evolution of underwriting risk in recent years creates a level of residual uncertainty about their ability to achieve these risk mitigation goals.

Analytical Contacts:
Dan Hofmeister, Oldwick
+1 (908) 882-1893
Dan.Hofmeister@ambest.com

Carlos F. Wong-Fupuy, Oldwick
+1 (908) 882-2438
Carlos.Wong-Fupuy@ambest.com

Steve Chirico, Oldwick
+1 (908) 882-1694
Steven.Chirico@ambest.com

2023-102.3

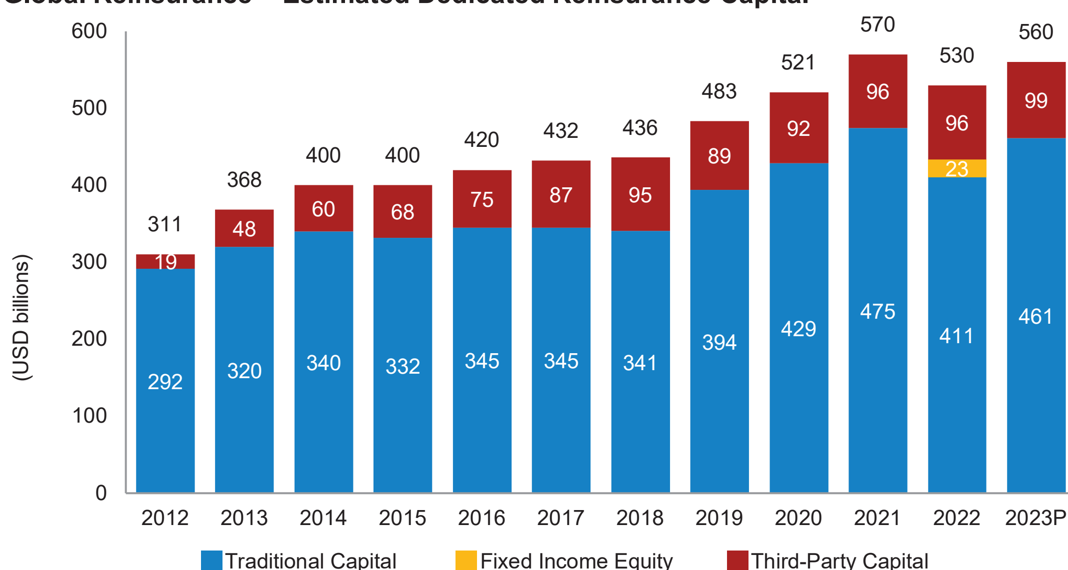
Traditional Reinsurance Capital Suffers Largest Loss in Recent History

AM Best's estimate of dedicated reinsurance capital is intended to provide a useful estimation of the available capital backing the reinsurance market, based on incisive analysis and consistent aggregation methods. Our estimate of traditional reinsurance capital takes into account allocations by business classification. We estimate that, since year-end 2018, traditional reinsurance capital has been less than 60% of the consolidated shareholders' equity of the groups identifying as reinsurance writers. In 2022, this figure came to 50% of shareholders' equity, as reinsurers continued to expand into primary and specialty insurance lines.

Traditional reinsurance capital declined roughly USD64 billion (13.5%) from USD475 billion at December 31, 2021, to USD411 billion at December 31, 2022, on an absolute basis (**Exhibit 1**). This drop was driven primarily by mark-to-market investment losses, albeit partially offset by underwriting gains and an increase in investment income due to significantly higher reinvestment book yields. The mark-to-market investment losses were due to rising interest rates, widening credit spreads, and heightened equity market volatility. Some reinsurers have realized their investment losses and reinvested in higher yielding fixed-income assets; many others have elected to hold these investments and allowed them to pull to par as they reach maturity. For reinsurers that have ample cash liquidity to support their potential shock losses, this results in an understatement of their current capital. In these cases, AM Best has credited some reinsurers' BCARs (Best's Capital Adequacy Ratio) with a measure of fixed-income equity, which anticipates what could be recovered as the bonds mature over time. This category of reinsurance capital was included in the 2022 estimate, bringing total traditional reinsurance capital to USD434 billion, an 8.6% drop from the 2021 estimate.

Although capital contracted rapidly because of largely unrealized investment mark-to-market losses, a potentially more notable driver of the contraction was a diminished appetite to deploy capital writing reinsurance business. The invested asset declines are mainly temporary losses, which we believe will be recouped over the near to mid-term. However, in 2022, some reinsurers decreased the capital allocated

Exhibit 1
Global Reinsurance – Estimated Dedicated Reinsurance Capital



P=Projected
* For reinsurers that have ample cash liquidity to support potential shock losses, the fixed-income equity adjustment captures the amount of capital that AM Best anticipates will be recovered as bonds mature over time.
Sources: AM Best data and research, Guy Carpenter

How We Calculate Total Dedicated Capacity

To calculate the amount of dedicated capacity, we analyze the BCARs of the Top 50 reinsurers. These BCARs quantify an individual company's available capital and required capital. To adjust for organizations that provide capacity in both primary and reinsurance markets, we apply a haircut based on a company's split of business, based on net premiums earned. The haircuts for all 50 companies are then consolidated and grossed up by 10% to account for organizations that are not in the Top 50. The consolidation of these figures results in AM Best's estimate of traditional reinsurance capital, which we then combine with Guy Carpenter's estimate of third-party capital, for total global reinsurance market capital.

AM Best also estimates excess capital in the market. The calculation of excess capital is similar to that of traditional reinsurance capital. The difference is that the BCARs incorporate the impact of a catastrophic event at the company level. We then apply the same haircut, consolidation, and gross-up procedure to the catastrophe-stressed BCARs. The consolidated figures are then examined to determine how much available capital must decline before the market's BCAR ratio falls below 25%, the strongest BCAR measure in AM Best's criteria.

to writing volatile property catastrophe lines of business and instead deployed it to writing primary and specialty insurance lines. From 2017 to 2021, the top 50 reinsurers have had a 51% weighted average of net premium written allocated toward reinsurance lines, which dropped to 46.7% in 2022. There is no clear indication when, or if, this trend will reverse and capital will be redeployed in reinsurance lines.

The significant positive change in reinsurance rates, as well as improved terms and conditions, has reinsurers upbeat despite the mark-to-market capital losses experienced in 2022. Notwithstanding another active catastrophe year in 2022, underwriting results mitigated the impact of investment market turmoil on reinsurers' balance sheets. The combined ratio of 95.6% for AM Best's global reinsurance composite for 2022 was the lowest since year-end 2016, as premium rate growth continued to improve expense ratios. This is anticipated to continue in the near-term, as rising costs of capital and deteriorating loss costs trends create a need for sustainable underwriting margins.

Third-Party Capital Recycles and Stagnates

The third-party capital market has struggled with many of the same issues as the traditional reinsurance segment in recent years, with third-party capital flat since 2018. Deterrents to the introduction of new third-party capital in recent years include loss fatigue, model uncertainty, and opportunity costs for potential new market participants. Additionally, investors were not immune to market volatility in 2022. Although the market volatility did not directly impact the value of insurance-linked securities, it forced asset managers to reevaluate their asset class allocations and rebalance their portfolios, which made justifying any additional investing in new ILS securities difficult. However, tightening terms and conditions have allowed some ILS funds to attract investors and at least replace much of the lost capital.

Guy Carpenter has projected only a slight 3.1% increase in net third-party capital in 2023, to USD99 billion, despite notable capital raises from established participants. The stagnation is driven by two major conflicting factors. The major headwind impacting third-party capital is the performance metrics in recent years, the rise in risk-free rates (higher cost of capital), and the higher risk premium for the segment. However, the segment benefited from tightening terms and conditions, which are characterized by shorter investment horizons, less uncertainty about secondary perils, and lower

expected losses. Expected returns for 2023 have improved meaningfully, although new capital has essentially only replaced the capital that exited the ILS market.

2023: The Hard Market Prevails

The reinsurance market's inability to meet its cost of capital for many years had begun to shift the market in early 2021. The property reinsurance market reached a breaking point as it approached the January 1, 2023, renewal negotiations, which had a detrimental effect on some relationships among reinsurers, cedents, and brokers, as they worked to reach an understanding in the new environment. Reinsurers had the capacity to deploy but would not do so without material changes to attachment points, pricing, and terms and conditions. Despite many cedents accepting the revised rates, several reinsurers elected not to deploy capacity in higher volatility lines of business such as property catastrophe coverage. Although the April, June, and July renewal periods operated more effectively, market participants believed that rates still needed to rise before capital would be redeployed in the reinsurance segment. Through the first half of 2023, reinsurers' underwriting and operating returns have been accretive to capital levels, despite relatively adverse loss experience among primary insurers and heavy second-quarter property catastrophe losses. Reinsurers have begun to benefit from the new standard of higher attachment points and improved interest income on fixed-income investments, which should continue through the remainder of 2023.

Whether significant new capital will enter the market in 2023 is unlikely. Some capital has been raised by established players to support growth in both the reinsurance and primary insurance lines of business, in the range of USD10 billion (although not all of that was allocated to reinsurance). AM Best has not seen any material capital allocated to start-up reinsurers thus far in the cycle, despite interest from potential management teams—one may ask at what point the opportunity becomes too great to pass up. At the moment, higher opportunity costs and risk-free rates are overwhelming the improved pricing opportunities in the market. Our initial estimate for 2023 includes an increase in traditional reinsurance capital of 6.2%. However, this does not include possibility of new reinsurers being formed, as any formations through the second half of 2023 would likely not provide capacity until 2024.

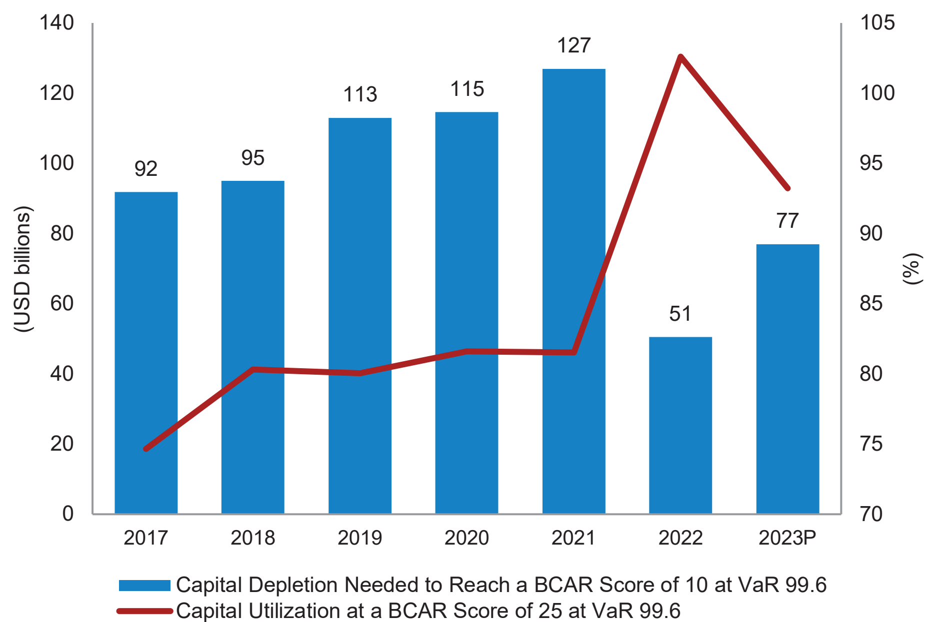
Capital Buffers Depleted amid Market Volatility

Capital levels grew steadily until 2022. Over that same period, however, we witnessed a rise in underwriting risk, as more frequent catastrophic events and uncertainty about social inflation generated lackluster underwriting margins throughout the industry. This increased the level of required risk-adjusted capital more quickly than the level of traditional reinsurance capital did. We calculate capital utilization by examining required risk adjusted capital levels in comparison to available capital levels. Capital utilization approximates how much of the available capital of the market is required to maintain risk-adjusted capitalization at the strongest BCAR of 25% at a 99.6% VaR (Value at Risk) level. Additionally, we track how much capital depletion is needed to reduce BCAR to 10% at 99.6% VaR. This measure approximates the tolerance afforded to companies in extreme stress scenarios (**Exhibit 2**).

At year-end 2022, traditional reinsurers' capital utilization sharply increased to 103% from 82%, driven by a 10.7% increase in required capital, which was compounded by the decreases in available capital previously noted. While capital utilization exceeding 100% indicates that risk-adjusted capitalization levels have dropped below the "strongest" measurement, AM Best expects this to reverse in the near term as some of the market's unrealized losses are recouped in 2023. AM Best has not had any rating actions related to various reinsurers' balance sheet strength assessments in 2023, as much of the concerns focused around operating performance. However, in the interim, if the market liquidates investments to pay for large claims, it would crystallize some of the capital stress currently viewed as short-term or transitory.

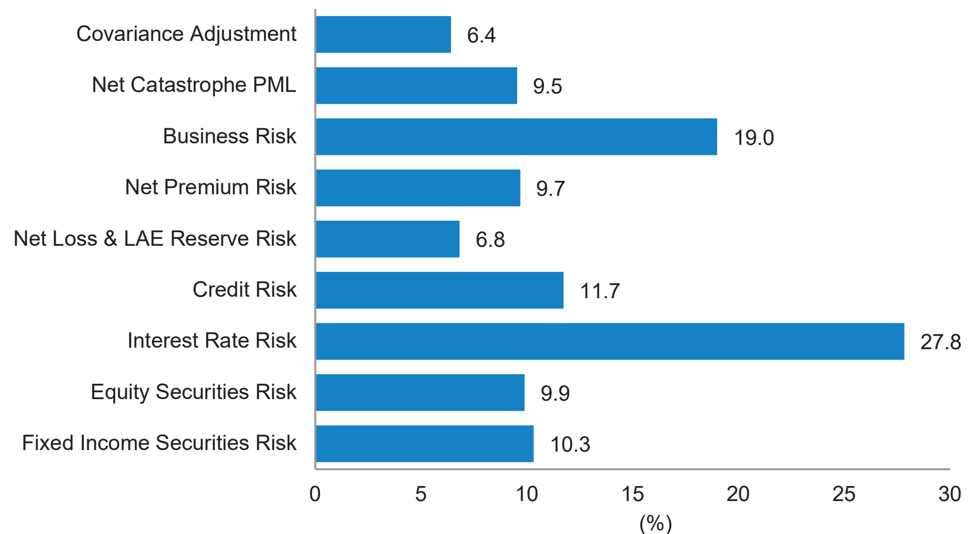
Required capital, as measured in BCAR at the VaR 99.6% level, can be broken down into eight separate risk factors—fixed-income securities, equity securities, interest rate, credit, net loss & loss adjustment expense (LAE) reserves, net premiums, business, and catastrophic—with an additional covariance adjustment that reduces the total level of required capital, taking into account underlying correlations (**Exhibit 3**). In 2022, the largest relative increase in risk (27.8%) relates to interest rate risk. This is not surprising as PMLs (probable maximum losses) have increased by 9.5%, at the same time as fixed-income investments are down 6.7% year over year. Companies would be required to liquidate far more bonds and realize losses in the event of a shock loss. Furthermore, despite devaluations throughout the year, fixed-income securities risk is up 10.3%, and equity securities risk, 9.9%, driven by greater volatility in underlying assets, as well as further deployment of cash into new, higher-yielding assets.

Exhibit 2
Global Reinsurance – Capital Utilization



Source: AM Best data and research

Exhibit 3
2023 Required Capital Growth by Risk Factor



Source: AM Best data and research

AM Best anticipates that, through the remainder of 2023, some of the investment losses will dissipate, and capital will be generated through operating returns. Our projection includes a 6.2% increase in capital levels, augmented by a 10% decrease in required capital. The reduction in required capital is anticipated from a drop in PMLs, as reinsurers further distance themselves from lower-level property layers. Additionally, the economic recovery should help raise investment values and lower interest rate risk, which should result in an increase in available capital. How much capital will reenter the market

outside of traditional underwriting earnings and investment gains is uncertain. Established players have raised capital, but that is not strictly dedicated to reinsurance. New participants have been unable to raise capital despite strong business plans and management team support. The length of this hard market will likely depend on how quickly investor appetite changes for funding reinsurers.

Meeting Cost of Capital a Challenge for Some Reinsurers

Reinsurers that can balance long-term strategies with effective tactical decisions and sound risk management can still meet, even exceed, return expectations

Principal Takeaways

- Despite significant price increases, achieving hurdle rates will be difficult amid economic and social inflation, as well as escalating weather losses.
- Because of rising interest rates and equity market volatility, the cost of capital is higher than the historical average.
- Reinsurers that can balance long-term strategies with effective tactical decisions and sound risk management can still meet—or even exceed—return expectations.

Sound risk management, strategic use of technology, and a maturing partnership with alternative capital have subdued the cyclical nature of the reinsurance market, by shrinking the extremes on both sides. To meet or remain above the cost of capital, reinsurers must also remain flexible to respond to market conditions and balance short-term opportunistic moves (e.g., taking advantage of market conditions, retreating when pricing is not right) with strategic long-term goals (e.g., maintaining relationships, building expertise, and being relevant and dependable over the long run).

Rising interest rates have elevated the cost of debt in recent years, as has the cost of equity, owing to stock market volatility. Reinsurers have also been witnessing severe volatility due to weather events and an inflationary environment. The reinsurance industry's weighted average cost of capital decreased from 9.44% in 2010 to 6.38% in 2019, before spiking to 9.16% in 2021. It declined again in 2022, but reinsurers are still struggling to generate returns above the cost of capital due to economic uncertainty, as well as rising climate risk, and economic and social inflation.

A shortage of property catastrophe capacity, concerns about prior year reserve development, economic and social inflation, and a dearth of new capital have driven a hardening of the reinsurance market. Rates have increased significantly for property catastrophe exposures. Guy Carpenter calculated a 30% increase in Rate-On-Line (ROL) at January 1, 2023, for both US and European property catastrophe reinsurers. The hardening market points to somewhat more sustainable pricing momentum, which could help reinsurers meet their cost of capital over the medium term. However, economic and social inflation and the growing frequency and severity of weather events will worsen the uncertainty. Even as capital comes back cautiously in this environment, we are not seeing substantial erosion of pricing conditions.

Dispersion of Returns Reflects Differences in Risk Management

The spreads on reinsurers' return on capital employed (ROCE) have varied over the past 14 years. In 2011, a severe tornado season in the United States, earthquakes in New Zealand and Japan, and floods in Thailand resulted in global insurance losses of approximately $150 billion. From 2011 through 2016, the reinsurance industry's returns on capital employed were pretty steady, despite weather events such as Superstorm Sandy in 2012.

Analytical Contacts:
Sridhar Manyem, Oldwick
+1 (908) 882-2087
Sridhar.Manyem@ambest.com

Helen Andersen, Oldwick
+1 (908) 882-1629
Helen.Andersen@ambest.com

2023-102.4

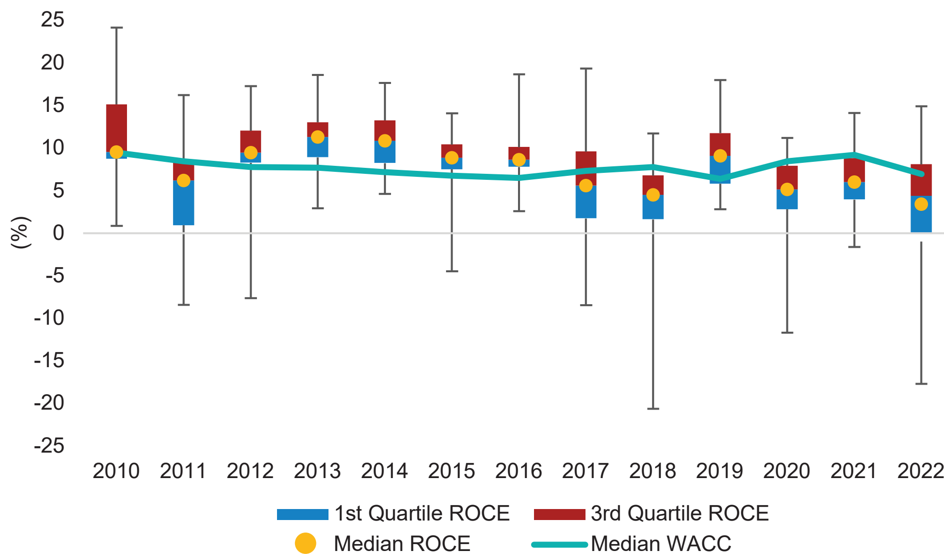
Definitions: Cost of Capital, Cost of Equity, and Cost of Debt

A company's cost of capital is the opportunity cost for investors as they contemplate a diversified portfolio. It is the minimum return that investors expect from a company based on the level of risk it takes. The cost of capital is based on the principle of substitution. An investor will not invest in an asset if a comparable asset is more attractive, including consideration for risk. The cost of capital varies across time, depending on economic and the risk conditions of the asset class (e.g., reinsurance) vis-à-vis other asset classes.

The cost of equity is the minimum return that equity investors expect for their investment in a company's stock. The cost of equity is usually calculated using traditional finance methods such as the capital asset pricing model, which postulates that investors get paid for systematic risk they take for investing in a company's stock. If an investor has a diversified portfolio, idiosyncratic risk gets diversified away. The cost of equity is usually calculated as a spread above the risk free rate—therefore, interest rates influence the final result. Stock market volatility and economic conditions also play an important role.

The cost of debt is easier to compute—it is simply the interest rate a company would expect to pay on its borrowings. The weighted average cost of capital (WACC) is a blended rate and is usually used as a hurdle rate or a minimum rate that companies need to earn on its investments.

Exhibit 1
Reinsurers – ROCE Dispersion



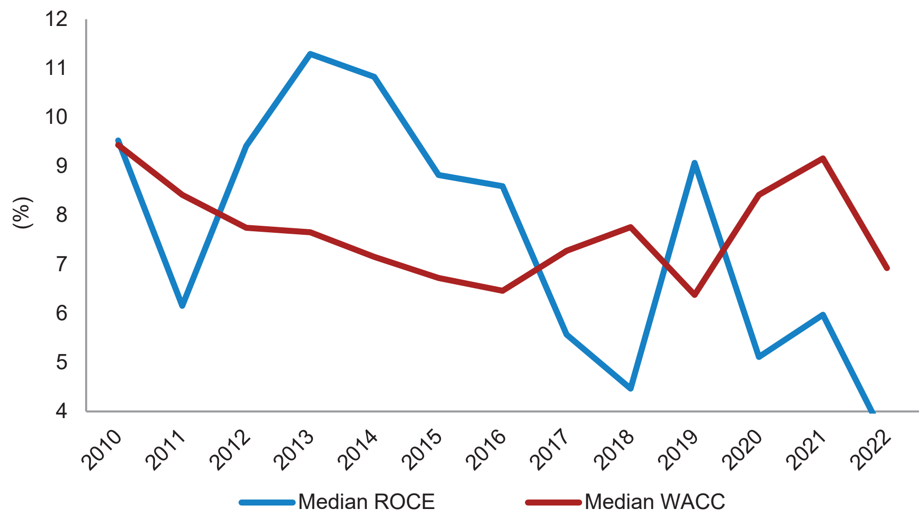
Source: Bloomberg

"A rising tide floats all boats. Only when the tide goes out do you discover who's been swimming naked"—the second sentence of Warren Buffet's quote is especially true when it comes to reinsurers' ability to manage catastrophic events. Generally, in years when losses were more severe, the variance in the spread of returns was wider, and more insurers were able to meet the median cost of capital. In years with higher losses, even relatively higher performing reinsurers had returns below the median cost of capital (**Exhibit 1**). For example, in 2019, reinsurers' returns ranged from 3% to 17%. In 2022, a year with high catastrophe losses, returns ranged from -15% to 11%, which included the impact of rising interest rates on unrealized fixed-income losses. In years such as 2014, when global insured

catastrophe losses were below average (less than $35 billion according to various estimates), the range of returns was between 3% and 17%, while in a year like 2017 (industry losses estimated to be more than $150 billion), the variance was much larger, between -5% and 17%.

Exhibit 2

Reinsurers' Median ROCE Compared to Median WACC

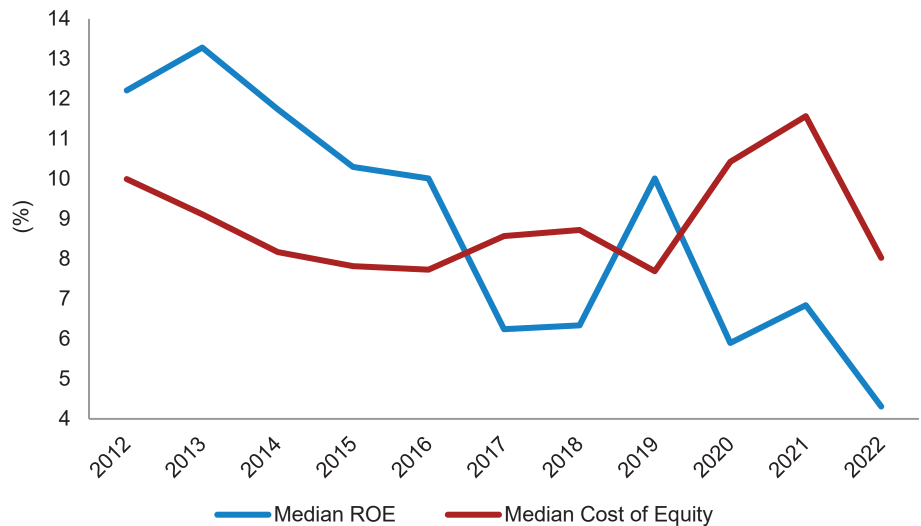


Source: Bloomberg

However, the level of volatility varies among reinsurers. Those with portfolio diversification and robust risk management are better positioned to more effectively respond to changing market conditions. Reinsurers in the third quartile experience more volatility due to the lack of effective risk management and exposures to risk outside investors' risk appetite. Reinsurers in the first quartile tend to focus on effective risk management, appropriate portfolio concentration, and diversification.

Exhibit 3

Reinsurers' Median ROE Compared to Median Cost of Equity



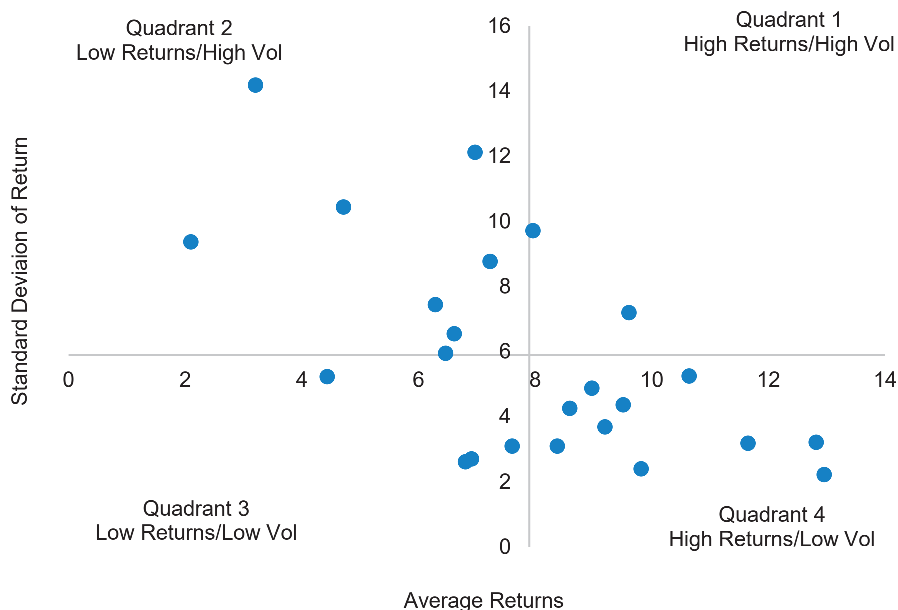
Source: Bloomberg

Effective risk management programs responsive to market conditions and cycle management provide companies with the agility necessary to take advantage of good conditions, as well as the foresight to walk away when conditions are not conducive to profitability. Effective communication of a reinsurer's risk profile is also key to managing investors' expectations. They are more likely to see a narrower spread of returns, often meeting or exceeding the cost of capital. These reinsurers do a much better job of communicating their risk profiles to investors. When losses are incurred, investors are not surprised.

Severe Catastrophe Losses Impact Returns

For reinsurers that take on high severity risks, meeting the cost of capital during years of severe catastrophe losses is a challenge, which is especially evident when comparing the median ROCE and the median weighted average cost of capital (WACC) (**Exhibit 2**). The years when returns exceed the cost of capital are generally those with a lower frequency and severity of natural disasters.

Exhibit 4
Average Returns vs. Volatility of Returns



Source: Bloomberg

However, since 2019, reinsurers have been unable to meet their cost of equity. Reinsurers were challenged by severe catastrophe losses in 2020-2022 and by rising interest rates in 2022 (**Exhibit 3**). Catastrophe losses have become more severe in recent years, as both traditional catastrophic events and growing secondary perils plague the industry.

Returns dropped in 2017 and 2018 and again in 2020 and 2022. According to Swiss Re, insured catastrophe losses in 2022 exceeded $100 billion for a second year, driven primarily by major losses due to Hurricane Ian and other extreme weather events.

In the low interest rate environment of previous years, investor interest in reinsurance through traditional equity exposures, third-party capital, and insurance-linked securities (ILS) grew as investors sought to diversify their portfolios. However, reinsurers' failure to consistently meet their cost of capital in recent years has tested investors' risk appetite. The insurance-linked securities markets have also been tested in recent years due to severe losses and trapped capital, and continue to experience a significant flight to quality when allocating capital.

Managing Risk/Return Trade-Off Impacts Cost of Capital

Reinsurers look to optimize their cost of capital and maximize their returns while taking risks commensurate with their risk appetites. Significant volatility of returns can indicate inefficiencies in managing risks, resulting in a higher cost of capital. **Exhibit 4** shows the returns of 16 reinsurers. Reinsurers in Quadrant 1 generate higher-than-average returns with higher-than-average volatility. Reinsurers in Quadrant 4 achieve high returns with low levels of volatility. Reinsurers in Quadrant 3 generate lower-than-average returns, and those in Quadrant 2 generate lower-than-average returns with higher volatility, resulting in a higher cost of capital.

An insurer's ability to raise capital, especially in times of stress, and the potential cost of capital are important considerations in AM Best's ratings process. When assessing operating performance, we

look at an insurer's return on equity both in comparison to its peers and vis-à-vis the cost of capital. We also look at equally important metrics such as return on revenue, combined ratio, return on assets, and underwriting expenses, as well as the absolute level of these metrics and their historic volatility.

US-Bermuda Reinsurers' Technical Results Improve amid Investment Losses

US-Bermuda reinsurers well capitalized as composite's combined ratio improves three points

Principal Takeaways

- The US-Bermuda reinsurance composite's 2022 combined ratio improved three points over the prior year.
- Property catastrophe capacity remains constrained despite dramatic pricing gains.
- Investment losses drove equity lower in 2022, but reinsurers remain well capitalized.
- Reinsurers are well positioned to post improved results in 2023.

AM Best's composite of US and Bermuda reinsurers contains 21 reinsurance groups domiciled in either the US or Bermuda, for which the reinsurance business accounts for a substantial portion of the underwriting portfolio. Although the composite's underwriting results improved in 2022, its overall profitability deteriorated, due to investment losses that more than counterbalanced the expanding underwriting margins. For the second straight year, net premiums written (NPW) grew at a robust pace, up 16% in 2022, following a 20% gain in 2021. Top-line growth reflected continued rate improvement in most of the business lines, particularly property exposures. AM Best projects that premiums for the composite will further increase in 2023, as demand remains high, and rates in most key business lines continue to rise, particularly in catastrophe-exposed business.

The 2022 combined ratio of 92.9 was a 3.1-point improvement over the prior year. Reported underwriting margins improved despite less of a benefit from prior year reserve releases, which lowered the group's reported combined ratio by 1.8 points in 2022, from 6.2 points in 2021. Notably, more than 60% of the total favorable development in 2021 was attributable to General Reinsurance Corp. The company's reported 2021 reserve development was driven largely by changes in internal reinsurance contracts with other Berkshire Hathaway affiliates and does not reflect downward revisions to claims estimates for prior accident years. Excluding Gen Re's favorable loss reserve development from 2021, the impact of favorable reserve development was 1.7 points in 2021, which was largely consistent with 2022.

Continued Catastrophe Activity Tests Reinsurers' Resolve

In 2022, natural catastrophe activity continued at a high pace and, like 2021, was one of the worst years on record for global insured catastrophe losses. Despite the high natural catastrophe activity, the composite's 2022 accident year (excluding prior year reserve development) combined ratio of 94.7 was 7.5 points better than the 102.2 ratio in 2021. The year-over-year improvement was due largely to steady improvement in reinsurance pricing, terms, and conditions.

Reinsurers continued to raise rates sharply in property-exposed lines at each of the key reinsurance renewal dates in 2023, with ongoing improvement—albeit at a slower pace—in many other key business lines. These favorable trends, combined with catastrophe activity that impacted primary carriers more than reinsurers during the first half of the year, suggest that the composite should be able to sustain, and even improve upon, its 2022 accident year combined ratio, assuming the industry doesn't suffer outsized catastrophe losses in the second half of the year.

Analytical Contact:
Gregory Dickerson, Oldwick
+1 (908) 882-1737
Gregory.Dickerson@ambest.com

Contributor:
Antonietta Iachetta, Oldwick

2023-102.5

Exhibit 1
Global Reinsurance – US & Bermuda Market Financial Indicators

	5-Yr Avg	2022	2021	2020	2019	2018
NPW Growth (Total) (%)	15.0	15.7	20.5	9.0	11.0	18.7
NPW Growth (P/C only) (%)	14.9	17.6	19.8	9.2	11.0	16.7
Reinsurance % of NPE	65.3	58.1	62.7	66.0	68.4	71.4
Shareholders' Equity Growth (%)	2.7	-9.4	5.6	7.9	14.5	-5.2
Loss Ratio	67.3	64.4	65.9	71.4	65.5	69.4
Expense Ratio	30.6	28.5	30.1	30.5	31.8	32.4
Combined Ratio	98.0	92.9	96.0	101.9	97.3	101.7
Reserve Development – (Favorable)/Unfavorable (%)	-3.4	-1.8	-6.2	-3.3	-2.1	-3.7
Net Investment Ratio[1]	8.2	6.6	7.9	7.9	10.4	8.2
Operating Ratio	89.8	86.3	88.1	94.0	86.9	93.5
Return on Equity (%)	4.7	-2.4	10.8	4.4	12.1	-1.5
Return on Revenue (%)	5.5	-2.9	12.3	5.7	14.4	-2.2
NPW (P/C only) to Equity (End of Period)	68.8	91.1	70.2	61.0	60.2	61.4
Net Reserves to Equity (End of Period)	124.1	144.3	119.5	115.8	119.5	121.3
Gross Reserves to Equity (End of Period)	168.0	207.0	170.5	157.2	144.3	160.9

[1] Net investment ratio based on PC NPE.
Ratios may vary slightly due to rounding.
Source: AM Best data and research

Investment Losses Overshadow Improved Operating Results

Despite higher underwriting income emerging in 2022, significant realized and unrealized investment losses led to an aggregate net loss in 2022, following positive net income in 2021 (**Exhibit 1**). The composite posted a -2.4% return on equity (ROE), versus 10.8% in 2021, when net income benefited from substantial pre-tax realized/unrealized investment gains. Given the stronger performance of the capital markets in the first half of 2023, investment performance is poised to improve upon 2022 results, when the S&P index declined by more than 20% and higher interest rates resulted in significant unrealized investment losses in fixed-income portfolios. Although recouping the unrealized fixed-income investment losses will take some time, net investment income will benefit immediately from significantly higher reinvestment rates on fixed-income asset classes. This should provide a strong earnings tailwind in 2023 and beyond. The composite will nevertheless need to generate solid underwriting results in 2023 if it is to cover its cost of capital.

Underwriting Leverage Up

Underwriting leverage rose for the US and Bermuda reinsurance composite, as NPW grew by 16% while GAAP equity declined by 9%. The composite's NPW to equity ratio was still a manageable 0.9x. The decline in equity in 2022 was driven primarily by unrealized investment losses and, to a lesser extent, by share repurchases and dividends paid. AM Best expects underwriting leverage to moderate in 2023, with ongoing NPW growth driven by pricing gains, coupled with a return to stronger US GAAP equity growth, reflecting operating earnings supplemented by a recovery in equity and fixed-income asset classes. Consistent with AM Best's expectations, the US & Bermuda reinsurers are well positioned to withstand the capital erosion seen in 2022 while maintaining solid risk-adjusted capitalization. These companies also maintain sufficient liquidity to pay claims without having to liquidate invested assets, while they remain in an unrealized loss position.

Catastrophe Capacity Constrained but Could Be Approaching Positive Inflection Point

The pricing environment for property catastrophe risks was already improving by mid-year 2022, with non-loss-impacted programs often seeing double-digit rate increases and impacted programs seeing even higher rate hikes, along with limit compression and higher retentions. Hurricane Ian, which hit Florida in September 2022, represented a breaking point for US and Bermuda reinsurers, which

entered the subsequent January renewal season with renewed determination to restore pricing, terms, and conditions to levels supporting achieving adequate risk-adjusted returns.

Capacity remains constrained in working layers of natural catastrophe programs, aggregate covers, and peak catastrophe zones in the US, despite the pricing momentum and improved terms and conditions in these areas. Some companies have either cut back on their property catastrophe exposures or exited the property catastrophe reinsurance market altogether. Underwriters have generally applauded recent legal reforms in Florida aimed at curbing fraud and curtailing legal expenses. However, concerns about the sustainability of these reforms have caused reinsurers to remain cautious about committing to the notoriously complex Florida property market.

An important distinction needs to be made between “available capacity” and “deployed capacity,” as many underwriters still maintain a buffer of excess capital rather than deploying it in catastrophe-exposed lines. In areas outside of catastrophe-exposed property lines, capacity is less scarce. The US and Bermuda (re)insurers remain interested in growing their specialty and casualty portfolios, particularly in primary lines, where pricing is viewed as broadly attractive, especially in the excess and surplus (E&S) markets. AM Best notes that, as another sign that available capacity is not pressured, publicly traded US and Bermudian reinsurers have not materially retrenched their dividend policies or share buyback programs.

Deployed capacity may be starting to expand in the US and Bermuda reinsurance market, including catastrophe-exposed business. However, unlike previous hard market cycles, capital inflows have not included a meaningful contribution from new company formations. Rather, a few established franchises have either raised capital, made acquisitions, or increased their allocations to the property catastrophe business. One of the more prominent examples of this trend is RenaissanceRe Holdings Ltd., which continued to raise capital to support its third-party capital ventures, several of which are levered to the catastrophe reinsurance markets. RenaissanceRe further signaled its commitment to the reinsurance market when it announced in May 2023 that it would acquire AIG’s treaty reinsurance business, which includes Validus Reinsurance Ltd. and its consolidated subsidiaries, in a deal valued at nearly $3 billion. Everest Group, Ltd. also raised $1.5 billion of equity capital in May 2023 to support growth in its own underwriting operations. Another indicator that property catastrophe deployed capacity may be expanding was Berkshire Hathaway’s comment in May 2023 that it had increased its property catastrophe exposure by 50% since year-end 2022, with room for further growth. Notably, Berkshire Hathaway, which has around $300 billion of total underwriting capacity, said publicly that is had been “disappointed” in the January 1 renewal season, but that April 1 renewals were much improved. This led to the company significantly growing its catastrophe reinsurance exposure, including a USD1 billion allocation to Florida’s Citizens’ reinsurance program.

AM Best expects that capital inflows to the reinsurance sector in the US and Bermuda markets will continue to be driven by established franchises with strong track records, while opportunities for new company formations will remain limited. M&A over the next several years may continue to be driven by reinsurers’ desire to strengthen their positions in the primary markets, especially in specialty areas, as long as the rate environment remains attractive.

The Lloyd's Market Can Point to Measurable Improvements in Underlying Performance

Lloyd's continues to outperform the US and Bermudian reinsurance market and the European Big Four in terms of the loss experience

Principal Takeaways

- Remedial work undertaken by the market and robust performance oversight by the Corporation, as well as improving market conditions in more recent years, have supported measurable improvements in underlying performance
- Lloyd's continues to outperform the US and Bermudian reinsurance market and the European Big Four in terms of loss experience
- Lloyd's underwriting performance is subject to volatility due to the nature of business underwritten

Lloyd's is the London-based market where approximately 100 individual syndicates underwrite all types of insurance and reinsurance business, apart from long-term life insurance. Each syndicate is formed by one or more members of Lloyd's, who join together to provide capital and accept insurance risks. Lloyd's members are mainly corporate organisations although a small proportion of Lloyd's underwriting capacity continues to be provided by private individuals.

Lloyd's has a strong position in the global general insurance and reinsurance markets as a leading writer of specialty property and casualty risks. Its network of global licences is a key competitive strength. Lloyd's portfolio is well diversified but with some geographical bias towards North America and product bias towards commercial specialty lines. Product risk is moderate to high given the market's material exposure to catastrophe risk as well as long-tail lines of business. The markets in which Lloyd's operates are highly competitive and broker driven.

Lloyd's Position Within the Reinsurance Market

Reinsurance is the market's largest segment and accounted for 33% of gross written premium (GWP) in 2022. Reinsurance business comprises of property, casualty and specialty reinsurance (primarily marine, aviation and energy reinsurance). Lloyd's is a leading player in the global reinsurance space, ranking as the 7th largest by reinsurance GWP based on 2022 premiums and the 4th largest when life premiums are excluded.

Overall GWP grew by 19.1% in 2022 to GBP 46.7 billion due to a combination of risk-adjusted rate change, foreign exchange movements, and exposure growth from the better performing syndicates. Property, casualty, and speciality reinsurance all grew by different rates (see **Exhibit 1**).

Exhibit 1
Lloyd's – Gross Written Premium, 2022
(GBP billion)

	(GBP billion)	Growth (%)
Property Reinsurance	7.7	4.9
Casualty Reinsurance	4.8	8.5
Speciality Reinsurance	2.8	11.5

Source: AM Best data and research

Analytical Contacts:
Tim Prince, London
+44 20 7397 0320
timothy.prince@ambest.com

Jessica Botelho-Young, CA, London
+44 20 7397 0310
jessica.botelho-young@ambest.com

Editorial Managers:
Richard Banks, London
+44 20 7397 0322
richard.banks@ambest.com

Richard Hayes, London
+44 20 7397 0326
richard.hayes@ambest.com

2023-102.6

The distribution of Lloyd's business is dominated by insurance brokers, and in particular by the top three largest global brokers. Lloyd's brokers play an active part in the placement of risks and in providing access to regional markets.

The Lloyd's distribution model is expensive, with business often passing through several distribution links before arriving at Lloyd's. The market's reliance on brokers also makes it vulnerable to price-based competition. Although Lloyd's overall is important to the large global brokers (as well as to the specialised London market brokers) the importance of individual syndicates is less. Overall, the Lloyd's distribution model is considered to place the Lloyd's market at a competitive disadvantage compared to the large global reinsurance groups, which have stronger individual positions with brokers as well as being able to distribute some of their business direct to cedents.

Capital at Lloyd's

Syndicates operating at Lloyd's follow a robust market-wide capital-setting regime, which incorporates a risk-based approach to setting member-level capital as well as a 35% capital uplift. Moreover, there is a requirement for members to replenish their Funds at Lloyd's (FAL) after a loss, through the "Coming into Line" process, which helps protect risk-adjusted capitalisation against volatility.

Member-level capital in the form of FAL and members' balances are held on a several rather than joint basis, meaning that any member only needs to meet its share of claims. However, Lloyd's central assets are available, at the discretion of the Council of Lloyd's, to meet policyholder liabilities that any member is unable to meet in full. This link in the Chain of Security comprises the Central Fund and other central assets, as well as subordinated debt. These central assets can be supplemented by funds called from members of up to 5% of their overall premium limits. In 2021, Lloyd's secured insurance for the Central Fund through a five-year, multi-layered cover. This insurance provides protection to the Central Fund, and therefore the market, against severe tail events.

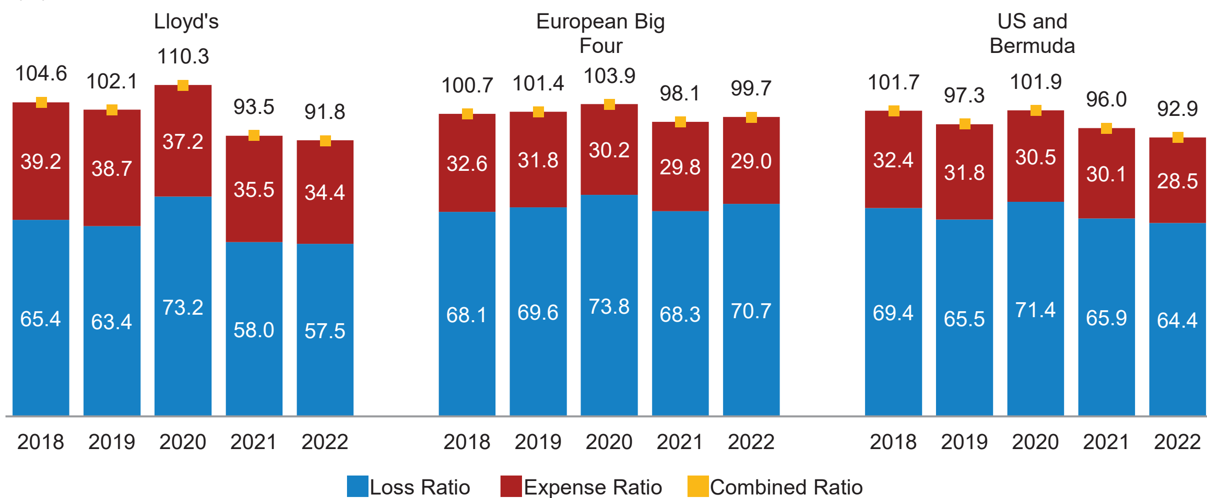
Lloyd's good financial flexibility is enhanced by the diversity of its capital providers, which include corporate and individual investors. Traditional Lloyd's businesses remain committed to the market. In addition, Lloyd's continues to attract new investors, drawn by its capital efficient structure and global licences. As the capital to support underwriting at Lloyd's is supplied by members on an annual basis, an important factor in AM Best's analysis of the market is its ability to attract and retain the capital required for continued trading.

To this end, as detailed in the Future at Lloyd's prospectus, one of the objectives was to improve the ease of doing business at Lloyd's and, specifically, make it easier for capital to enter the marketplace. This included reinventing the way that capital comes into the market and making it flexible to access a diverse set of insurance risks on the Lloyd's platform.

In 2021, Lloyd's sponsored a new multi Insurance Special Purpose Vehicle (mISPV), London Bridge Risk PCC Ltd. (LB1), which is a protected cell company, acting as a reinsurance risk transformation vehicle, onshore in the UK, to support the Lloyd's market and facilitate the participation of institutional investors in (re)insurance risk underwritten at Lloyd's. The SPV has been utilised twice since its inception.

The following year, Lloyd's sponsored a second transformation vehicle; London Bridge 2 PCC Ltd (LB2). LB2 is different from the first SPV because it allows the issuance of both preference and/or debt securities to fund the reinsurance obligation of each cell. It also provides enhanced options for Lloyd's market participants to either raise corporate member capital to support underwriting plans,

Exhibit 2
Lloyd's – Loss, Expense and Combined Ratios, 2018-2022
(%)



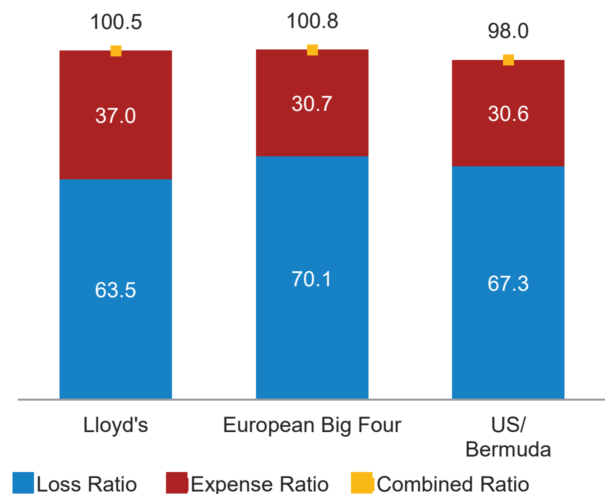
Ratios may vary slightly due to rounding.
Source: AM Best data and research

and/or transfer specific class(es) of business risk directly from syndicates, as part of the syndicate's outward reinsurance programs. In February 2023, LB2 was used for the first time. Importantly, the qualified investors that purchased the preference shares were all new investors in the Lloyd's market.

Performance on the Mend

For several years, the market's underwriting performance was below AM Best's expectations, demonstrated by five-year (2018-2022) and 10-year (2013-2022) combined ratios of 100% and 98%, respectively. However, remedial work undertaken by the market and robust performance oversight by the Corporation, as well as improving market conditions in more recent years, have supported measurable improvements in underlying performance, with the accident-year combined ratio (excluding major claims) falling in each year since 2017. In 2022, the overall combined ratio fell to 91.9% from 93.5% in the previous year.

Exhibit 3
Lloyd's – Loss, Expense and Combined Ratios, Five-Year Averages, 2018-2022
(%)



Ratios may vary slightly due to rounding.
Source: AM Best data and research

The market's underwriting performance in 2022 compares well to that of the US and Bermudian reinsurance market as well as the Big Four European reinsurers who reported combined ratios of 92.9% and 99.7%, respectively (see **Exhibit 2**). In terms of loss experience, Lloyd's continues to outperform the US and Bermudian reinsurance market and the Big Four, as evidenced by its five-year (2018-2022) weighted average loss ratio of 63.5% versus 67.3% for US and Bermuda and 70.1% for the Big Four (see **Exhibit 3**). Although Lloyd's expense ratio has persistently underperformed those of its peers, it has improved meaningfully in recent years (2022: 34.4%), but remains approximately 5 percentage points (pp) higher.

The strong pricing environment has continued into 2023, which together with a greater focus on underwriting discipline and risk selection by the market, should support good underlying performance this year. However, AM Best notes that rate increases are necessary to offset the impact of claims inflation and a trend of higher catastrophe losses.

Lloyd's underwriting performance is subject to volatility due to the nature of business underwritten. In 2022, major claims contributed 12.7% to its combined ratio (2021: 11.2%). Natural catastrophe losses included Hurricane Ian, Hurricane Fiona, and Australian floods. In addition, losses from the conflict in Ukraine had a material impact on the year's result. There is significant uncertainty as to the magnitude of potential direct and second-order losses associated with the conflict, and as at year-end 2022, the incurred but not reported component represented more than 90% of the loss.

Lloyd's attritional loss ratio improved again in 2022, falling by 0.5pp to 48.4%, despite the market reserving 2.9% for inflation (in addition to any implicit allowance included in reserving methodologies). Actions taken to drive sustainable profitable performance, as well as several years of cumulative risk-adjusted rate increases across a number of lines, continue to have a positive impact on the market's underlying performance. Prior-year reserve releases reduced the loss ratio by 3.6pp, compared to 2.1pp in 2021. An improvement in the market's expense ratio to 34.4% from 35.5% was primarily driven by the favourable impact of foreign exchange movements and better pricing on premiums, as well as a reduction in the acquisition cost ratio given the market's changing business mix.

Interest rates rose rapidly in 2022 as Central Banks sought to contain higher levels of inflation. Higher yields pushed down the price of bonds, and the market reported net investment losses of GBP 3.1 billion (2021: GBP 948 million profit), representing a negative return of 3.5% on invested assets, which offset the underwriting profit of GBP 2.6 billion (2021: GBP 1.7 billion). The overall result was a loss before tax of GBP 769 million (2021: 2.3 billion profit).

Looking forward, as the majority of the market's portfolio is invested in high quality short duration bonds, losses are expected to unwind as investments mature, and there should be the opportunity to invest in instruments with significantly higher returns.

Global Reinsurance – The European Big Four

The European Big Four are benefiting from the hard reinsurance market conditions evident during the 2023 renewals

Principal Takeaways

- Heightened demand and higher prices contributed to a 6% increase in net premiums written by Europe's Big Four reinsurance groups—Munich Re, Hannover Re, Swiss Re and SCOR
- But 2022 saw a greater variation between the four groups than has typically been the case in recent years
- Three of the Big Four continue to see opportunities in property catastrophe segment, with only SCOR paring back its natural catastrophe exposures

The European Big Four reinsurers—Munich Re, Hannover Re, Swiss Re and SCOR—are composite reinsurers, writing both life and non-life business. As shown in **Exhibit 1**, total net written premiums (NWP) for the segment grew by 6% in 2022, and 12% for non-life premiums only. Growth reflected improvements in pricing, as well as strong demand.

It should be noted that the growth rates in the exhibits have been calculated based on figures converted to US dollars for Munich Re, Hannover Re and SCOR, which all report in euros. This has resulted in a reduced growth rate for 2022 for the segment, hampered by changes in the euro/US dollar exchange rate.

Exhibit 1
Global Reinsurance – European Big Four Market Financial Indicators, 2018-2022
(%)

	2018	2019	2020	2021	2022	5-Year Average
Net Written Premium Growth (Total)	-2.7	8.2	12.1	1.9	6.0	5.1
Net Written Premium Growth (P/C only)	4.2	7.5	12.9	6.0	12.3	8.6
Reinsurance % of Net Premium Earned	86.0	88.5	90.3	88.3	88.3	88.3
Shareholders' Equity Growth	-12.6	10.0	3.2	-6.8	-37.8	-8.8
Loss Ratio	68.1	69.6	73.8	68.3	70.7	70.1
Expense Ratio	32.6	31.8	30.2	29.8	29.0	30.7
Combined Ratio	100.7	101.4	103.9	98.1	99.7	100.8
Reserve Development - (Favourable)/Unfavourable	-3.3	-0.2	-2.1	-3.3	-1.0	-2.0
Net Investment Ratio[1]	16.1	26.5	12.5	14.2	9.6	15.8
Operating Ratio	84.6	74.9	91.4	83.8	90.1	85.0
Return on Equity	5.8	7.2	2.4	8.1	8.3	6.4
Return on Revenue	3.4	3.6	1.2	3.9	3.1	3.0
Net Written Premium (P/C only) to Equity (End of Period)	90.2	88.2	96.5	109.7	198.0	117
Net Reserves to Equity (End of Period)	486.9	440.3	473.7	508.4	792.8	540
Gross Reserves to Equity (End of Period)	515.0	461.2	493.9	535.4	837.4	569

Note: Hannover Re net premium written data not reported; net premium earned substituted
[1] Net investment ratio based on P/C NPE.
Source: AM Best data and research

Analytical Contact:
Mathilde Jakobsen, Amsterdam
+31 20 308 5427
mathilde.jakobsen@ambest.com

Contributors:
Valeria Ermakova, London
Konstantin Langowski, Amsterdam
Victoria Ohorodnyk, Amsterdam

Editorial Managers:
Richard Banks, London
+44 20 7397 0322
richard.banks@ambest.com

Richard Hayes, London
+44 20 7397 0326
richard.hayes@ambest.com

2023-102.7

For the same reason, each of these reinsurers reported stronger growth in their reporting currency for their non-life reinsurance segments than shown in the exhibit. Hannover Re recorded the highest premium growth of the four—at 14% overall and 23% for non-life (when premiums are converted to US dollars). The non-life growth was 30% in its reporting currency. The growth in the non-life segment originated mainly from strong demand for structured reinsurance and Insurance-Linked Securities (ILS) and Facultative Reinsurance.

Swiss Re, which reports in US dollars, reported lower growth than its peers in 2022. The company notes that growth was impacted by unfavourable foreign exchange movements and would have been higher at constant exchange rates.

The return on equity (ROE) of 8.3% for the European Big Four in 2022 is in line with that achieved in 2021, and both years' figures compare favourably with the 2.4% achieved in 2020. Munich Re and Hannover Re both reported better ROEs for 2022 than for 2021, while Swiss Re and SCOR saw deteriorating ROEs.

The combined ratio deteriorated to 99.7% from 98.1% in 2021. The five-year (2018-2022) average combined ratio remains elevated at 100.8%, following a period with substantial catastrophe and man-made losses. The combined ratios of the European Big Four reinsurers showed more variation in 2022 than was the case in 2021, varying from SCOR's 113.2% to Munich Re's 96%.

One reason for the variation in results can be found in the development of non-life reserves. All four made provisions in reserves for higher inflation, but for SCOR and Swiss Re this inflation-related reserve strengthening negatively impacted their reported combined ratios, while Munich Re and Hannover Re were still able to make overall releases.

The performance of the life books saw improvements in 2022, benefitting from a lower, although still sizable, excess mortality related to the COVID-19 pandemic, and from a positive impact due to rising interest rates. For example, Swiss Re reported that its COVID-19-related claims decreased to USD 588 million, from nearly USD 2 billion in 2021.

Despite the positive ROE performance overall, the absolute level of shareholders' equity for the European Big Four declined significantly in 2022 (see **Exhibit 1**). The drop of 37.8% was driven by negative movements in the valuation of fixed income investments due to the rapid rise in interest rates.

Pricing Reflects Economic Expectations

The European Big Four are benefiting from the hard reinsurance market conditions evident during the 2023 renewals with improved pricing and terms and conditions across reinsurance lines of business and geographies. Higher inflation expectations are reflected in pricing, attachment points and updated asset values.

Munich Re, Swiss Re and Hannover Re are aiming for targeted growth in property catastrophe reinsurance business, supported by improved conditions, but continue to have limited appetite for frequency layers and aggregate covers. On the other hand, SCOR, the smallest of the European Big Four, has reduced its natural catastrophe exposure by 14% at the 1.1. 2023 renewal. This follows a reduction of 21% in 2022.

The European Big Four are also aiming for growth in specialty segments, where price increases achieved since 2018 allow for good returns. The growth in these lines is not purely opportunistic, but

also aimed at achieving increased levels of diversification and in turn more stable earnings. Within specialty lines, the appetites for different types of business varies, but generally there is more caution around risks associated with cyber, war and recession, given the potential for a systemic loss. Munich Re continues to provide capacity in a cyber market with ever-increasing demand and aims to grow this line of business in tandem with the market.

AM Best notes that there was also evidence of the reinsurers taking a more cautious approach to casualty business at the 1 January 2023 renewals. Casualty performance is affected by the prospect of higher inflation for longer, combined with social inflation and increases in motor frequency, particularly in the US. Going forward, carriers are likely to pursue selective growth in this segment, given the challenging market dynamic.

On the life side, the pandemic has highlighted the significant exposure of the composite to US mortality trends. In response, the reinsurers are seeking further growth in other regions and products to create more balanced portfolios. Overall, the reinsurers generally see good opportunities in the life and health segment, and aim to benefit from the increased customer demand in life and health protection, higher mortality premium rates post pandemic losses, and the benefit of higher interest rates.

Cat Bonds Lift a Muted ILS Market

Catastrophe bonds remain one of the bright spots in the ILS market

Principal Takeaways

- Hard market conditions have helped the ILS market secure advantageous terms and conditions for both new and renewed programs.
- Capital formation has been tepid, hampered by a number of factors, despite prospects for higher returns.
- Catastrophe bonds remain one of the bright spots in the ILS market.
- Cat bond issuance indicates high demand from cedents, with first-half 2023 issuance having surpassed the full year total for 2022.

The persistently hard market indicates that ILS investors have not gotten over the sting of severe catastrophe losses averaging over USD100 billion from 2017 through 2022, during which investors' returns were paltry, especially when considering the volatility in loss experience.

The focal points in negotiations for the June renewals were rate adequacy, structural terms such as attachment and exhaustion levels, and the streamlining of contractual wording. The effect of inflation has abated somewhat, as it has been baked into insured values and resulted in higher capital requirements for traditional reinsurers. Cedents have had to undergo fundamental repricing and restructuring of their books fo business (to the extent allowed by competition and regulators). To adapt to these changes, cedents were often compelled to raise their retention levels, streamline contractual language for clarity, enhance transparency about recent loss activity, and provide insights into their strategic portfolios and outlooks.

Overall, the prevailing market conditions have enabled the ILS market to secure advantageous terms and conditions for both renewed and new programs, leading to a significant increase in yields for funds as well as catastrophe bonds. Indeed, demand for reinsurance remains high, as some Florida reinsurance carriers have stopped writing business, and the uncertainty introduced by inflation and climate change still looms large in property/cat reinsurance.

Catastrophe bonds, in particular, remain one of the bright spots in the ILS market, helping lift the overall ILS market capacity by about USD3 billion since the beginning of the year, to approximately USD99 billion as of mid-year, as estimated by AM Best and Guy Carpenter. Private funds have been performing well so far, with cumulative returns hitting record highs during mid-year that have not been seen in over a decade.

Although insured losses through mid-year are already elevated, optimism—however cautious—abounds as both traditional reinsurance and ILS markets wait for what they hope will be a relatively muted US hurricane season in the Southeast in the second half of 2023, to give the property cat market the respite it needs to pull in more investors while maintaining pricing discipline.

Analytical Contacts:
Emmanuel Modu, Oldwick
+1 (908) 882-2128
Emmanuel.Modu@ambest.com

Wai Tang, Oldwick
+1 (908) 882-2388
Wai.Tang@ambest.com

Contributors:
Matt Tuite, Oldwick
David Mautone, Oldwick

2023-102.8

Significant Natural Catastrophe Insured Losses in 1H23

Natural catastrophe insured losses in the first half of the year usually tend to be driven by severe convective storms, which was again the case in the first half of 2023. Munich Re estimates total global natural catastrophe insured losses for the period at USD43 billion, compared to USD47 billion in first-half 2022 and the ten-year average of USD34 billion. Of the USD43 billion total, USD25 billion are estimated to have resulted from severe convective storms in the US.

The storms tend to have a relatively lower-severity but higher-frequency risk profile, which puts aggregate covers at greater risk than per-occurrence covers. The shift among reinsurers and ILS capital providers to move away from aggregate covers means that more of these losses will be retained by primary carriers. Providers of aggregate cover may need to see improvements in the underlying primary terms and conditions for them to feel motivated to deploy more capital into aggregate covers.

Tepid Supply of Capital

In AM Best's discussions with traditional and ILS reinsurers, the refrain has been that capital formation has been tepid despite the prospect of higher returns. There have been some new capital raises, as evidenced by the net increase of USD4 billion in cat bond originations in first-half 2023 and the USD1.5 billion raised by Everest Re. However, the broad sentiment is that supply of capital is still hampered by several factors, including more attractive investment returns in other asset classes; unresolved issues related to the potential effect of rising climate risk on losses; unmodelled losses; loss creep; higher return expectations commensurate with extreme volatility in property/cat returns; significantly reduced retro capacity (especially for higher frequency risk); and the prospect of higher inflation.

The dearth of capital injections into the reinsurance market and the resulting supply shortfall has also meant that many insurers were unable to fill their requested covers from reinsurers except at exorbitant prices during the year. This also meant that many insurers had to increase retentions. At year-end, the cat bond and collateralized reinsurance markets may be met with pent-up demand for reinsurance cover among cedents who didn't have room in their budgets to purchase as much reinsurance coverage as they would have liked at the January 2023 or July 2023 renewal periods. The ILS market will remain hard if heightened cedent demand for capacity is met with overall reinsurance capital levels that are relatively flat.

The estimated ILS capacity of USD99 billion represents a small increase from the USD96 billion at year-end 2022, of which approximately USD38.6 billion represents 144A catastrophe bond capacity, 12% higher than the USD34.4 billion at the end of 2022. The remaining USD60.4 billion is composed of collateralized reinsurance, sidecars, and industry loss warranties (ILWs). However, the net capacity provided by the ILS market is lower than USD99 billion due to an unknown amount of trapped capital, most recently due to Hurricanes Ian and Ida.

ILS managers are optimistic that insured losses due to Hurricane Ian will be considerably lower than the initial estimates of USD50 billion to USD60 billion, and so they expect that some trapped capital will be released and recycled back into the reinsurance market. In addition, the risk of future trapped capital is being addressed by including buffer loss tables in cat bond contracts. For now, however, trapped capital continues to diminish ILS capacity.

Capital inflows to cat bonds and the private collateralized reinsurance market (private ILS) may follow divergent paths. The additional capital flowing into cat bonds may result in the relative softening of the market, as evidenced by the slight tightening in spreads in the second quarter of 2023. Also, the final size of cat bonds issued in the first half of 2023 was on average nearly 50% larger than the initial

size and spreads on average finalized about 6% below the midpoint of guidance (**Exhibit 1**), which seems to show that the cat bonds were generally well received by investors.

Some ILS fund managers believe that the lack of meaningful of capital inflows into the private collateralized reinsurance market may persist into 2024. **Exhibit 2** shows that ILS funds managers with USD2 billion or more in assets under management have raised capital compared to January, but are still down compared with July 2022. The increase may be attributable to cat bond strategies rather than private ILS allocations.

High Volume of Cat Bond Issuance, Despite High Loss Multiples

The substantial cat bond issuance volume in first-half 2023 illustrates the high level of cedent demand for capacity in remote layers of risk and their willingness to use cat bonds to cover those layers.

Exhibit 1

ILS – Cat Bonds Issued During First Half of 2023

(USD millions; spreads expressed as basis points)

#	Vehicle	Sponsor	Initial Size (USD)	Final Size (USD)	Change (%)	Midpoint of Initial Pricing Guidance (bps)	Final Spread (bps)	Spread Change (%)
		Weighted Average			**49**			**-6**
1	Acorn Re Ltd. (Series 2023-1)	Hannover Rück SE / Oak Tree Assurance, Ltd.	100	150	50	513	435	-15
2	Alamo Re Ltd. (Series 2023-1)	Texas Windstorm Ins. Assn. (TWIA)	250	500	100	1,000	850	-15
3	Aquila Re I Ltd. (Series 2023-1)	Nationwide Mutual Ins. Co.	150	300	100	873	785	-10
4	Atlas Capital DAC (Series 2023-1)	SCOR SE	75	75	0	875	725	-17
5	Baldwin Re Ltd. (Series 2023-1)	Vermont Mutual Ins. Co.	100	100	0	488	450	-8
6	Bayou Re Ltd. (Series 2023-1)	Louisiana Citizens Property Ins. Corp.	150	195	30	1,577	1,535	-3
7	Bonanza Re Ltd. (Series 2023-1)	ARX Holding Corp. (Progressive Home)	125	135	8	1,347	1,391	3
8	Cape Lookout Re Ltd. (Series 2023-1)	North Carolina Ins. Underwriting Assn.	200	350	75	738	650	-12
9	Citrus Re Ltd. (Series 2023-1)	Heritage Property and Casualty Ins. Co.	180	235	31	835	785	-6
10	Commonwealth Re Ltd. (Series 2023-1)	The Hanover Ins. Grp.	125	150	20	425	400	-6
11	Eiffel Re Ltd. (Series 2023-1)	AXA SA	125	165	32	350	325	-7
12	Everglades Re II Ltd. (Series 2023-1)	Citizens Property Ins.	100	300	200	1,150	1,138	-1
13	Everglades Re II Ltd. (Series 2023-2)	Citizens Property Ins.	100	450	350	1,025	1,013	-1
14	First Coast Re IV Ltd. (Series 2023-1)	Security First Ins. Co.	100	100	0	1,050	900	-14
15	FloodSmart Re Ltd. (Series 2023-1)	FEMA / NFIP via Hannover Re	250	275	10	1,770	1,720	-3
16	Gateway Re II Ltd. (Series 2023-1)	SafePort Ins. Co., SafeChoice Ins. Co.	100	125	25	988	950	-4
17	Gateway Re Ltd. (Series 2023-1)	SURE	200	355	78	1,369	1,408	3
18	Gateway Re Ltd. (Series 2023-2)	SureChoice Underwriters Reciprocal Exchange	75	100	33	1,050	850	-19
19	Hestia Re Ltd. (Series 2023-1)	Kin InterIns. Network	100	100	0	1,100	975	-11
20	Hypatia Ltd. (Series 2023-1)	Convex Re	100	150	50	1,213	950	-22
21	IBRD – Chile 2023	Republic of Chile	150	350	133	513	475	-7
22	Integrity Re Ltd. (Series 2023-1)	American Integrity Ins. Co. of Florida, Inc.	100	150	50	1,150	1,200	4
23	Lightning Re Ltd. (Series 2023-1)	Citizens Property Ins.	200	500	150	1,200	1,100	-8
24	Locke Tavern Re Ltd. (Series 2023-1)	The Andover Companies	125	175	40	588	475	-19
25	Lower Ferry Re Ltd. (Series 2023-1)	NJM Ins.	175	190	9	491	474	-3
26	Mayflower Re Ltd. (Series 2023-1)	Massachusetts Property Ins. Underwriting Assn.	175	250	43	495	525	6
27	MetroCat Re Ltd. (Series 2023-1)	First Mutual Transportation Assurance Co. (NYC MTA)	75	100	33	600	575	-4
28	Mona Lisa Re Ltd. (Series 2023-1)	Renaissance Re and DaVinci Re	150	185	23	1,227	1,239	1
29	Mountain Re Ltd. (Series 2023-1)	Spinnaker Ins. Co.	100	110	10	638	675	6
30	Nakama Re Ltd. (Series 2023-1)	Zenkyoren	200	225	13	375	350	-7
31	Purple Re Ltd. (Series 2023-1)	Slide Ins. Co.	100	100	0	1,200	1,225	2
32	Queen Street 2023 Re dac	Munich Re	100	300	200	900	750	-17
33	Residential Reinsurance 2023 Ltd. (Series 2023-1)	USAA	200	400	100	805	775	-4
34	Sanders Re III Ltd. (Series 2023-1)	Allstate	225	250	11	1,168	1,160	-1
35	Sanders Re III Ltd. (Series 2023-2)	Allstate	370	370	0	659	649	-2
36	Solomon Re Ltd. (Series 2023-1)	Korean Re	75	75	0	563	525	-7
37	Stabilitas Re Ltd. (Series 2023-1)	Conduit Re	100	100	0	938	850	-9
38	Sutter Re Ltd. (Series 2023-1)	California Earthquake Authority	300	425	42	847	816	-4
39	Titania Re Ltd. (Series 2023-1)	Syndicate 1910 (Ariel Re)	115	125	9	1,358	1,245	-8
40	Torrey Pines Re Ltd. (Series 2023-1)	Palomar Specialty Ins. Co.	150	200	33	625	563	-10
41	Totara Re Pte. Ltd. (Series 2023-1)	New Zealand Earthquake Commission	156	156	0	838	875	4
42	Ursa Re Ltd. (Series 2023-1)	California Earthquake Authority	175	200	14	728	653	-10

Sources: Artemis, AM Best data and research

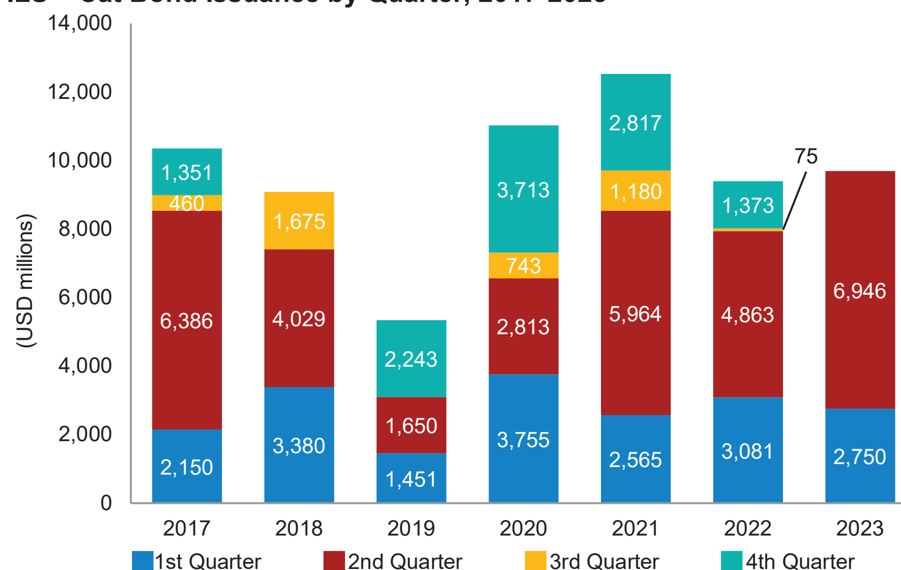
Exhibit 3 shows that cat bond issuance in first-half 2023 reached a record of approximately USD9.7 billion. This volume has already surpassed the full year total for 2022 and is roughly 14% higher than the next-highest first half totals recorded in 2017 and 2021 of about USD8.5 billion. The size of the cat bond market has grown consistently for the last five years, as issuances outpace maturities, and now stands at about USD38.6 billion outstanding. The record issuance volume in first-half 2023 outpaced maturity volume by over USD4 billion. Second-half issuance volume is typically much lower than first-half issuance volume, but, even in the second half, issuance volume has usually tended to exceed maturity volume. If second-half 2023 issuance volume matches scheduled maturities, there may be another USD2 billion or more of issuance, which makes it likely that the full year 2023 will set a record for total issuance.

Exhibit 2
ILS – Fund Managers with More than USD2 Billion in Assets Under Management, as of January/July, 2021-2023
(USD billions)

	Jul-23	Jan-23	Jul-22	Jan-22	Jul-21
Fermat Capital Management	9.7	8.6	8.9	8.2	8.0
Nephila Capital	7.2	7.4	8.5	8.8	10.2
RenaissanceRe Capital Partners	6.9	6.2	6.7	5.6	6.0
LGT ILS Partners	5.5	6.1	6.8	7.6	8.2
Leadenhall Capital Partners	4.9	5.5	6.0	6.2	6.4
Schroders Capital	4.4	4.3	4.1	4.0	3.8
Aeolus Capital Management	3.9	3.3	3.3	3.3	4.0
Pillar Capital	3.9	3.1	3.1	3.0	2.5
Elementum Advisors	3.8	3.7	4.1	4.3	4.4
Scor Investment Partners	3.5	3.2	3.2	3.0	2.9
Twelve Capital	3.4	2.6	2.7	2.6	2.4
Neuberger Berman	3.2	3.1	3.1	2.9	2.2
Securis Investment Partners LLP	3.1	3.6	3.9	4.1	4.4
AlphaCat Managers	3.1	3.1	3.2	3.5	3.8
Hudson Structured	3.0	3.0	3.0	3.0	3.0
Swiss Re	2.9	2.9	2.2	2.2	1.9
Stone Ridge Asset Management	2.9	2.6	2.9	3.1	3.4
Credit Suisse Insurance Linked Strategies	2.5	3.9	3.9	3.9	5.2
Amundi Investments	2.0	2.0	2.0	2.0	2.0
Total	**79.5**	**78.2**	**81.5**	**81.1**	**84.6**

Source: Trading Risk

Exhibit 3
ILS – Cat Bond Issuance by Quarter, 2017-2023



Sources: Artemis, AM Best data and research

New sponsors and perennial sponsors alike contributed to the issuance volume in first-half 2023, along with a few sponsors such as Munich Re and NJM Insurance, who returned to the cat bond market after a hiatus. The diverse group of sponsors demonstrates the broad appeal that the cat bond market has among cedents.

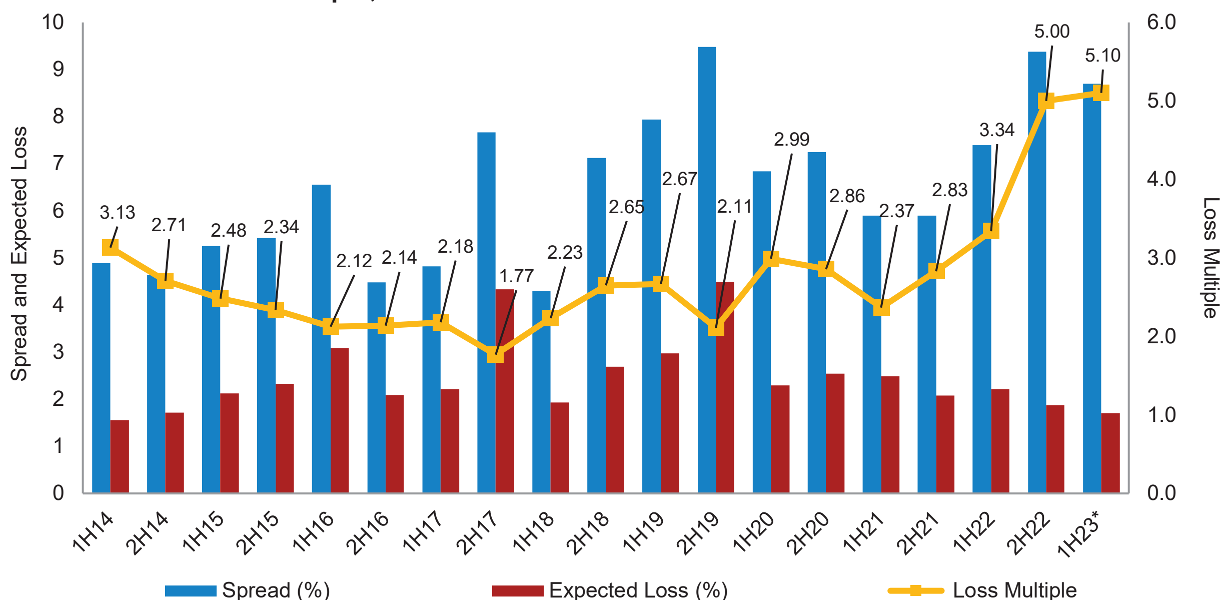
Cedents' pursuit of capacity from the cat bond market comes at a time when the average loss multiple is higher than it has been in many years. The loss multiple—the ratio of the spread (premium paid to investors) to the expected loss—is one important metric to gauge the risk/reward dynamics for

cat bonds. **Exhibit 4** shows loss multiples from first-half 2014 through first-half 2023. The average loss multiple in first-half 2023 was 5.10x, considerably higher than the 3.34x average loss multiple observed in first-half 2022. Despite the high multiple in first-half 2023, there is some indication that spreads may be tightening because the first-quarter 2023 multiple was 5.50x but decreased in second-quarter 2023 to 4.90x.

Returns Reach New Heights

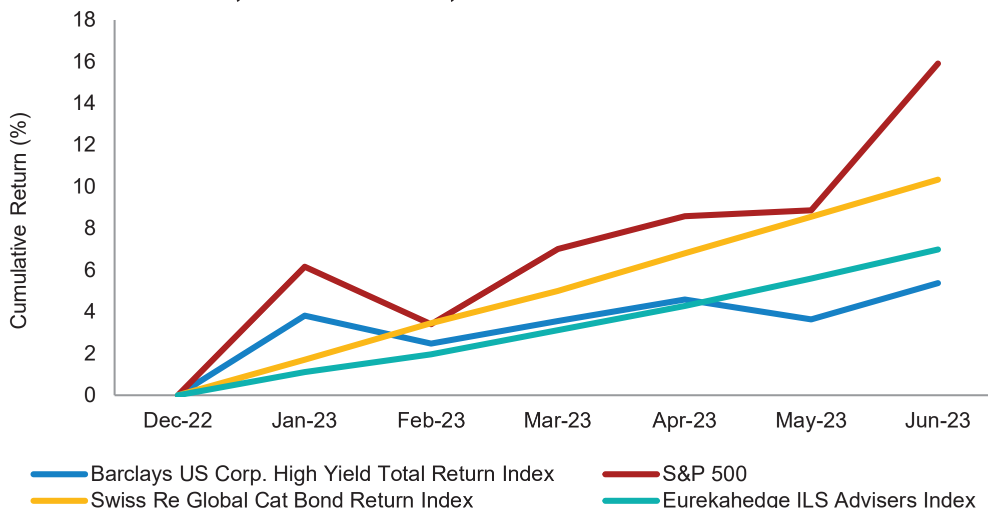
Substantial price increases associated with the hardening of the market are boosting ILS investor returns to new heights. The Swiss Re Global Cat Bond index posted its highest first-half returns ever, at 10.34%, as did Eurekahedge ILS Advisors index, at 6.99%. **Exhibit 5** shows the year-to-date

Exhibit 4
ILS – Cat Bond Loss Multiple, 1H14-1H23



* The first-quarter 2023 multiple was 5.5, and the second-quarter multiple, 4.9.
Sources: Artemis, AM Best data and research

Exhibit 5
ILS – YTD Returns, Various Indices, Jan-June 2023



Sources: Bloomberg, Eurekahedge

returns for the Barclays US Corporate High Yield Total Return Index, S&P 500, Swiss Re Global Cat Bond Return Index, and the Eurekahedge ILS Advisers Index. Both the Swiss Re index and Eurekahedge index outperformed the Barclays Index in the first-half of 2023.

Whether higher returns posted by the ILS asset class begin to attract additional capital remains an open question. Industry observers have noted that ILS investors are likely focused on other, more familiar asset classes that offer higher expected returns with greater liquidity and perhaps less volatility. Some ILS investors may already be fully allocated in the ILS space; others may be satisfied with the income they generate from the risk-free rate, which is much higher than it was a couple years ago.

Life/Annuity Reinsurers Remain Prepared for Growth

The industry remains well capitalized and is dominated by the large global players, but faces incremental competition from shifting business models

Principal Takeaways

- The life reinsurance segment maintains capitalization within target levels.
- Block reinsurance transactions remain robust.
- Large, global traditional players continue to dominate the market, but newer players are finding their niche or expanding their footprint.

The global life/annuity reinsurance segment continues to face challenges in 2023, but the industry remains well capitalized and positioned for robust growth. Elevated mortality claims have leveled off and are manageable, but pinpointing direct causes and determining future direction has been difficult. Reinsurers continue to evaluate underwriting practices, including premium rate increases, to mitigate the impact of higher claims. Reinsurers are also monitoring emerging trends such as artificial intelligence and digitization, to see what role they will play in the future.

Mortality Claims Are Elevated but Manageable

The impact of COVID-19 on life reinsurers has been less pronounced than initially expected, but the pandemic has resulted in elevated mortality in certain demographics. Life reinsurers have noted an uptick in deaths related to liver disease, drug use, and diabetes. Whether the pandemic will cause a permanent shift in mortality or mortality will revert to pre-COVID levels remains to be seen. There has been some movement in adjusting mortality pricing and assumptions, with European insurers often reacting more quickly than other parts of the world. Throughout the pandemic, mortality losses were most heavily concentrated in the US, which impacted the earnings of the five largest European and US-based reinsurers. Mortality rates have been higher but have thus far been manageable.

The death tolls reported for COVID-19 were lower than what typical pandemic stress scenarios assume, but excess mortality has still negatively affected the profitability of the global life reinsurers. Nonetheless, AM Best expects the impact of elevated life claims on most reinsurers to be a manageable earnings drag. Additionally, COVID-19 raised awareness of the need for life insurance, which, combined with the high cost of hospital treatments, drove an increase in demand for reinsurance. Rising interest rates led to robust annuity sales, which has motivated some primary carriers to reinsure incremental business, to manage liabilities and support gross premiums written.

Questions remain about the near- and long-term impacts of pandemic-related mortality experience on assumptions and future pricing for the life reinsurance industry. Early evidence indicates different approaches to insurers' mortality assumptions, as some have updated assumptions and pricing for the pandemic experience but others have not. In the US, the impact of the pandemic on mortality pricing has been slight. However, given the ease of repricing the group life product at each annual renewal, this may be an area that could see premium increases. In Europe, mortality

Analytical Contacts:
Edward Kohlberg, Oldwick
+1 (908) 882-1979
Edward.Kohlberg@ambest.com

Stratos Laskarides, Oldwick
+1 (908) 882-1995
Stratos.Laskarides@ambest.com

Stephen Vincent, Oldwick
+1 (908) 882-1705
Stephen.Vincent@ambest.com

2023-102.9

pricing has been adjusted because of worsening mortality trends. In the UK, many insurers raised premiums by 15% to 20% due to heightened mortality risks. Additionally, there has been an expectation of a permanent shift in mortality in the UK, which has led to more price competition in the longevity market. In Italy, premium increases were in the low teens, while the impact in France and Germany, as well as central European countries, was more muted.

Healthy Risk-Adjusted Capitalization

The life reinsurance carriers remain well capitalized, and their risk-adjusted capitalization is expected to remain healthy for the remainder of 2023 and in 2024, despite heightened investment volatility and elevated mortality.

Most life reinsurers have traditionally avoided the investment risks associated with many products on the primary life insurance side. Primary life insurers' diversification strategies typically include the annuity and retirement business, which is seen as a natural hedge to their mortality business but also adds to their financial market risk. The operating models of the major traditional global life reinsurers differ significantly, as most rely on their property/casualty business to balance earnings. Life reinsurers have historically been less exposed to financial market risk than primary writers have.

Exhibit 1a

US Life Re – Top US Life Reinsurers by Individual Life Insurance in Force, 2022

(USD thousands)

AMB#	Company Name	Total Individual Amount in Force
009080	RGA Reinsurance Company	1,808,678,283
007283	Swiss Re Life & Health America Inc.	1,792,814,073
006746	Munich American Reassurance Company	1,363,750,634
068031	Hannover Life Reassurance Co of America	1,127,704,597
009189	SCOR Global Life USA Reinsurance Company	990,948,305
009791	Canada Life Assurance Company USB	817,063,894
006555	SCOR Global Life Americas Reinsurance Co.	595,930,104
006234	General Re Life Corporation	339,641,343
061745	PartnerRe Life Reinsurance Co of America	123,993,882
060212	SCOR Global Life Reins Co of Delaware	89,258,016
008863	Optimum Re Insurance Company	86,317,420
060560	Wilton Reassurance Company	84,617,616

Source:

Exhibit 1b

US Life Re – Top US Life Reinsurers by Group Life Insurance in Force, 2022

(USD thousands)

AMB#	Company Name	Total Group Amount in Force
009791	Canada Life Assurance Company USB	4,144,238,094
006746	Munich American Reassurance Company	399,480,311
009080	RGA Reinsurance Company	101,175,517
007283	Swiss Re Life & Health America Inc.	99,173,593
009189	SCOR Global Life USA Reinsurance Company	34,936,642
006234	General Re Life Corporation	29,704,565
006555	SCOR Global Life Americas Reinsurance Co	2,494,896
060212	SCOR Global Life Reins Co of Delaware	1,653,678
068031	Hannover Life Reassurance Co of America	1,468,935
007086	First Allmerica Financial Life Ins Co	550,902
006297	Union Fidelity Life Insurance Company	204,178
008491	Commonwealth Annuity and Life Ins Co	127,348

Source:

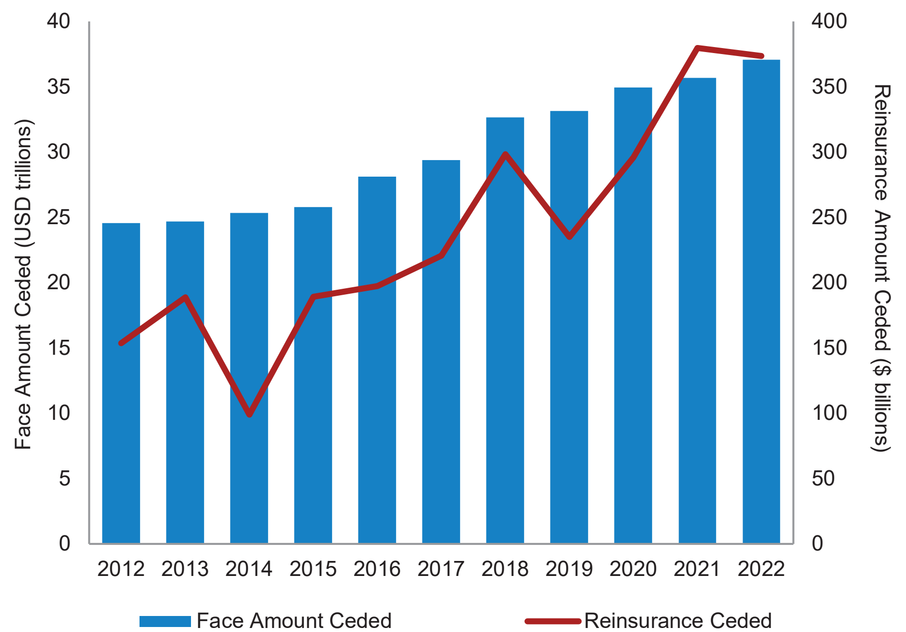
Prudent asset-liability matching is a key element of the enterprise risk management frameworks of life reinsurers, whose asset portfolios tend to be dominated by longer-duration, fixed-income securities of high credit quality. AM Best believes that strong capital buffers will be able to absorb potential asset revaluations amid the volatile capital markets in 2023. After years of generally investing in securities with shorter-than-average liability durations during the prolonged low interest rate environment, asset-intensive reinsurers and other newer entrants have been extending their asset durations by buying higher-rated, on-the-run bonds with more attractive coupon rates.

Global Life Reinsurance Market Dynamics

Almost all of the largest global reinsurers write both life and non-life business. For the traditional life reinsurers, the overall market landscape has not changed very much, with the top-tier global life reinsurers—maintaining their leading market positions based on reinsured face amounts in force.

These top-tier companies account for over 96% of the US individual (**Exhibit 1a**) and group life (**Exhibit 1b**) in force reinsured.

Exhibit 2
US Life Re – Reinsurance Ceded



Source: AM Best data and research

The pandemic highlighted the significant exposure of the largest life reinsurers to US mortality trends. In response, the European reinsurers are seeking further growth in other regions and products to create more balanced portfolios. Premium growth in Europe has been muted partly due to higher reinsurance pricing, which has resulted in some primary writers choosing to retain more risk on their own balance sheets. Overall, reinsurers generally see good opportunities in the life segment and hope to benefit from growing customer demand for life protection, higher post-pandemic mortality premium rates, and higher interest rates. Financial solutions like longevity swaps have become more popular among pension funds and insurers in a number of European markets, particularly in the UK.

Historically, the US life reinsurance market had been pressured, as primary insurers transferred less risk to third-party reinsurers, which led to a years' long decline in cession rates. Over time, primary insurers generally have enhanced their balance sheet strength and business diversification. With greater access to data, they can price more accurately and retain more risk. However, the rise in US business ceded over the past few years continued in 2022 (**Exhibit 2**). The absolute amount of business ceded generally rises over time due to inflation, but other factors are also driving this trend. The top-tier reinsurers have invested, to varying degrees, in innovative products and services to differentiate themselves in a competitive market. This helps drive profitable revenue from primary insurers seeking access to additional expertise to grow and compete in new markets and to distribution channels, or looking at new or refinements to underwriting methods. For example, several reinsurers have adopted automated and accelerated underwriting, using more sophisticated tools such as data analytics to determine pricing. With more companies relaxing some of their underwriting standards during the pandemic, including rising policy size thresholds for fluidless underwriting, life insurers have looked for assistance and guidance from traditional reinsurers. Helping these trends is consumers' new awareness of the importance of life insurance.

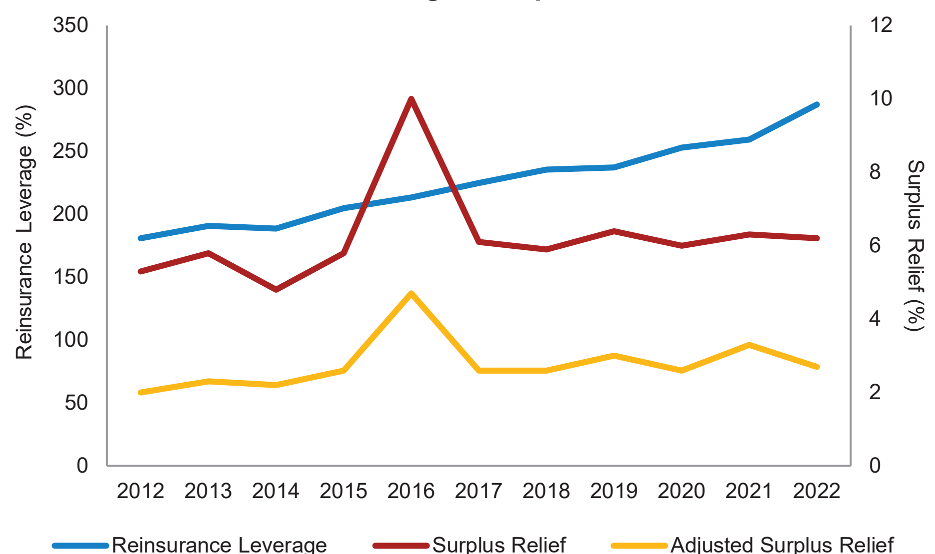
Some reinsurers have focused on providing capacity for large one-off full or structured remote risk reinsurance transactions on in-force blocks that help primary insurers manage their capital and accelerate the delivery of their strategic and financial targets for investors.

The ratios most often used to measure reliance on reinsurance to support capital needs are the *reinsurance leverage ratio*, *surplus relief ratio,* and *adjusted surplus relief ratio*.

- The *reinsurance leverage ratio* is defined as aggregate reserves ceded to unaffiliated reinsurers plus amounts recoverable and funds held, divided by statutory capital and surplus. This ratio measures the cedent's dependence on the security provided by its reinsurers and the potential exposure to adjustments on such reinsurance.
- The *surplus relief ratio is* defined as reinsurance commissions and expense allowances on reinsurance ceded (recorded as income on the statutory statement) divided by C&S, illustrating the degree to which a cedent depends on reinsurance to maintain its solvency ratios, e.g., the National Association of Insurance Commissioners' (NAIC) risk-based capital and Best's Capital Adequacy Ratio (BCAR).
- *The adjusted surplus relief ratio* simply nets out expenses and commissions on reinsurance assumed (recorded as a statutory expense) before dividing by C&S. As a result, the adjusted surplus relief ratio for the industry is less volatile and reports at an overall lower level than the surplus relief ratio does.

Other than in 2016, the US industry has maintained a surplus relief ratio in a narrow band of 4.8% to 6.4% (**Exhibit 3**). An anomaly occurred in 2016, as large cessions by several companies resulted in elevated commissions and expense allowances received on reinsured business, raising the surplus relief ratio to almost twice the longer-term average.

Exhibit 3
US Life Re – Reinsurance Leverage & Surplus Relief



Source: AM Best data and research

The reinsurance leverage ratio for the US industry rose the most in 2020 (by approximately 7%, from 237.2% in 2019, to 252.8% in 2020) and 2022 (by approximately 11%, from 259.4% in 2021, to 287.2% in 2022). Despite the typically long lead time until reinsurance transactions close, this might suggest reinsurance demand and supply remain robust in both declining and rising yield environments, as in 2020 and 2021. This trend points to the growing use of third-party reinsurance in the US life industry relative to companies' C&S.

New Entrants in the Market

Private-equity backed insurers have emerged over the last year or two as start-ups in both the annuity and block reinsurance markets. New capital has clearly come into the segment, which has been viewed positively. The key to deploying this capital is the sponsor's understanding that life and annuity insurance is a long-term play. Capital providers who are impatient and lack a long-term focus will be unable to achieve their business goals. New market participants will need to understand the long-term nature of the segment and be prepared to provide the appropriate customer and capital support for the underlying business. Some of the more established asset-intensive reinsurers have begun plans to win non-US business, predominantly by reinsuring international business through Bermudian affiliates,

but some have also considered establishing offshore licenses in Continental Europe and Asia. Some of the more seasoned asset-seeking reinsurers are also emphasizing their flow reinsurance business strategies, to underscore their long-term focus to remain strong partners with their cedents with aligned go-forward interests.

These companies seek to grow assets under management through reinsurance transactions to help primary insurers unlock capital, as in the pre-2022 low interest rate environment. PE-backed reinsurers can offer attractive ceding commissions based on higher anticipated investment returns once the transferred assets are rolled into a wider set of investment opportunities. Another important factor is the market value of the assets transferred, which depends on the credit spreads on the treaty's effective date—the greater the value of the transferred assets, the more likely the asset-intensive reinsurer can make the pricing work.

Reciprocal Certified Reinsurer Status and Collateral Reform for the US Life Segment

In January 2020, the NAIC placed the Bermuda Monetary Authority, Japanese Financial Services Agency, and Swiss Financial Market Supervisory Authority on its list of Qualified Reciprocal Jurisdictions. The European Union and the United Kingdom had already signed bilateral agreements with the US and are now Covered Agreement Reciprocal Jurisdictions. This allows non-US reinsurers operating on a cross-border basis to post less than 100% of the US statutory reserves as collateral for US reinsured business, depending on the non-US reinsurer's financial strength, business diversification, and several other prerequisites. Previously, state insurance regulators had required non-US reinsurers to hold 100% collateral in the US for the risks they assumed from US insurers. To date, several dozen reinsurers have received reciprocal status, and the majority of state insurance departments now approve the use of reciprocal jurisdictions. Several offshore reinsurers have been actively pursuing this designation in states where they aim to expand their business. (Many start-ups do not yet satisfy all of the prerequisites for obtaining certified reinsurer status.) The rise in the number of transactions by certified reinsurers (according to Schedule S Part 5 in US carrier statutory statements) could also drive increased reinsurance leverage.

For risk management, a ceding company may request additional collateral above the regulatory requirements, and the reinsurer may be willing to offer the same over-collateralization for commercial reasons, which provides additional security for policy owners' benefits.

Although the volume of business reinsured on a certified basis to offshore reinsurers is relatively small compared with total third-party cessions, certified reinsurer status could benefit reinsurers as it provides another layer of credibility. It may allow greater flexibility to structure deals, including more straightforward coinsurance treaties instead of Modified Coinsurance (MODCO) and Funds Withheld (FWH) transactions, which can cause accounting friction and investment-related restrictions. Discussions between regulators and carriers under the Covered Agreement that primarily relates to one justification regulating a group's parent company could alter the collateral required by offshore reinsurers. AM Best will continue to monitor this emerging trend, with a greater focus on how future transactions are structured.

Bermuda Regulatory Developments in 2023

The Bermuda Monetary Authority (BMA) has proposed enhancements to its Bermuda Solvency Capital Requirement (BSCR) model with an effective date of January 2024. A draft proposal was published in February 2023, with a revised proposal expected in the third quarter of 2023. The proposed enhancements generally move the BSCR closer to Solvency II and may help the BSCR maintain its Solvency II equivalency status. They are also expected to harden life insurance pricing.

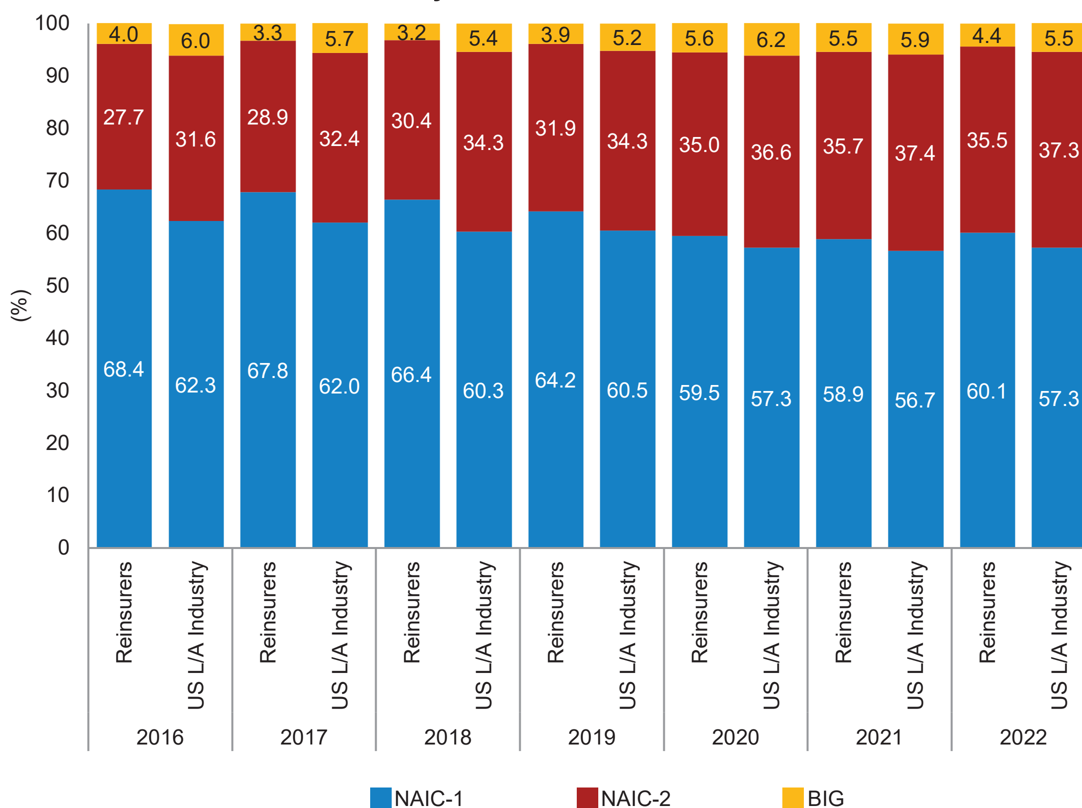
The proposal's main points are changes to technical provisions, amendments to the BSCR, and enhancements to reporting. The technical provisions entail changes to the treatment of the risk margin calculation among consolidated entities and introduce a liquidity premium for asset-liability duration mismatch. The liquidity risk management requires more modeling, stricter risk management, and stronger governance systems. These changes would apply to business written in 2024.

The amendments to the BSCR include separating the expense risk and lapse risk and adding scenario testing unique for each risk as well as modeling for catastrophic man-made risks. Reporting enhancements would also allow for some predefined adjustments that wouldn't require BMA approval.

Reinsurers' Asset Portfolios

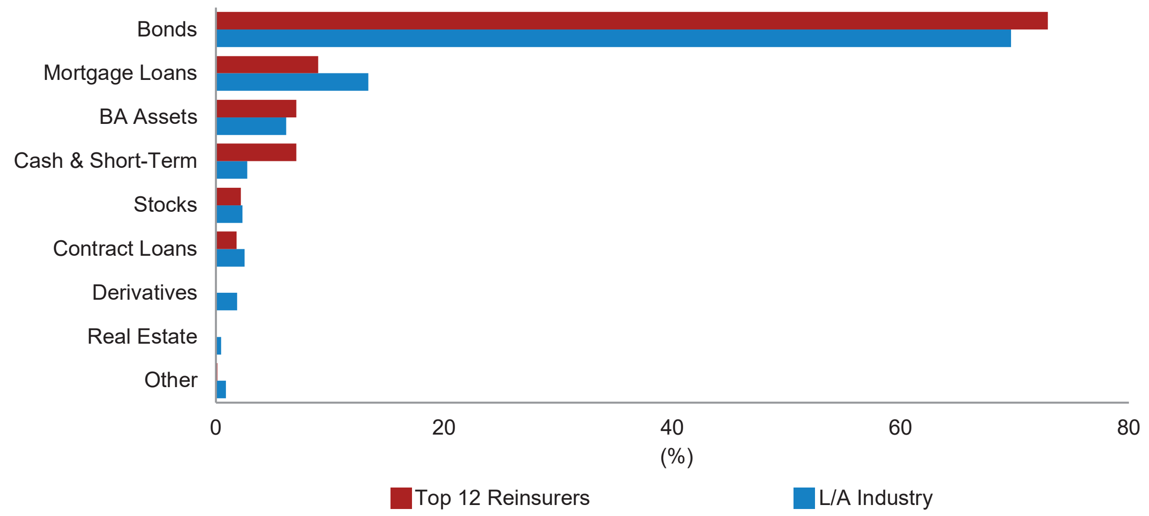
The credit profiles of life reinsurers' bond portfolios have historically been conservative and of higher quality, with larger allocations to investment-grade bonds and smaller allocations to below-investment-grade bonds. Reinsurers in the US life segment increased their allocations to NAIC-1 bonds for the first time in years owing to higher interest rates, which have helped improve credit quality and made the corporate bond market more attractive (**Exhibit 4**). Life reinsurers have the same objective as primary writers: Seeking well-matched yields, for example, with mortgage loans (9.0%)—an asset class that AM Best views as less liquid than investment-grade bonds—although these exposures remain lower than direct writers' (13.4%) (**Exhibit 5**). Of particular concern in the COVID and post-COVID world are commercial mortgage loan portfolios with large exposures to the office, retail, and travel and leisure sectors. Despite the conservativeness of reinsurers' portfolios versus direct writers, the net yields of the two groups do not differ greatly.

Exhibit 4
US Life Re – Bond Portfolio Quality



BIG = Below investment grade.
Source: AM Best data and research

Exhibit 5
US Life Re – Invested Assets, 2022



Source: AM Best data and research

Market Fundamentals Drive Growing Demand for Health Reinsurance

Expensive new treatments and therapies, as well as pressure on capital associated with government business, are driving greater demand for health reinsurance

Principal Takeaways

- The need for health reinsurance tends to be less than for other segments owing to obligations that tend to be short-term, pricing flexibility, and minimal catastrophe exposure.
- In the US market, the use of health reinsurance has grown, owing to recent weak financial results in the commercial segment, growth of Managed Medicaid premium, and a sharp increase in high-cost claims.
- The growth of health insurance premium in emerging markets and a lack of expertise in that segment among primary carriers, particularly in Asia, is fueling the demand for health reinsurance.

The demand for health reinsurance solutions in the US and globally continues to grow. In the US, the downturn in the profitability of the commercial segment in 2021 and 2022 prompted some carriers to turn to reinsurance to relieve the pressure on capital. Primary carriers are facing a rise in high-cost claims associated with innovative treatments and new therapies. Furthermore, the rapid growth of narrower margins, capital intensive government business—Medicare Advantage (MA) and Managed Medicaid in the US[1]—add to the pressure on capital. Globally, COVID-19 slowed health premium expansion, even as it enhanced awareness of the value of health protection products and fueled near-term growth. Reinsurance provides solutions for capital support and allows primary carriers to focus on growth.

Health reinsurance represents a relatively small share of premium for global reinsurance carriers. Although health insurance accounts for about 50% of global premium, the short-term nature of obligations, relative flexibility to re-price, and limited exposure to catastrophic events lessen the need for reinsurance. In addition, around 80% of global health insurance premium is generated in the US, where large primary carriers with strong balance sheets dominate the market. These companies traditionally choose to retain premiums with little or no need for excess of loss protection.

The focus on premium growth has limited primary carriers' profitability, resulting in a lag in capital accumulation. As a result, US health carriers have recently started showing more of an appetite for reinsurance. In addition to protection from high-cost claims, more companies are using reinsurance to enhance financial flexibility. Reinsurance allows health insurers to free up capital and use it to cover operational needs, expand vertical integration capabilities, maintain debt service, and return to shareholders.

The US health insurers have historically dominated the market in premium, but emerging economies are now generating the majority of premium growth due to a rapidly expanding

Analytical Contact:
Doniella Pliss, Oldwick
+1 (908) 882-2245
Doniella.Pliss@ambest.com

Contributor:
Jason Hopper, Oldwick

2023-102.14

[1] Managed Medicaid is a health insurance plan for low-income individuals administered by private insurance companies and paid for by the government. The government regulates the eligibility and mandates covered benefits. Insurance companies are generally at risk, but the government provides backstops. Medicare Advantage (MA) – health insurance plan for individuals age 65+ that is administered by private insurance companies and primarily paid for by the government. Government regulates eligibility and mandates covered benefits. MA has a large premium per member and carriers high regulatory capital requirements. Insurance companies are at risk.

middle class, especially in Asia, and its rising demand for better access to healthcare. In addition, the aging population and larger burden of chronic diseases worldwide has fueled a need for more medical services.

Accelerated Growth at Leading Health Reinsurers

Major global reinsurers have reported accelerated health premium growth over the past decade, although in 2021 and 2022, health reinsurance premiums declined somewhat owing to disruptions caused by COVID-19 in primary health product sales, especially in some emerging markets. Still, positive results have helped offset the losses from COVID-19 mortality claims over the past two years.

- *Swiss Re*: Health premium as a share of total premium increased from 11% to 14% between 2011 and 2020, but declined to 11% in 2021 and 10% in 2022. Health premium remained flat in 2021 and 2022 while total premium grew. Earnings before interest and taxes (EBIT) for the health business dropped by about 25% in 2022 compared to 2021 after it more than doubled in 2021 compared to 2020. Combined 2021 and 2022 EBIT from health business was around USD715 million. Health business was significantly more profitable than life.
- *Hannover Re:* Morbidity premium grew 31% from 2018 to 2022, but the rate of growth slowed to 2.9% in 2022 from 17.6% in 2019. During the same period, total life and health reinsurance premium grew by 25%; mortality premium, by 17%; and longevity, by 18%. The share of morbidity premium rose only slightly, from 27% to 28% of total premium from 2018 to 2022, while mortality declined from 42% to 40%.
- *Munich Re*: Health reinsurance premium declined by 2.7% in 2022 from 2021, driven by the termination of insurance contracts in the UK and the US, which was partially mitigated by new business growth in Asia.
- *RGA*: Morbidity risks grew from 9% in 2005 to 24% in 2022, while mortality declined from 89% to 59%. In 2022, morbidity provided 23% of adjusted operating income compared with 34% for mortality.
- *SCOR*: The share of health premium (critical illness, disability, and long-term care) grew from 18% of premium in 2013 to over 25% in 2022, while mortality premium declined from 69% to 56%, and longevity grew from 3% to 9%. However, health premium growth has moderated more recently. SCOR has a strong market position in the disability (Europe, New Zealand, Australia, and Canada) and critical illness segments (market leader in the UK). Medical reinsurance is a rather small part of SCOR's life/health portfolio, with new business coming mostly from Asia.

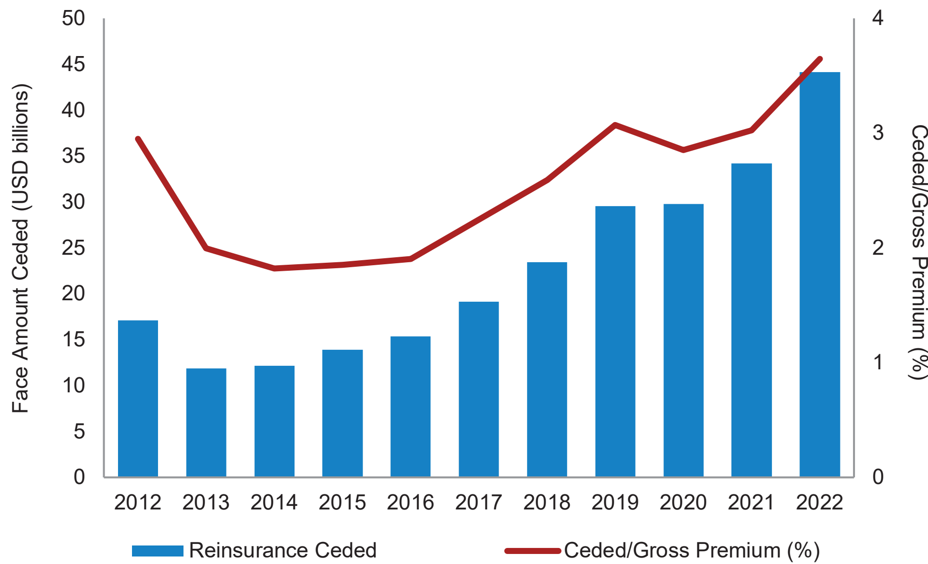
On a broader scale, global reinsurers view the health segment as an important pillar of ESG (environmental, social, and governance) and sustainability initiatives. That includes closing protection gaps, improving wellbeing solutions, and supporting aging populations. More recently, mental health has come into focus due to the pandemic's severe impact on individuals, societies, and businesses, and has been added to the list of major risks by several global reinsurance carriers. Reinsurers provide enhanced support to primary carriers to expand mental health assessments and implement solutions to curb future claims costs.

US Health Reinsurance Market Still Growing

The US health reinsurance market has grown in both quota share and excess of loss reinsurance arrangements. The volume of ceded health premium (combined for health and life/health statutory filers) has more than doubled over the past ten years (**Exhibit 1**). Ceded premium as a share of gross premium has been growing gradually, reaching 7% in 2022, after fluctuating between 5% and 6.9% the past ten years (**Exhibit 2**).

Exhibit 1

US Health Reinsurance Ceded (Orange Book/DMHC Filers Only)

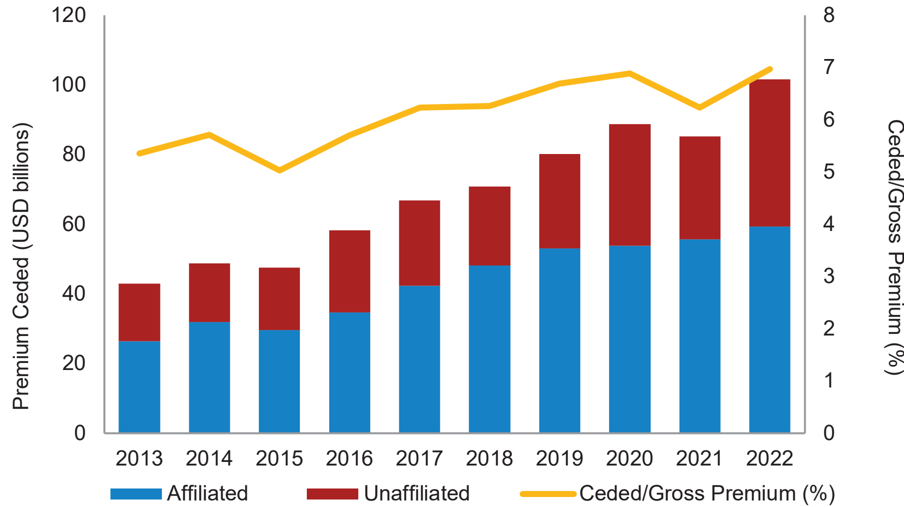


DMHC = Department of Managed Health Care, a government agency in the state of California in charge of regulating health insurance plans in the state.

Source: BESTLINK

Exhibit 2

US Health Re – Health Insurance Premiums Ceded



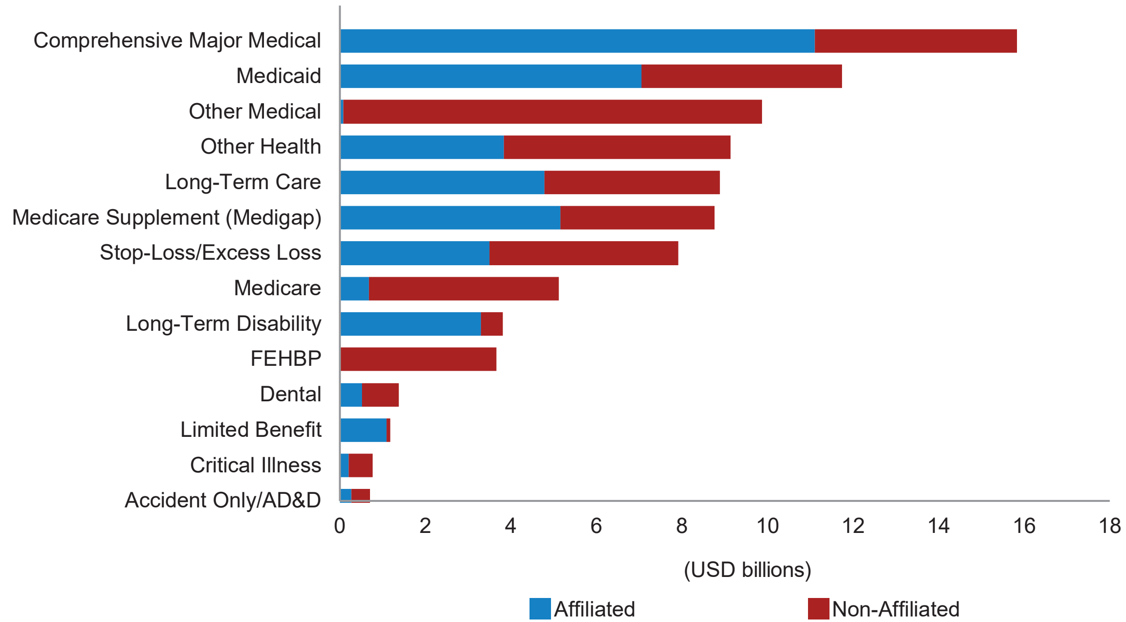
Note: Includes Blue Book filing companies.

Source: BESTLINK

A sizable amount of ceded premium in the US health market is reinsured with affiliates, as large health insurers usually have multiple subsidiaries and use the flexibility to optimize their internal capital structure and business flow. However, in 2022, the share of premium ceded to non-affiliated companies rose to 42%, the highest in ten years. While total ceded premium for the commercial segment declined in 2022, the amount ceded to non-affiliated reinsurers increased. At the same time, 40% of ceded premium for Medicaid business went to non-affiliates in 2022, a sharp increase compared with less than 10% in 2021. Ceding to non-affiliates for the stop-loss, Medicare supplement, and long-term care lines of business also rose (**Exhibit 3**).

Exhibit 3

US Health Re – Health Premium Ceded by Product



Source: BESTLINK

Greater Use of Captives

Although the share of premium ceded to affiliates declined in 2022, affiliated arrangements have become more sophisticated, especially at the large national carriers with significant resources and multiple subsidiaries. For example, in the past several years, Elevance Health, Inc., has been using its long-established captive to assume Federal Employee Program (FEP) premium written at multiple Elevance affiliates. Elevance established a segregated cell at the captive for health premium. FEP premium is a cost-plus program with relatively low risk, but many states treat it as a commercial product and impose capital requirements accordingly. Because reinsurance through a captive provides an opportunity for material capital relief at insurance subsidiaries, Elevance can send extra capital to the parent and use it for the needs of the enterprise. The captive cell structure allows Elevance to add other lines of business to the cell in the future.

In 2022, Aflac, Inc., established a reinsurance entity in Bermuda, to transfer liabilities for the old cancer policies of its Japanese subsidiary. Aflac is a market leader in the supplemental health segment in both the US and Japan. The company maintains relatively low loss ratios and consistent profitability. Reserves for the old block of cancer policies in Japan were established under very different assumptions about the nature and duration of cancer care, as over the past two decades the treatments have shifted from inpatient to outpatient settings. As a result, Aflac has seen consistently positive reserve development for these policies.

The internal reinsurance of these liabilities allows Aflac to both unlock the value of reserves and bring additional profitability forward and to lower the capital requirements for the Japanese subsidiary. By lowering the cost of capital, Aflac can offer more favorable pricing and become more competitive, which puts Aflac on more equal footing with competitors that have already executed similar transactions. Only a small share of existing liabilities has been reinsured so far, but it has allowed Aflac to take a sizable extra dividend from its Japanese subsidiary. Aflac plans to increase the volume of business under this arrangement in the near term.

Ceded Premium Rises but Profitability Declines in the Commercial Segment

The average growth of ceded premium between 2012 and 2021 was about 8%, but rose notably to almost 20% in 2022. Ceded premium exceeded USD100 billion in 2022. Over the past decade, the growth of ceded premium has been largely driven by government programs where premium expansion was more robust during that period. However, in 2022, the commercial line of business contributed significantly to ceded premium growth. From 2021 to 2022, for health companies filers ceded commercial premium increased from USD11.6 billion to USD15.8 billion. The growth in ceded commercial premium was in part due to primary carriers turning to reinsurance arrangements for capital relief following operating losses in the commercial segment in 2021 and 2022.

The profitability of the commercial segment declined substantially in 2021 and 2022, driven by higher COVID-19 expenses, including testing, treatment, and, to a lesser degree, vaccinations. The Public Health Emergency (PHE) in effect in the US through May 11, 2023, severely limited carriers' flexibility when it came to coverage and negotiation of COVID-19 related claims. At the same time, higher government subsidies fueled premium growth in the ACA (the US Patient Protection and Affordable Care Act) exchange segment. Companies with diversified product portfolios were able to offset lower results in the commercial segment with higher earnings in government programs. However, less diversified carriers found themselves with earnings insufficient to support the growing premium base, prompting greater utilization of reinsurance.

Several subsidiaries of Bright Health Group and Oscar Health, Inc., increased the volume of ceded premium in 2022 sharply over 2021, as persistent underwriting losses led to pressure on risk-adjusted capitalization and a need for capital relief. Additional commercial premium was ceded to AXA France Vie and RGA Reinsurance Company (Barbados) Ltd. As of January 2022, Health Insurance Plan of Greater NY, a lead insurance entity in Emblem Health, Inc., had ceded over USD1.6 billion to Canada Life Assurance Company to relieve the pressure on capital.

Friday Health Plans, Inc., expanded its ceded commercial premium to almost USD1 billion in 2022 from less than USD200 million in 2021, to relieve pressure from premium growth and comply with regulatory capital requirements in multiple states. The majority of premium was ceded to AXA France Vie. However, Friday was unable to stabilize its capital position and was placed in liquidation in mid-2023.

The long-term care segment also contributed to the growth of ceded premium in 2022, from just under USD5 billion in 2021 to almost USD9 billion in 2022. A large portion of the additional ceded premium went to affiliated companies.

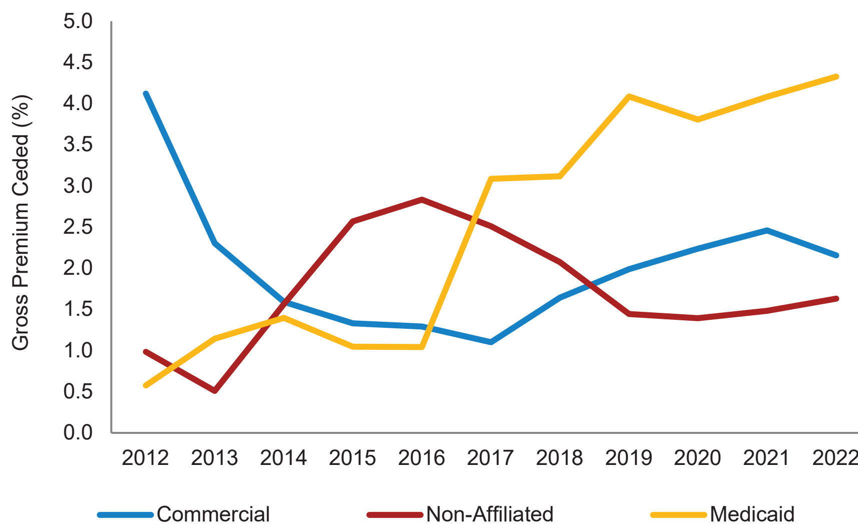
Overall, the share of ceded premium for the three major health segments (commercial, Medicare Advantage, and Medicaid) remains in the low single digits (**Exhibit 4**). However, given the high volume of direct premium, in dollar terms the ceded premium translates into very material amounts. For Medicaid, the share of ceded premium continues to rise, reaching its highest level, 4.3%, in a decade in 2022. Significant expansion of Medicaid premium during the PHE resulted in disproportionate growth for some carriers. The share of ceded premium for the MA line of business has been relatively flat the past three years, at around 1.5%. However, the volume of ceded premium has grown owing to the robust growth of the MA segment's top line.

Structured Reinsurance Solutions on the Rise …

The changing economics of the US health insurance segment is creating more demand for structured reinsurance solutions. The health insurance segment remains profitable, but most of the growth in recent years has been generated in the more narrow-margin government lines of business—MA

Exhibit 4

US Health Re – % of Gross Premium Ceded by LOB



Source: AM Best data and research

and Medicaid. However, MA and, especially, Medicaid are capital-intensive lines of business, with substantially higher capital requirements than for commercial premium.

Structured reinsurance offers an opportunity for capital relief and greater financial flexibility. It can be used to fund part of the capital structure but, unlike debt, does not impact financial leverage. Primary carriers retain all the future profits, minus a reinsurance financing charge. The arrangement is usually multi-year, and if a block of reinsured business is unprofitable, the reinsurer can set up a loss carry-forward against future profits.

Primary carriers can use structured reinsurance to write more premium or free up capital for other purposes—M&A, investing in the business, returning to shareholders. Structured reinsurance can also allow the primary carrier to meet risk-based capital requirements without turning to more expensive sources such as borrowing, which would limit business growth opportunities or the ability to use capital for other needs. Given the rise in the cost of borrowing the past two years, the level of interest in structured reinsurance has been growing.

… particularly for Medicare Advantage

Reinsurers view MA as an attractive opportunity for structured products growth and have the potential to play a larger role in the segment. Medicaid is less attractive to reinsurers owing to fluctuating profitability, contract limitation on margins, and high exposure to regulatory risks. Structured reinsurance arrangements can also be used for individual ACA and stop-loss lines of business.

The MA segment will continue to expand rapidly given the aging population and the product's value proposition. Competition in the space remains very intense, with more companies at the local, regional, and national levels entering the business. However, competition and the price-sensitivity of the senior population limits insurers' ability to implement premium rate hikes and retain membership. In the second quarter of 2023, several large carriers reported a marked increase in MA utilization, which could further pressure MA margins if the trend continues—and will challenge insurers' ability to accumulate the capital needed to support the fast growing premium volume.

Structured reinsurance is gaining more traction among the large US carriers. Among publicly traded, managed-care carriers, CVSHealth/Aetna Inc. has shown a consistent appetitive for capital relief through structured solutions. The ceding of over USD3 billion of MA premium to Hannover Re allowed Aetna to grow the MA segment without pressuring capital, following its merger with CVS and subsequent accelerated deleveraging. Aetna continues to use its wholly owned captive, Health Re, for an insurance-linked security (ILS) transaction to protect against potential spikes in the commercial medical loss ratio. The ILS arrangement has been in place for over a decade and has allowed Aetna to hold less capital at the lead regulated entity.

Rising High-Cost Claims …

Another area of growing demand for reinsurance in the US health market comes from rapid growth in catastrophic claims as advances in medical technology and pharmaceuticals create new opportunities for treatment. The implementation of the ACA in 2014 removed lifetime caps on individuals' medical claims (under major medical ACA-compliant products) creating opportunities for wider adoption of more expensive medical interventions.

According to Sun Life's most recent high-cost claims report, from 2019 to 2022, members with claims above USD1 million increased 45%. Growth of claims over USD1 million has accelerated more recently, growing by 15% from 2021 to 2022. The age distribution of high-cost claims has been shifting towards children, as new therapies emerge for some severe genetic diseases and in 2021 and 2022 children under 2 incurred around 25% of claims over USD1 million.

An emerging category of high-dollar claims is related to newly approved gene and cell therapies whose cost per treatment can easily exceed USD1 million. Around 15 gene and cell therapies have been approved so far, and overall utilization was less than some initial projections. The FDA (Federal Food and Drug Administration) pipeline includes more approvals for these types of drugs. Although the early cell and gene therapies targeted extremely rare conditions, several of the more recently approved drugs are for diagnoses with much higher prevalence. Some of these treatments are not a cure, meaning that once the condition is diagnosed the catastrophic costs may continue for a number of years, if not for the rest of an individual's life.

… Especially for Stop-Loss Carriers

The growth of high-cost claims has had a greater impact on stop-loss carriers, given their large share of these claims. With the growing shift from fully insured to self-funded in the commercial segment, the volume of stop-loss premium has grown, bringing more demand for reinsurance.

Smaller stop-loss and major medical carriers have traditionally relied on excess-of-loss reinsurance protection, even before the rise in large claims. However, in recent years, even large insurers have begun purchasing high-cost claims protection, owing to the growing number, duration, and severity of catastrophic claims. The number and cost of claims hitting reinsurance has been rising continuously, resulting in a substantial hardening of reinsurance rates. Primary carriers have been raising the deductibles for their excess-of-loss reinsurance gradually to balance the rate increases.

Stop-loss carriers still find sufficient capacity in high quality counterparties for excess-of-loss protection. Although reinsurance carriers believe the health segment provides diversification, they may be concerned about the emerging new risks of gene and cell therapies. Over time, reinsurers may start imposing limitations on coverage for those therapies, which could lead to higher reinsurance disputes and add a new level of complexity to the stop-loss market. However, reinsurance will continue to play

a vital role in keeping the stop-loss market competitive, as smaller players need protection to be able to participate and offer primary coverage.

In response to the market demand, reinsurers have been building expertise around the ability to both predict and manage high-cost medical conditions to set appropriate pricing and limit the losses. That becomes especially important for small group level funded products, where losses can be harder to predict. The innovative capabilities around case management of high-cost complex claims have become a value-added services offered to primary carriers seeking excess of loss protection.

Growing Reinsurance Demand for Value-Based Care Arrangements

Another area of demand for health reinsurance has emerged around value-based care arrangements.[2] Each year, primary insurance carriers report growth in value-based medical spend, wherein payments are tied to quality outcomes and risk is shared with providers. More of these arrangements have begun to include providers' downside risk participation. In addition, the capitation arrangements for primary care have grown significantly, which could raise the burden of higher-cost members on providers. Medical providers are turning to reinsurance to limit their potential exposure through excess-of-loss type protection, with a growing number of reinsurers participating in this segment.

Since medical reinsurance was relatively limited prior to recent years, the vast majority of historical claims data in the US belongs to primary carriers. Reinsurers have developed their own data analytics and some have collaborated with technology companies to make inroads into predictive analytics for health claims. Swiss Re Corporate Solutions, a commercial insurance unit of Swiss Re, collaborated with Google's subsidiary Verily, and between 2020 and 2022 was a minority investor in Granular Insurance, a company that uses precision risk technology to improve the performance of stop-loss products.

Health Reinsurance Expanding Globally, Especially in Asia

Globally, health reinsurance has been used to support premium growth and provide expertise to local players. In many emerging markets with a low penetration of health insurance and a high share of healthcare expenses paid out-of-pocket, health insurance premium have seen double-digit growth rates the past decade. Most of the growth of reinsurance demand for health products in emerging markets has been generated in Asia, owing to fast premium expansion of fixed-benefits products such as critical illness and personal accident. These products have relatively low barriers to entry and are priced to narrow margins as many companies are focused on growth. Low limits on policies ensure there is no exposure to large claims. However, because capital accumulation has been an issue, reinsurance is used to provide capital relief and ensure compliance with regulatory capital requirements.

China has led the expansion of commercial health insurance in Asia for the past decade, with an annual growth rate of almost 30% between 2010 and 2020, with the critical illness product accounting for about half the premium. However, growth has slowed significantly the past several years, driven by the impact of COVID-19 on distribution and difficulties of conducting face-to-face sales. Slower growth and more experience with health products resulted in primary carriers retaining a higher share of the business, reducing the role of reinsurers.

However, COVID-19 also boosted consumer awareness and prompted demand for more comprehensive health protection products. To meet that need, local primary carriers have started offering medical indemnity products tailored towards specific needs, age groups or diagnosis.

[2] Value-based care refers to a contractual arrangement between providers (doctor, hospitals) and insurance companies whereby the reimbursement to providers is tied to a set of quality of care outcomes. Examples include re-admission to a hospital after a major procedure, control of certain measures (blood pressure, sugar level) for individual with chronic conditions; keeping overall cost of care within certain limits. These types of contracts are viewed as a major tool to control the cost of care while improving health outcomes.

To achieve better results, local carriers are turning to reinsurers for expertise on product design, underwriting, and risk selection. Global reinsurers can provide extensive knowledge of products and technological tools; however, health insurance has proven to be very local in nature, creating ample opportunities for local and regional reinsurers as well.

Given the need for innovation and the fast pace of change, the health reinsurance market in Asia has attracted non-traditional participants such as technology companies. Chinese conglomerate Tencent Holdings Ltd. established a reinsurance subsidiary, FuSure Reinsurance Company Limited, in 2021, which focuses on providing health reinsurance to companies in Greater China. Tencent's technological expertise is sought as a competitive advantage to provide innovative solutions to the market. Technology companies could have a larger role to play in the future of health reinsurance, in both emerging and mature markets, based on the growing accumulation of health data, combined with innovative tools and vast financial resources.

AM Best believes reinsurers will continue to play an important role in supporting the continued growth of the health insurance segment, not only through capital support and cost reduction solutions, but also by identifying and helping manage emerging risks. Furthermore, ongoing earnings volatility, rising high-cost claims, and growing demand for efficient health insurance solutions globally have created an environment for greater participation by reinsurers in health insurance.

Operating Performance, Retro Cost Drive Asian Reinsurer Strategies

Composite P/C NPW grew 8.1% year over year

Principal Takeaways

- Underwriting losses and poor investment returns dragged the large Asian reinsurers' 2022 operating performance.
- The decline in large Asian reinsurers' shareholders' equity is much smaller than that of European reinsurers due to monetary easing in some Asian countries.
- A decrease in retro capacity suppressed Asian reinsurers' capacity offering. A lack of aggregate excess-of-loss retrocession capacity availability may result in higher underwriting volatility for reinsurers.
- Reinsurers' appetite for catastrophe-exposed property business in South and Southeast Asia has diminished, given the heightened catastrophe activity in the region in recent years.
- Reinsurers demonstrated increased pricing discipline and a willingness to walk away from unprofitable programmes, which led to meaningful rate increases.
- Some reinsurers have pivoted toward non-property lines in pursuit of better earnings diversification.

AM Best's Asia-Pacific reinsurance composite, a select group of reinsurers from the Global Top 50 Reinsurers, remains strong and resilient, sustaining growth despite tough market conditions. Their financial results shed light on the operating performance of both domestic and international operations of these Asia-Pacific reinsurers, which write both life and property/casualty businesses.

The composite delivered strong growth in 2022, with P/C net premiums written (NPW) up by 8.1% year over year, versus 6.4% in 2021 (**Exhibit 1**). The results demonstrated carriers' continuous efforts to diversify business, as well as the benefits of both primary rate and reinsurance rate increases. Compared to the US and Bermudian reinsurers and large European reinsurers, Asia-Pacific reinsurers enjoyed a less immediate positive benefit from excess-of-loss rate hardening, given that domestic proportional treaties account for a relatively large proportion of their books, to meet their domestic capacity needs.

Growth in premiums and shareholders' equity was stronger in original currency, as a strong US dollar dampened the premiums, shareholders' equity, and net profit when measured in USD. For example, the P/C reinsurance NPW of China P&C Reinsurance Company Ltd. (a P/C reinsurance subsidiary of China Reinsurance Corporation) expanded by 7.1% in reported currency, while growth in USD dropped slightly. Each of the Asia-Pacific reinsurers in the composite reported stronger growth for the P/C segment in 2022 in their reporting currency.

For the 2023 renewals so far, business strategies amongst Asian reinsurers are diverse. Some Asian reinsurers were unable to secure the same level of retro capacity or the preferred terms/structure of protection, and lowered their capacity offerings (especially on the property line) to strictly follow their risk appetite statements in their enterprise risk management (ERM) frameworks.

Analytical Contacts:
Christie Lee, Hong Kong
+852 2827 3413
Christie.Lee@ambest.com

Chris Lim, Singapore
+65 6303 5018
Chris.Lim@ambest.com

2023-102.10

Exhibit 1
Global Reinsurance — Asia-Pacific Market Financial Indicators

	5-Yr Avg	2022	2021	2020	2019	2018
NPW Growth (Total) (%)	10.3	5.4	7.7	12.9	23.3	2.2
NPW Growth (P/C only) (%)	10.7	8.1	6.4	14.4	17.2	7.2
Reinsurance % of NPE	93.2	94.3	94.0	93.4	93.4	91.0
Shareholders' Equity Growth (%)	4.2	-9.5	0.6	18.0	8.3	3.6
Loss Ratio	73.1	75.3	73.9	73.9	72.3	70.3
Expense Ratio	27.9	25.5	27.3	27.5	28.9	30.1
Combined Ratio	101.0	100.8	101.1	101.3	101.2	100.4
Net Investment Ratio[1]	6.4	5.5	7.0	7.0	6.5	6.0
Operating Ratio	94.6	95.3	94.1	94.3	94.7	94.4
Return on Equity (%)	4.8	1.8	7.0	5.0	5.4	4.8
Return on Revenue (%)	2.9	1.0	4.1	2.9	3.2	3.2
NPW (P/C only) to Equity (End of Period)	162.2	193.1	161.7	152.9	157.7	145.7
Net Reserves to Equity (End of Period)	215.3	270.7	222.3	194.5	196.3	192.4
Gross Reserves to Equity (End of Period)	273.3	337.2	279.8	253.7	250.9	245.0

[1] Net investment ratio based on P/C NPE.
Ratios may vary slightly due to rounding.
Source: AM Best data and research

The combined ratio of reinsurers in the Asia-Pacific composite improved slightly, from 101.1 in 2021 to 100.8 in 2022, just below the five-year average of 101.0. The weighted average P/C underwriting results for the composite reflects the higher rankings of China Re (#8) and Korean Re (#13) among the top 50 reinsurers. With a large book of proportional treaties, the composite's combined ratio remains very stable and hovers around 100, attributed to loss-absorbing features in proportional treaty commission schemes, such as wide sliding scales and loss participation, which result in stable but thin profit margins. Despite a higher cost of capital and a challenging investment environment in 2022, Asia-Pacific reinsurers maintained their underwriting discipline in 2023 renewals to ensure reasonable profit margins and adjusted pricing in proportional treaties to improve performance. Primary insurers also followed this rule, aligning with reinsurance pricing, terms, and conditions, which is expected to improve revenue and underwriting results for reinsurers. Asian reinsurers invest in their analytical and modelling expertise to enhance their portfolio management capabilities, effectively manage capital allocations, and support insurability of natural catastrophe risks in their core markets.

The composite's net income deteriorated to USD166 million in 2022 from USD688 million in 2021, while return on equity also declined significantly, to 1.8% in 2022 from 7.0%. These results were driven by a sharp increase in catastrophe losses outside their home markets and a challenging investment environment in fiscal year 2022. For China/Hong Kong-based reinsurers, investment income was adversely affected by realised and unrealised losses from both equities and fixed-income portfolio. The MSCI China Index slumped 23% in 2022, marking its worst year since 2008, while the Hong Kong equity benchmark, the Hang Seng Index, traded below 15,000 points last October, which was half the peak recorded two years ago. China's slower economic growth underscores the growing credit stresses. For reinsurers, lower yields and greater economic uncertainty will require further investment risk oversight.

The absolute level of shareholders' equity of the Asia-Pacific composite's reinsurers fell by 9.5% YoY, which was much lower than the capital decline for the European Big Four Composite (-38%). The decline was due in part to the impact of foreign exchange rate movements, based on figures converted to USD. In addition, the impact of rising interest rates (other than in Japan and China), which results in net unrealised losses on fixed-income securities, also had a negative effect on the combined shareholders' equity figures. AM Best expects the composite's shareholders' equity will have a one-

time movement in 2023, as most reinsurers in the composite start adopting the new accounting IFRS 17 standard. The magnitude of change could vary by company depending on business profile mix, investment classifications, and actuarial assumptions.

Due to the decline in shareholders' equity and business expansion, AM Best observed that the Asian reinsurers' underwriting leverage increased sharply. The NPW-to-equity ratio increased from 162% in 2021 to 193% in 2022 and the net reserves to equity ratio increased from 222% in 2021 to 271% in 2022. To maintain capacity offering, China P&C Reinsurance Company Ltd. (RMB4 billion [USD578 million]) and Taiping Reinsurance (China) Company Ltd. (RMB1.3 billion [USD188 million]) both issued capital supplementary bonds (a form of subordinated debt) in 2023. Korean Re issued KRW580 billion (USD458 million) in hybrid bonds in 2022 and 2023.

Nevertheless, the capital position of the major reinsurers in the Asia-Pacific composite remains robust. All of their consolidated Best's Capital Adequacy Ratio (BCAR) scores remain at the strongest levels. Global expansion has contributed to diversification benefits that mitigate their inherent risk of domestic natural catastrophe risk accumulation. However, global expansion also becomes more challenging because retrocession rates have increased significantly. Aggregate excess-of-loss capacity, which functioned well in past years to lower reinsurers' annual aggregate retention and stabilise net underwriting profit from multiple catastrophe losses, is severely restricted owing to the prior years' catastrophe losses. AM Best believes that, before new ideas of retention protection retrocession structures are accepted by retrocessioners and cedents, reinsurers will face higher volatility in underwriting results in active catastrophe years.

Market Dynamics – North Asia

After the global insurance industry recorded a second year with more than USD100 billion in natural catastrophe losses and higher-than-expected secondary peril losses, the retrocession rate increase and capacity withdrawal on retrocession protection drove the regional Asia-Pacific reinsurers to revise their business strategies, capacity offering limits, and targeted profit margins.

The renewals earlier in 2023 in North Asia were disciplined overall and not materially short in capacity. Some regional Asian reinsurers scaled back their property risk capacity slightly due to a retro capacity shortage, but domestic reinsurers remained highly committed to servicing their home markets. Although a number of US and Bermudian reinsurers curtailed their property catastrophe exposures, some major reinsurers with meaningful capacity offerings remained positive about the growth prospects and diversification benefits of the Asia-Pacific markets but were more selective by market and by program based on profit margins. A capacity crunch was felt at the bottom layers of property excess-of-loss programmes. Cedents were forced to raise the attachment point to manage their reinsurance costs within budget. Some chose to increase proportional treaties for stability, but this requires improved profit margins. Nevertheless, the supply/demand dislocation created business opportunities for lower-rated reinsurers to tap into programmes that they wouldn't otherwise be able to in the soft market environment.

China

The COVID-19 wave after lockdown restrictions were lifted in December 2022 heavily disrupted the January 2023 renewals in China. Local market leaders pushed for increases in pricing, tightening of proportional terms, reductions in ceding commissions and event limits, as well as expansion of loss participation clauses in loss-impacted programmes. For non-proportional, non-marine treaties, apart from double-digit risk-adjusted rate increases, limited structural change and placement were generally successfully completed, indicating no capacity supply shortage for China's reinsurance

market. The retention levels continued to rise as in previous years, with reinsurers either asking for non-economic rate increases or refusing to quote the bottom layers with no retention increase. Lastly, with C-ROSS Phase 2 having taken effect on 31 December 2021, primary insurers under temporary solvency pressure (such as waiting for a capital injection or debt issuance to be completed) are using additional proportional reinsurance for capital relief. Domestic reinsurers tend to have more competitive advantages in these types of capital relief business due to proximity and long-term business relationships, with a lock-up profit margin to reinsurers via sliding scale commissions.

Taiwan

Despite a benign natural catastrophe environment in Taiwan last year, the January 2023 renewal season was described by reinsurance participants as one of the toughest in the past decade. The increased frequency of large risk losses led to material rate increases on loss-impacted property per risk excess of loss. In addition, the pandemic product loss in Taiwan's non-life insurance industry has led to a material erosion of capital for some of the major primary insurers, which also offer facultative capacity to major domestic industry risks. While facing temporary solvency pressure before capital injection is in place and being more cautious in business selection to ensure profitability, the facultative reinsurance capacity used to be offered by domestic major (re)insurers has shrunk. Coupled with the supply/demand imbalance in the global reinsurance market, offerings for facultative accounts are facing capacity shortages. Policyholders need to retain more risks due to incomplete placement or to accepting lower sub-limit coverages.

Japan

Although overall capacity offered to Asia has not diminished, some capacity allocation has shifted from other Asian markets to Japan. After four years of increases following the 2018 and 2019 typhoon losses, the five-year compound rate increase for wind peril excess of loss is now very significant. With average rates for wind risk at historic highs, cedents have increased retentions to manage reinsurance costs within budget. Less capacity is available for aggregate excess of loss and significant price increases if capacity is available.

Despite the global reinsurers' perception that the Japanese market is more attractive in terms of risk-adjusted rate adequacy and sufficient capacity to meet demand, treaties with international coverages for worldwide exposures are following global market trends and are becoming more difficult to place in existing structures.

South Korea

The demand for reinsurance continues to grow in South Korea. The reinsurance cession rate in commercial insurance from the primary market has continued to increase since 2018. Significant losses in past years from both risk (such as fires at chemical plants and warehouses) and catastrophe losses (typhoon and flood losses in 2022) have resulted in meaningful hardening of pricing and terms in commercial insurance, with some foreign reinsurers exiting the market.

A new reinsurance product in South Korea (co-insurance), recently permitted by the Financial Services Commission (FSC), boosted Korean Re's life revenue roughly by 50% in 2022. This is a reinsurance solution to improve primary insurers' capital positions as their high guaranteed liabilities can be transferred to reinsurers. It helps cedents minimise their earnings volatility or achieve desired solvency levels by mitigating their interest rate risk and insurance risk. Although co-insurance deals could in principle be offered to both life and non-life insurance companies, the new contracts signed so far are all with life insurance companies.

Market Dynamics – South/Southeast Asia/Australia/New Zealand

Singapore Reinsurance Hub

Singapore is home to nearly 50 reinsurance companies that write significant business outside Singapore. Combined, the gross premiums for the Singapore Insurance Fund (SIF) and Offshore Insurance Fund (OIF), including direct premiums written by reinsurance players operating out of Singapore, grew by 8%, to SGD9.4 billion (USD7.0 billion) in 2022, from SGD8.7 billion in 2021 (according to unaudited financial statistics from the Monetary Authority of Singapore). In particular, six of the ten largest players writing domestic and regional non-life reinsurance out of Singapore saw double-digit reinsurance premium growth (**Exhibit 2**). This list comprises branches and subsidiaries of major (re)insurance groups, as well as Lloyd's Asia.

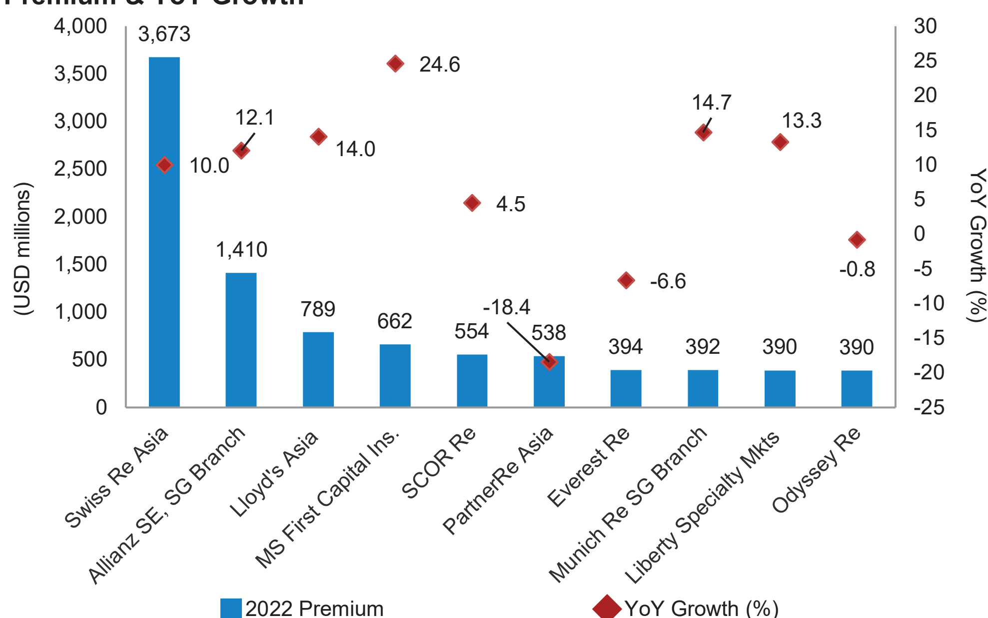
The demand for reinsurance remained robust as cedents continued to seek protection against balance sheet volatility, given the heightened catastrophe activity in the region in recent years. Property reinsurance was a strong growth driver in 2022, having benefitted from the rate correction that gained momentum in the 2022 renewals. In addition, business expansion in property has benefitted in part due to concerns about inflation, which has led primary risk carriers to reevaluate and raise insured limits to mitigate the risk of underinsurance.

Other Rated Reinsurers in South/Southeast Asia

Compared to the largest reinsurance players operating out of Singapore, top-line growth for other reinsurance companies rated by AM Best showed more variation in 2022 (**Exhibit 3**). This is reasonable given the larger business concentrations of these regional reinsurers in their domestic markets and their typically smaller size. Seven out of ten of these reinsurers recorded premium growth in 2022, while three recorded a business contraction.

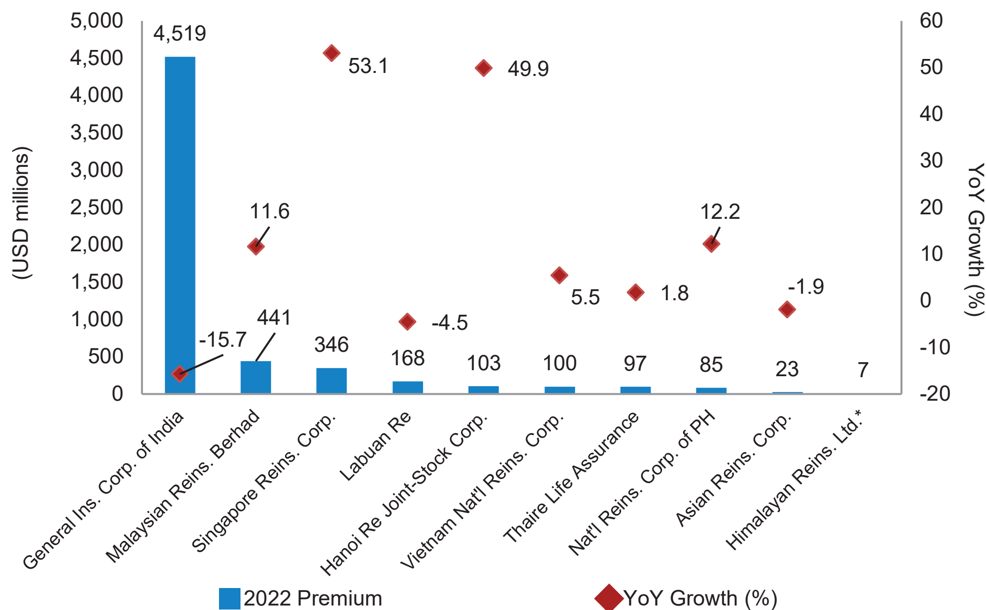
General Insurance Corporation of India, the dominant reinsurer in India, recorded a 16% decline in gross premiums written from the prior year, as the company implemented portfolio remediation

Exhibit 2
Top Ten Singapore Reinsurers – 2022 Non-Life Reinsurance Assumed Premium & YoY Growth



Sources: Monetary Authority of Singapore, Insurance Company Returns, AM Best data and research

Exhibit 3
South/Southeast Asia Reinsurers – 2022 Non-Life Reinsurance Assumed Premium & YoY Growth



Note: Companies rated by AM Best.
* 2021 data for Himalayan Re was excluded as 2022 was the first full financial year for the company.
Source: BESTLINK

measures. In a bid to improve its underwriting performance, the company has tightened its risk selection by shedding non-performing treaties in both its domestic and foreign portfolios.

On the other hand, smaller players such as Singapore Reinsurance and Hanoi Reinsurance (formerly, PVI Reinsurance Joint Stock Corp.) have experienced far more aggressive business growth. Singapore Re demonstrated robust year-over-year growth of 53% in 2022, driven by changes in the company's growth strategy to expand its international portfolio after becoming a wholly owned subsidiary of Fairfax Financial Holdings Limited in the second half of 2021. Hanoi Re, a Vietnamese reinsurer and a subsidiary of HDI Haftpflichtverband der Deutschen Industrie V.a.G., also grew by 50% in 2022, supported by a higher level of intragroup reinsurance assumed.

Performance of Singapore's Ten Largest Reinsurers

The 1 January 2022 reinsurance renewals were cautiously approached by reinsurers with a focus on improving their underwriting profitability. After years of heightened natural catastrophe losses, reinsurers were under additional pressure to generate earnings through underwriting operations, given the rising cost of capital amidst challenging capital markets and an inflationary environment.

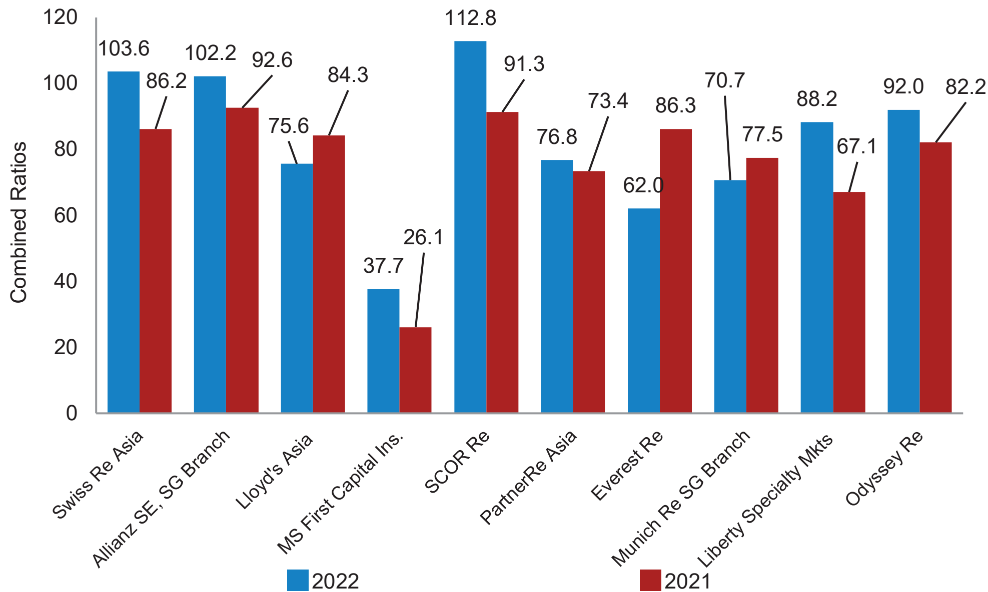
The underwriting remediation measures have paid off. Underwriting profits for reinsurers in Singapore more than doubled in 2022, to SGD1 billion from SGD396 million in 2021, according to the Monetary Authority of Singapore. The underwriting performance of the majority of the ten largest reinsurance players operating out of Singapore improved in 2022 over the prior year, supported by lower losses in the region, a more favourable pricing environment, and tightened reinsurance underwriting terms.

Loss experience generally benefitted from the lower catastrophe activity in South and Southeast Asia during 2022, although companies with higher exposures to Australia property risks were negatively

impacted by the Eastern Australia floods in 2022, which were estimated to cost more than USD4 billion in insured losses.

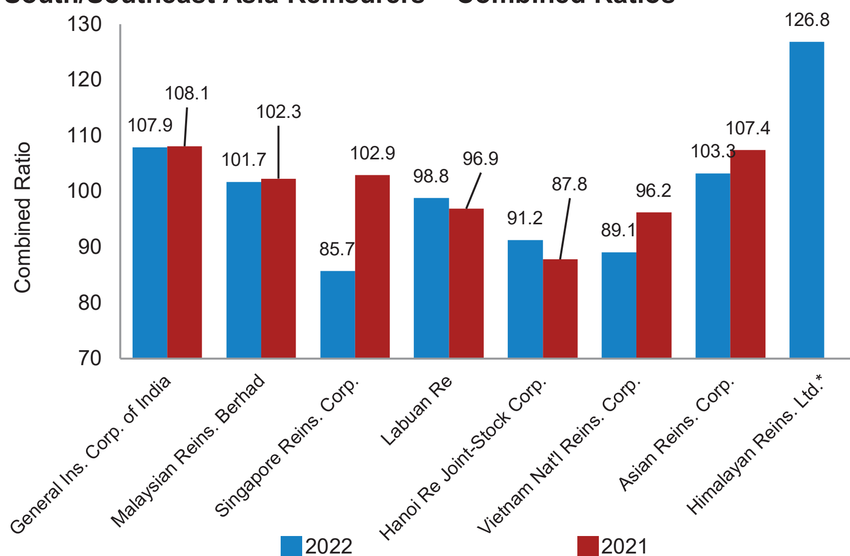
In contrast to the international subsidiaries and branches of (re)insurance players operating out of Singapore, few of the other AM Best-rated reinsurers operating in South and Southeast Asia showed meaningful improvement or deterioration in their combined ratios (**Exhibits 4 and 5**). Although

Exhibit 4
Top Ten Singapore Reinsurers – Combined Ratios



Sources: Monetary Authority of Singapore, Insurance Company Returns, AM Best data and research

Exhibit 5
South/Southeast Asia Reinsurers – Combined Ratios



Note: Companies rated by AM Best.
* 2021 data for Himalayan Re was excluded as 2022 was the first full financial year for the company.
Source: BESTLINK

some of these companies benefitted from generally more benign regional catastrophe activity in 2022, the improvement has been partially countered by increases in retrocession rates and the companies' exposure to international treaties, which included exposures to global catastrophe losses such as Hurricane Ian in the US and the Düzce Earthquake in Turkey, both in 2022, in addition to adverse claims reserve development from prior years' catastrophe events.

Across Southeast Asia, some reinsurers were also impacted by losses related to COVID. Earnings for National Reinsurance Corporation of the Philippines (Nat Re), Thai Reinsurance Public Company (Thai Re), and various domestic reinsurers in Indonesia were impacted by heightened claims arising from COVID-related life and health insurance products in 2022, although future COVID claims are not expected to be significant.

In addition to life and health reinsurance claims arising from COVID, domestic reinsurers in Indonesia were also impacted by a material increase in credit reinsurance claims in 2022, which resulted in a decline in their regulatory solvency ratios. The impact was most keenly felt by the largest domestic reinsurers in Indonesia. Coupled with the highest exposure to the line, the absence of adequate underwriting controls and risk accumulation management inevitably led to significant reserve strengthening and outsized capital erosion. In particular, this resulted in a negative regulatory solvency ratio for PT Reasuransi Nasional Indonesia, Indonesia's largest domestic reinsurer by 2021 gross premiums written, which eventually led to coordinated replacement of capacity to other reinsurers during the 1 January 2023 renewals, amidst concerns about the reinsurer's actual and prospective solvency levels.

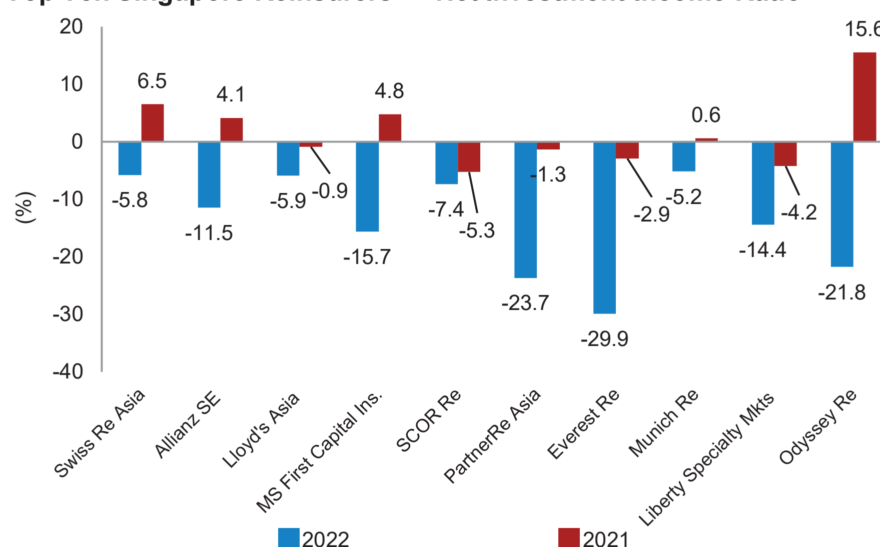
Investment Income Rose

In 2022, reinsurers operating in Singapore recorded an increase in investment income arising from interest, dividend, and rental income, countered by significant realised losses on their investments. In addition, like their counterparts in other economies, which experienced a period of successive interest rate increases over a short period, Singapore-based reinsurers recorded notable unrealised losses attributable to fair value losses on their fixed-income investments. **Exhibit 6**, which reflects the net investment income ratio—i.e., investment income including unrealised investment losses relative to net earned premiums for the ten largest reinsurers in Singapore—shows that all of these reinsurers recorded negative investment income for the year. Nevertheless, over the near term, investment income is expected to benefit from the higher global interest rate environment.

The regional reinsurers, on the other hand, were mostly less impacted by unrealised losses on their fixed-income portfolios, in part because domestic interest rates in most of the developing

Exhibit 6

Top Ten Singapore Reinsurers — Net Investment Income Ratio



Sources: Monetary Authority of Singapore, Insurance Company Returns, AM Best data and research

economies in South and Southeast Asia remain at or below pre-pandemic levels, despite progressive monetary tightening since early to mid-2022.

2023 Renewals for South/Southeast Asia, Australia, and New Zealand

Leading up to the 1 January 2023 renewals, several reinsurance underwriters withdrew their capacity for international property catastrophe business. In mid-2022, Axis Re withdrew its capacity for property catastrophe business, followed by the closure of Bermuda-based (re)insurer SiriusPoint's Singapore office at year-end 2022. Many other major reinsurance players have reportedly also scaled back their appetite for catastrophe-exposed property business in Southeast Asia, given the heightened catastrophe activity in the region over recent years. More recent events such as Super Typhoon Rai in the Philippines and floods in Malaysia (from late 2021 to early 2022) remained fresh in memory.

Consequently, reinsurance capacity became more constrained during the 1 January and 1 April 2023 reinsurance renewals. In some instances, the unwillingness and inability of reinsurers to provide capacity were also driven by prohibitive retrocession costs, the lack of retrocession cover, or simply by weakened regulatory solvency positions, which limited their ability to support the market. Proportional reinsurance capacity became harder to come by, as reinsurers sought to rebalance their portfolios. Where the capacity remained available, reductions in reinsurance commissions, the imposition of sliding commissions and loss participation clauses, and reductions in event limits were commonplace. The shortage of proportional reinsurance capacity paved the way for some cedents to overhaul their reinsurance structures and adopt gross excess-of-loss reinsurance programmes.

Non-proportional reinsurance programmes also reported meaningful rate increases during these renewals. Facing pressure to ensure premium rate adequacy to meet the cost of capital, reinsurers became more selective in the programmes they write, as well as the price and terms of covers. Across most markets in the region, there were significant rate hikes on both loss-free and loss-impacted treaties. The diminished appetite for catastrophe risks imposed a pricing discipline for reinsurers to stand their ground, in contrast to prior renewals.

The 1 July 2023 reinsurance renewals for Australia and New Zealand also showed a similar trend of reduced catastrophe risk appetite as well as continued double-digit rate increases consistent with prior years. The 2022 floods in Eastern Australia, which affected coastal areas in New South Wales and southeast Queensland, ranked amongst the worst insured events in Australia, with insured losses of USD4.3 billion, according to Swiss Re. Similarly, New Zealand was impacted by two severe weather events in early 2023—over a period of three weeks, the country was impacted by the North Island floods in Auckland (between late January and early February) and Cyclone Gabrielle (in February). In aggregate, these two events led to economic losses between USD7 billion and USD8 billion in New Zealand, of which insured losses ranged between USD2 billion and USD3 billion, according to estimates from Aon.

These adverse events further validated reinsurers' growing concerns about climate risk and provided justification for rate hikes. Estimating the loss cost of lesser modelled perils, such as floods, is a challenging undertaking during periods of changing weather patterns. Nonetheless, reinsurance capacity remained generally available at the recent renewals, although capacity for lower reinsurance layers was reportedly scarce, as reinsurers opted to move up the reinsurance deductibles to avoid higher frequency losses. Overall, reinsurance capacity availability was supported in part by a government-backed cyclone reinsurance pool recently launched by the Australian Reinsurance Pool Corporation. The reinsurance pool allows insurers to cede risk for cyclones and cyclone-related flood damage, and seeks to provide cost-effective reinsurance to pool participants.

Pivoting to Non-Property Lines

As various reinsurers in the region reduced their participation in the domestic and overseas property catastrophe business, some have actively sought alternative premium sources to make up for the reduction in revenue. To support better earnings diversification, these players have pivoted toward health reinsurance and other specialty lines. In some cases, this has been achieved by leveraging the use of managing general agents (MGAs) that have specialised expertise in niche segments overseas, to gain access to profitable business that would offer little to no correlation to their existing portfolios. AM Best cautions that, while there is promise in such a strategy, proper distribution channel management and control—including appropriate alignment of objectives between reinsurers and MGAs—will be fundamental to achieving underwriting success in the long run.

Fewer Major Cat Events Limit Claims Activity for Latin America Reinsurers

Despite the current lull, parts of Latin America are prone to hurricanes, earthquakes, and other major disasters

Principal Takeaways

- Reinsurers in Latin America have incurred no major losses the past four years owing to the lack of large severe events.
- The regional reinsurers continue to diversify profits geographically.
- Political risk remains a key factor for reinsurers domiciled in the region.

The Latin American markets in Mexico, Guatemala, Costa Rica, Ecuador, Chile, and Peru are vulnerable to catastrophe events in both magnitude and frequency. However, in the past four years, large severe events have been minimal and have not resulted in major insured losses, questioning the need for the market hardening that occurred at the onset of the COVID-19 pandemic. Reinsurers have adjusted their product offerings by raising deductibles, narrowing coverages, and pressing for exclusions, with varying degrees of success, as they try to expand net profits by retaining more risks. In addition, most of the region's large insurers have ample available capital due to greater acceptance by cedents of hardening conditions in 2021 and 2022.

The global reinsurers' appetite for Latin America remains limited, as they have shifted their focus to less cat-prone areas or have targeted their capital in regions that justify price increases. These conditions have created opportunities for both domestic and regional reinsurers to participate in lower layers of programs and to delegate underwriting authority to specialized parties like managing general agents (MGAs). We are thus seeing new names enter the reinsurance space. Additionally, reinsurers and cedents are increasing awareness of the value proposition of delegating underwriting authorities.

The strategies of the domestic and global reinsurers in the region differ. The slowdown in hardening conditions should be viewed with some caution, especially by domestic participants trying to fill the gaps left by global reinsurers. These program gaps are being filled by either a diverse group of reinsurers or other global reinsurers, but communications with brokers and further detailed analyses of PMLs (probable maximum losses) remain key to developing efficient and profitable reinsurance solutions in a market that could quickly incur large insured losses as a result of earthquakes, hurricanes, or other catastrophic events.

Regional reinsurers with expertise outside Latin America have shifted to a wide array of non-cat lines both in the region and beyond, mostly fidelity and some other low-exposure liabilities. Some are cutting back on their cat exposures in the region, while others are limiting their exposures by either using retro structures or demanding stricter terms and conditions.

Direct business (opportunities found by reinsurers, which are then underwritten by primary insurers), captive solutions, and automated faculties for external underwriters such as MGAs continue to gain traction as ways not only to diversify revenue sources but also to address market

Analytical Contacts:
Elí Sánchez, Mexico City
52 55 11022720 ext. 122
Eli.Sanchez@ambest.com

Ricardo Rodríguez Pérez, Mexico City
52 55 90852708
Ricardo.Rodriguez@ambest.com

2023-102.11

dynamics. For example, in Nicaragua, capital outflows are extremely limited, so insurance groups with a regional presence are limited with regard to the fungibility of their resources. One way to access the market there is through fronting with foreign reinsurers that are already registered in the country. For more specialized lines, reinsurers looking to enter new markets have found MGAs to be an efficient alternative to conduct business rather than develop their underwriting capabilities. In most cases, these market explorations go hand in hand with retro capacities and participation in lower layers of contracts.

Reserve development in Latin America has been favorable, owing to the dearth of significant cat events the last several years. However, there is an active awareness of the cat nature of many markets in the region, and as such cat reserves continue to strengthen in accordance with regulations in key markets such as Mexico.

Claims activity has been favorable for reinsurers' income. To varying degrees, many rated reinsurers have reported more success translating inflationary pressures in claims and insured assets into better pricing. Nevertheless, many cedents remain reluctant, while underinsured markets continue to struggle against rising reinsurance costs. So far in 2023, currency valuations remain constant across Latin America, with major currencies like the MXN, CLP, PEN, and COP gaining traction against the USD. Although most contracts are in US dollars, a decline in purchasing power owing to higher prices could continue to soften renewals for primary insurers. Large contracts for government-related risks are particularly sensitive in this regard, given the growing prominence of governments more inclined to press for flat renewals or better conditions for coverages.

Recent natural catastrophes have not resulted in significant insured or economic losses in the region, but we remain vigilant as the effects of El Niño are still developing. Rising temperatures and heatwaves have been prevalent throughout 2023, raising concerns about future extreme weather and its developments.

Rising interest rates could help improve net income if portfolio durations allow, depending on asset-liability management. Traditionally, risks in the region allowed for shorter terms, but most large and experienced participants will opt to either take longer terms on investments over reserve requirements or deploy less capital for reinsurance activities. So far, available capital has increased (**Exhibit 1**) due to favorable results overall, but investment portfolios are shifting from fixed income—including real estate—to either higher credit quality instruments or alternative asset classes.

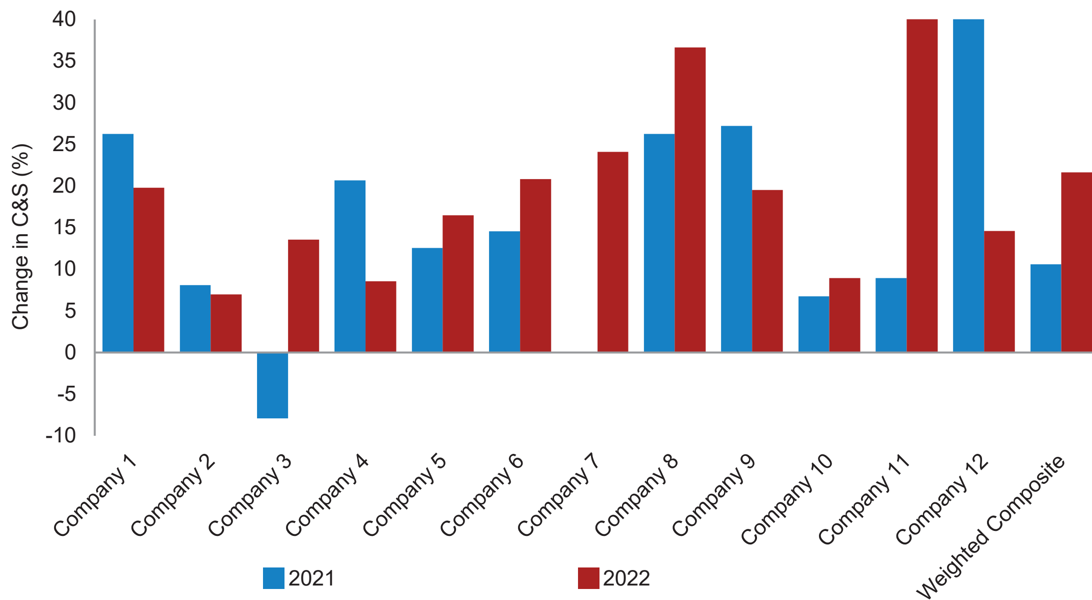
Political risks remain a significant factor for reinsurers domiciled in Latin American countries, which are pressured by investment requirements in sovereigns with deteriorating credit quality. Although there has not yet been a flight of companies to less risky domiciles, it is a constant in companies' internal risk assessments.

Brazil's Reinsurance Industry

In Brazil (which, other than flooding, has no significant natural catastrophe exposures that would be covered by (re)insurance), domestic reinsurers with international catastrophe exposure are trimming their property catastrophe exposures in line with global trends. However, their actions have yet to translate into meaningful underwriting profits or capacity growth.

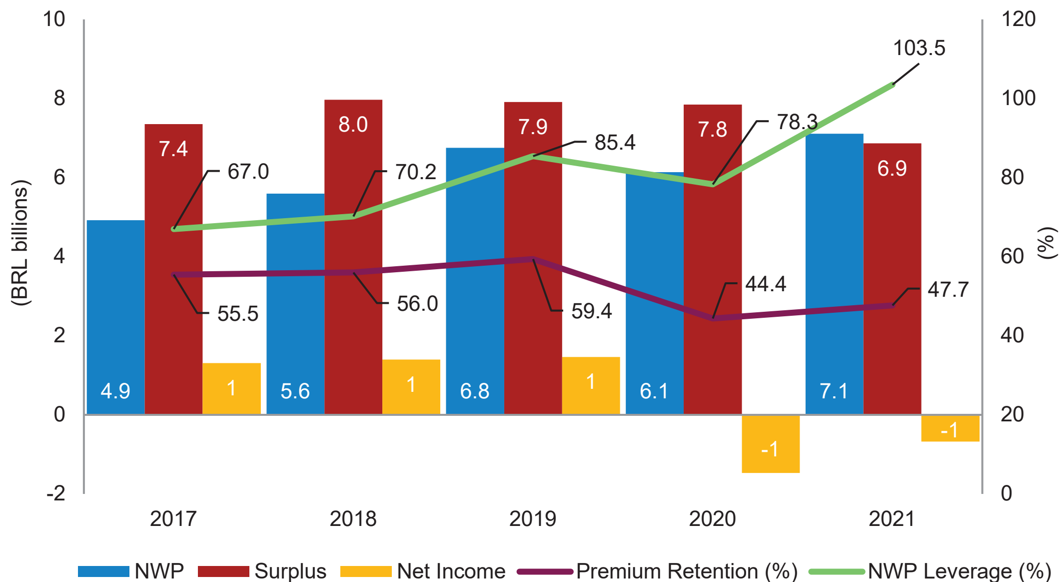
Domestic reinsurers have been focusing on specialty lines (such as surety, auto, oil and gas, marine, and agriculture), as well as property and still have room to grow due to the relatively low insurance penetration in the country. The profitability of Brazil's primary insurance industry is higher than that of the reinsurance industry. The most significant player in the country, which accounted for 43% of

Exhibit 1
Latin America Reinsurance – Change in Capital & Surplus (Selected Reinsurers, ex Brazil)



Source: AM Best data and research

Exhibit 2
Latin America Reinsurance – Local Brazilian Reinsurers' NWP Leverage and Premium Retention



Source: AM Best data and research

domestic gross written premium in 2022, is dedicated exclusively to reinsurance. Almost all of the remaining domestic reinsurance companies have a presence in the primary insurance market.

In Brazil, inflation is at 3.16% as of June 2023, down from 5.79% at the end of 2022. Net premiums decreased by 1.4%, with premium retention of 43.2% (after a slight increase to 48% in 2021), contributing to the drop in underwriting leverage of 89% from 104% in 2021 (**Exhibit 2**). The 20% jump in investment income over 2021 was not enough to offset the underwriting losses incurred the

past three years despite high interest rates. Lower net premium retentions has helped to leverage claims that occurred during the year and the increase in share capital resulted in 14.9% growth in surplus (measured in Brazilian *reals*) in 2022 in the domestic reinsurance industry.

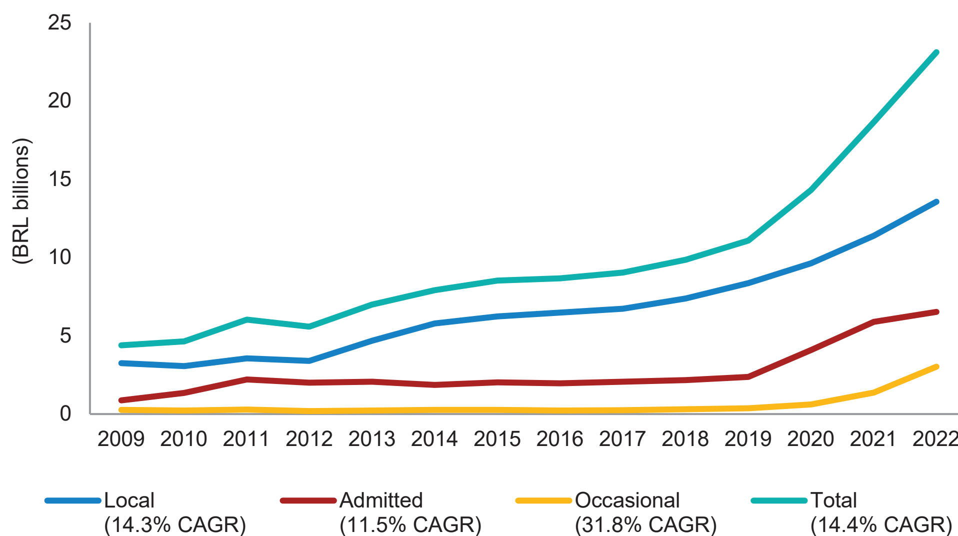
The growth in premium volume ceded to local reinsurers, admitted and occasional, throughout the years reflects the maturing insurance market and the growing need for risk dilution. The number of local reinsurers grew from nine in 2009 to 13 in 2022. For Brazil's domestic reinsurance industry, surplus growth and the retention of profitable business remain key. Pricing remains favorable, with the help of the hard global reinsurance market, and the Central Bank of Brazil's hawkish interest rate hikes (13.75% at year-end 2022) have not been enough to generate profitable results for the industry. In a year of presidential elections aggravated by global instability, reinsurance groups will likely find it difficult to attract capital from investors and increase capacity.

The most significant lines of business contributing to annual growth in 2022 were property, automobile, and agricultural reinsurance. Agricultural (re)insurance can be considered natural catastrophe-like exposure, but innovative techniques are being used to monitor climate risks to which the sector is vulnerable. New technologies may improve the operating performance of the agricultural line, which continues to incur underwriting losses. As a result, (re)insurance companies have cut their exposures in this segment, led by offshore players looking to minimize their overall risk exposure.

Insurers' and domestic reinsurers' gross premium cession limits to occasional reinsurers skyrocketed at the end of 2019, to 95%, from 10% (set originally in 2008). As of 2020, the volume of premiums ceded to occasional reinsurers was growing at much higher rates due to the increase in the limits for ceding premiums from local insurers and reinsurers to occasional reinsurers. As a result, occasional reinsurers have posted significantly higher growth in the past three years, with a 102.2% CAGR, compared with 40.3% for the admitted reinsurers and 17.5% for the domestics. Occasional and admitted reinsurers faced another tailwind as the Brazilian *real* was devalued further, strengthening their USD capacity versus the BRL compared to 2021.

Exhibit 3

Latin America Reinsurance – Premiums Ceded to Reinsurers by Type of Reinsurer



Source: AM Best data and research

The country's regulatory framework continues to evolve toward a more open and less restrictive reinsurance market, allowing occasional and admitted global participants to access the market more efficiently while maintaining strict regulatory metrics to protect policyholders.

Brazil – Types of Reinsurers

Domestic: Fully compliant with local (re)insurance rules; partial right of first refusal in local primary business; a minimum mandatory percentage of business is ceded to them

Admitted: Domiciled abroad; files local financial statements; representative office

Occasional: Domiciled abroad (except for tax havens); recent regulatory change makes it practically equal to admit

MENA Reinsurers Report Topline Growth, While Challenging Economic Conditions Persist for Most

Achieving consistently strong underwriting returns has been a historical challenge for MENA reinsurers, however, recent market conditions favour the region's reinsurers

Analytical Contacts:
Emily Thompson, London
+ 44 20 7397 0291
emily.thompson@ambest.com

Jessica Botelho-Young, CA, London
+44 20 7397 0310
jessica.botelho-young@ambest.com

Editorial Managers:
Richard Banks, London
+44 20 7397 0322
richard.banks@ambest.com

Richard Hayes, London
+44 20 7397 0326
richard.hayes@ambest.com

2023-102.12

Principal Takeaways

- Double-digit growth in Gross Written Premium (GWP) reported at year-end 2022, with reinsurers citing favourable global reinsurance pricing trends, inflation, new business opportunities, and corrective action to rates and terms and conditions as the leading drivers
- Reinsurance capacity for the region remains plentiful, sourced through global reinsurers, regionally domiciled reinsurers, and carriers domiciled in Africa and Asia
- Regional reinsurers are further adapting pricing and modelling capabilities, following greater incidences of weather-related losses
- Operational challenges and deteriorating risk landscapes, particularly for non-oil producing countries, continue to widen the ratings gap between reinsurers in the region

Reinsurers domiciled in the Middle East and North Africa (MENA) region continued to benefit from positive pricing momentum over the recent renewal periods, albeit to a lesser extent than the global reinsurance market.

The reinsurance pricing environment in the region largely reflects global reinsurance trends, though local factors have also contributed—including rising claims inflation, elevated frequency of large losses and weather-related events, and improved underwriting discipline of reinsurers.

The operating landscape of the MENA reinsurance market has shifted in recent years. The region is not homogenous, and countries are facing fresh and varying challenges, from supply chain disruptions and inflationary pressures, to elevated economic, financial system, and political instability in certain markets. For example, inflation varies significantly by country, ranging between 0.6% for Oman to 38% for Türkiye as reported in June 2023. A primary differentiator is between the hydrocarbon-producing economies and those that import energy.

Diverging Economic Conditions to Impact Reinsurance Markets

Several of the economies in the region are heavily reliant on revenues from the hydrocarbon sector. The current buoyant oil price environment, attributable to supply concerns amid excess demand for oil and energy linked to post-pandemic activity and disruption caused by Russia's conflict with Ukraine, has had a substantial impact on the region's economies. Insurance markets in the region are reliant on government spending—notably on infrastructure projects—for a sizeable share of premium growth. These risks are typically heavily ceded by primary insurers to reinsurance partners and have thus far provided profitable underwriting opportunities for the region's reinsurers.

Conversely, AM Best notes that certain markets in the region are experiencing significant levels of economic deterioration. For those countries that are net importers of energy, the current oil price

environment is challenging fiscal manoeuvrability, while inflationary pressures and supply side constraints on the importation of food consumables and other commodities are compounding economic challenges. In AM Best's view, the current geopolitical volatility has exacerbated the vulnerabilities of already weak countries. Examples of jurisdictions that are experiencing heightened country risk challenges include Türkiye, Tunisia, and Lebanon.

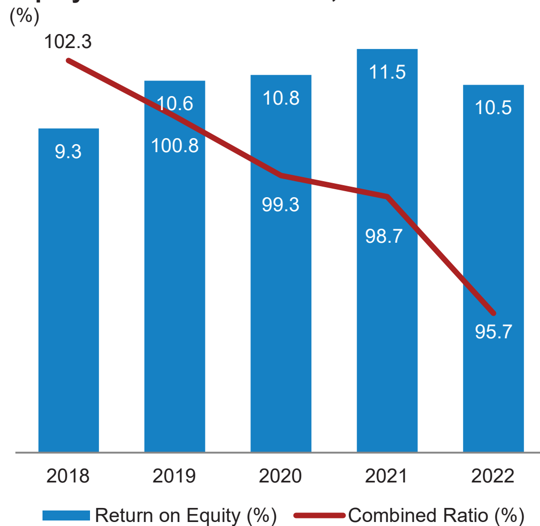
Performance Profitable but Volatility Remains

Achieving consistently strong underwriting returns has been a historical challenge for MENA reinsurers (see **Exhibit 1**). However, recent hard market conditions favour the region's reinsurers, allowing companies to revisit their portfolios and take advantage of global market price rises to re-price and review business. In AM Best's view, this is also a signal of an enhanced focus on underwriting profitability.

Exhibit 1

MENA Reinsurance – Market Average Return on Equity and Combined Ratio, 2018-2022

(%)



Ratios exclude Trust International Insurance & Reinsurance Co. BSC and Arab Insurance Group for all years, and Milli Reasurans Turk Anonim Sirketi in 2022 due to hyperinflation in Türkiye.

Sources: BESTLINK Best's Financial Suite - Global, AM Best data and research

Aside from strong competition—a result of the plentiful and dynamic capacity in the region—the performance hurdles faced by the region's reinsurers include a lack of both scale and diversification when compared with their international counterparts, and their participation is often limited to being a follower on reinsurance programmes, which restricts their ability to influence pricing and terms.

As with other reinsurance markets, the MENA region is not immune from the spectre of inflation, even with the resilience to oil price increases for the net oil-exporting economies. Supply-side inflation may weigh on loss cost trends for the region's reinsurers over the near term, and as the inflationary

2023 Türkiye Earthquakes

On February 6, 2023, two powerful earthquakes of more than 7.5 magnitude struck near the south-eastern Turkish cities of Gaziantep and Kahramanmara—the country's sixth and 18th largest cities. The earthquakes rank among the highest magnitude in the country's history and resulted in widespread devastation as well as the loss of thousands of lives in both Türkiye and Syria.

At the time of writing, ultimate loss estimates arising from the earthquake sequence remain uncertain, with estimated economic losses reported of USD91 billion, according to AON's Global Catastrophe Recap. A recent report released by PERILS has highlighted the additional hurdle of currency fluctuations for insurers to manage; they estimated an insured loss of USD4.9 billion, based on exchange rates at the time of the event. AM Best expects the loss to be material but manageable for many of the regional reinsurers, given their moderate use of retrocession.

To date the Turkish Catastrophe Insurance Pool has reported it has paid claims in excess of USD1.0 billion.

environment develops, the region's reinsurers will need to remain nimble and disciplined, and continue to adjust premium rates and reserves to ensure loss cost inflation is adequately covered and does not erode already thin underwriting margins.

Additionally, market-wide performance has been adversely impacted in recent years by an increasing volume of natural catastrophe losses and several single large loss events. Following greater incidences of weather-related losses, such as flood events (particularly in the Gulf Cooperation Council (GCC) countries), reinsurers in the region are having to further adapt pricing and modelling capabilities to ensure these exposures are appropriately factored into underwriting decisions and risk appetites. Single large event losses, such as the Beirut blast in August 2020, several high-profile fire events, and the Turkish earthquakes, have weighed particularly on property, engineering and energy lines that in general are heavily ceded by the direct market.

Natural catastrophe schemes are becoming a common feature of North African reinsurance markets, in response to a growing number of events in recent years. Common perils for the region include earthquake, drought, wildfires, and floods. Schemes are already in place across countries such as Algeria, Morrocco, and Türkiye. The development of such schemes often sees mandatory cessions boosting premium for local reinsurers, while smoothing volatility in underwriting results as catastrophe risk is shared more widely across the market. There has been renewed interest in the implementation of a natural catastrophe pool in Egypt, following several large natural catastrophe events in 2023.

Exhibit 2 shows the individual performance of reinsurers domiciled in the region, and highlights the volatility in underwriting returns, with many reinsurers struggling to make consistent returns in recent years. Supported by the improved market conditions, most MENA-domiciled reinsurers recorded better combined ratios in 2022. A notable exception is Arab Insurance Group which has been in run-off since 2021. Furthermore, Milli Re's performance metrics are distorted by the impact of the hyper inflationary environment in Türkiye. While there were some modest improvements on loss ratios, rate-driven premium growth in local currencies provided strong scale benefits and pushed down expense ratios in many cases.

Exhibit 2
MENA Reinsurance – Technical Performance, 2020-2022
(%)

			Loss Ratio - Non-Life				Combined Ratio - Non-Life			
AMB #	Company Name	Country	2020	2021	2022	3yr Avg	2020	2021	2022	3yr Avg
89190	Arab Reinsurance Co. SAL	Lebanon	72.5	66.6	67.0	68.7	104.0	98.0	98.2	100.1
85013	Arab Insurance Group (B.S.C.)[1]	Bahrain	43.0	-103.8	-1696.6	-585.8	90.5	-10.7	-988.4	-302.9
90777	Compagnie Centrale de Réassurance	Algeria	52.7	51.4	54.4	52.8	82.2	77.8	80.2	80.1
78849	Hannover Re Takaful B.S.C. (c)	Bahrain	63.2	43.4	63.2	56.6	100.4	85.5	104.1	96.7
85585	Kuwait Reinsurance Co. K.S.C.P.	Kuwait	68.8	65.6	62.9	65.8	97.5	92.3	92.3	94.0
85454	Milli Reasurans Turk Anonim Sirketi	Turkey	88.8	113.9	131.0	111.2	123.9	150.6	166.6	147.0
93609	Oman Reinsurance Co. SAOC	Oman	62.1	63.1	58.4	61.2	102.8	103.0	99.2	101.7
90005	Saudi Reinsurance Company	Saudi Arabia	58.2	61.3	63.5	61.0	96.6	96.2	94.5	95.8
84052	Société Centrale de Réassurance	Morocco	51.3	52.3	61.8	55.1	89.6	86.9	101.2	92.6
83349	Société Tunisienne de Réassurance	Tunisia	60.3	57.2	52.5	56.7	96.3	98.0	95.5	96.6

1: Aug. 13, 2020: Arab Insurance Group (B.S.C.) announced that it would cease writing further reinsurance business and seek to carry out an orderly run-off of its existing portfolio.

Sources:

Best's Financial Suite - Global, AM Best data and research

Notwithstanding recent pressures on underwriting margins, overall returns have generally remained robust for the region's reinsurers, with the weighted average return on equity (ROE) for the cohort standing at approximately 10% over the 10 years to 2022 (see **Exhibit 3**). Thinner underwriting margins have been more than compensated by generally robust investment returns over the period. On a company-by-company basis, the comparability of ROE is somewhat skewed by the inflationary and interest rate environment in their respective countries of operation.

When compared to the global reinsurance composite, the MENA reinsurers cohort has delivered greater levels of profitability to their shareholders as measured by ROE (see **Exhibit 4**). However, this should be viewed in the context of investment returns driving overall results. Moreover, the investments generating the strong returns are associated with higher risk assets, typically concentrated portfolios of local equities and real estate investments, which have the potential to introduce volatility.

Exhibit 3
MENA Reinsurance – Investment Yield and Return on Equity, 2020-2022
(%)

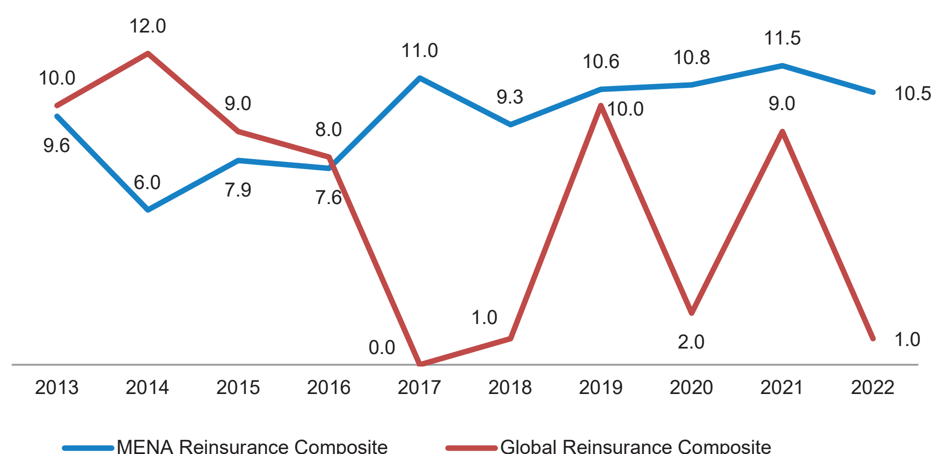
			Investment Yield				Return on Equity			
AMB #	Company Name	Country	2020	2021	2022	3yr Avg	2020	2021	2022	3yr Avg
89190	Arab Reinsurance Co. SAL	Lebanon	2.7	2.3	2.5	2.5	2.4	4.7	4.5	3.9
85013	Arab Insurance Group (B.S.C.)[1]	Bahrain	1.5	1.6	1.7	1.6	5.0	9.0	7.2	7.1
90777	Compagnie Centrale de Réassurance	Algeria	5.0	5.4	5.1	5.2	13.9	16.2	13.9	14.7
78849	Hannover Re Takaful B.S.C. (c)	Bahrain	3.4	1.2	-3.1	0.5	17.2	9.9	1.6	9.6
85585	Kuwait Reinsurance Co. K.S.C.P.	Kuwait	3.3	2.6	3.0	3.0	9.5	10.5	12.0	10.7
85454	Milli Reasurans Turk Anonim Sirketi	Turkey	11.5	15.3	28.1	18.3	15.4	20.1	24.1	19.9
93609	Oman Reinsurance Co. SAOC	Oman	4.1	4.1	4.2	4.1	6.0	4.9	5.6	5.5
90005	Saudi Reinsurance Company	Saudi Arabia	3.2	2.5	3.3	3.0	5.1	4.0	4.2	4.4
84052	Société Centrale de Réassurance	Morocco	6.8	3.2	3.1	4.4	12.5	14.0	10.9	12.5
83349	Société Tunisienne de Réassurance	Tunisia	8.6	7.2	7.3	7.7	6.1	7.7	9.1	7.6

1: Aug. 13, 2020: Arab Insurance Group (B.S.C.) announced that it would cease writing further reinsurance business and seek to carry out an orderly run-off of its existing portfolio.

Sources:

Best's Financial Suite - Global, AM Best data and research

Exhibit 4
MENA Reinsurance – Return on Equity, 2013-2022
(%)



Sources:
Best's Financial Suite - Global, AM Best data and research

Dynamic Reinsurance Capacity

Whether the hardening reinsurance landscape can be maintained in the region is largely dependent on competition and reinsurance capacity, pricing, and underwriting discipline. Reinsurance capacity in the region is dynamic. Capacity on a year-on-year basis is largely dependent on performance, and the impact global market trends have on international reinsurers ability to take on risk. As a result of the open and liberal MENA reinsurance markets, that have few regulatory restrictions concerning the provision of reinsurance capacity, the level of competition – a result of easy access to the market- can vary considerably.

The region's capacity comes from many sources, including global reinsurers, regionally domiciled reinsurers, and reinsurance capacity from Africa and Asia. Moreover, since 2020, a growing number of the region's primary insurers have shown a renewed interest in participating in the regional reinsurance market on an inward facultative basis. This is based on the rationale that primary insurers are seeking to grow their topline and diversify their underwriting portfolios. AM Best notes that the inward facultative segment has been a source of underwriting losses and volatility for several insurance companies in the market, demonstrating the risks presented by this diversification strategy for the region's insurers.

Exhibit 5 highlights premium and retention trends of the MENA reinsurers cohort over the last five years. While the cohort has reported GWP growth of more than 18% for 2022, this does not indicate a shift in capacity from the international market. Growth can largely be attributed to inflation and rate corrections along with new business opportunities related to government funded infrastructure projects. Moreover, the premium growth rate observed over 2022 is also partially distorted by currency volatility against the US dollar. While several countries in the region maintain currency pegs (or similar) to the US dollar, those with free-floating currencies experienced devaluation over the year, and in some cases, positive underlying premium growth rates in local currencies were negative in US dollar terms.

Economic Transition to Support Longer-Term Opportunities

In general, AM Best views the region as having solid longer-term reinsurance growth potential. Prospects for the reinsurance market may arise from growing product offerings in primary markets, namely in cyber and liability lines of business, along with opportunities created by the commitments of the region's oil-exporting countries to reduce their dependence on petrochemicals and diversify their economies.

To reach these climate commitments, higher levels of fiscal expenditure are expected to be channelled into "green" and other infrastructure projects, including green buildings and solar parks. In AM Best's view, the region's reinsurers that can embrace the economic shift, develop the required capabilities, and tailor their products accordingly should be well placed to benefit from this expected increase in insurable risk opportunities.

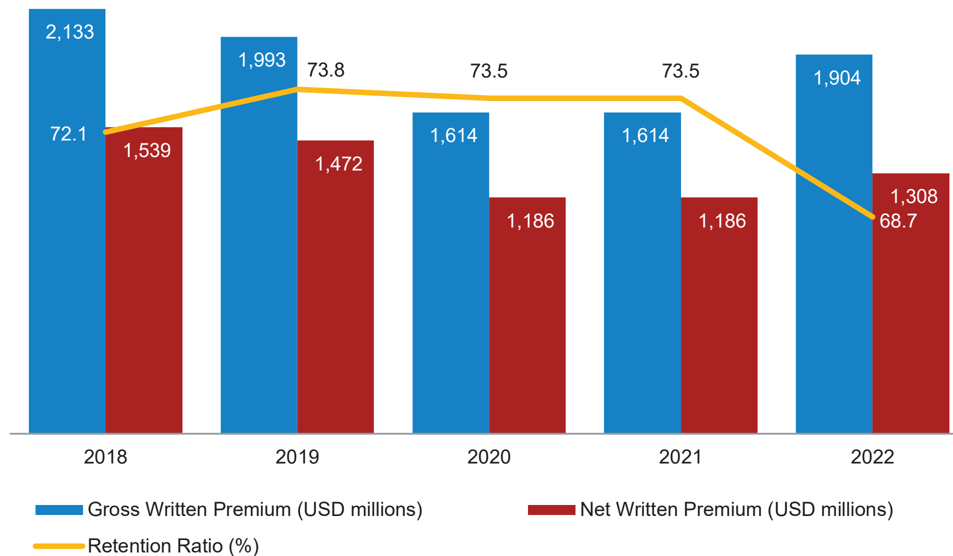
MENA Reinsurers – Rating Considerations

AM Best's credit ratings of reinsurers domiciled in the region encompass Financial Strength Ratings (FSR) of "C" through to "A-". The wide range in FSRs is evidence of the 'no one size fits all' nature of the MENA reinsurance markets, with diverging country risk conditions experienced across the region having an important impact. AM Best defines country risk as the risk that country-specific factors could adversely affect an insurer's ability to meet its financial obligations. Countries are placed into one of five tiers, ranging from Country Risk Tier 1 (CRT-1), denoting a stable environment with the least amount of risk, to Country Risk Tier 5 (CRT-5) for countries

Exhibit 5

MENA Reinsurance – Gross/Net Written Premiums and Retention Ratio, 2018-2022

(Premiums: USD millions; Retention Ratio: %)



Financial years 2018 and 2019 include reported premium for Trust International Insurance & Reinsurance Co. BSC. Premiums have not been included from 2020 onwards as financial statements are not publically disclosed.

Sources: BESTLINK

Best's Financial Suite - Global, AM Best data and research

that pose the most risk and, therefore, the greatest challenge to an insurer's financial stability, strength, and performance. The MENA region encompasses countries assessed between CRT-3 and CRT-5.

Rating actions taken over the past 12 months, highlight the operational challenges and deteriorating country risk landscapes in several countries (see **Exhibit 6**). Increasing economic, fiscal and political risk is prevalent in several of the region's countries, typically the non-oil-exporting nations. Increased public debt burdens, coupled with persistent high oil and other commodity prices, and currency devaluations against the US dollar, have contributed to, among other things, weakening current account balances, sovereign debt downgrades, high inflation and ultimately the need to secure external funding to counteract economic woes. Reinsurers with concentrated operations, underwriting exposures, and/or asset portfolios in these markets have faced mounting pressures.

In this context, **Exhibit 6** also highlights two companies that have experienced downgrades to their Long-Term Issuer Credit Ratings over the past year, with three ratings assigned with a negative outlook. Negative rating actions and outlooks reflect the impact that elevated country risk can have on a company's balance sheet fundamentals as well as on the risk profile a company must face and manage.

On the whole, AM Best-rated MENA reinsurers tend to demonstrate strongest levels of risk-adjusted capitalisation, as measured by Best's Capital Adequacy Ratio (BCAR), reflective of significant capital buffers relative to their operational exposures (see **Exhibit 7**). Most AM Best-rated MENA reinsurers typically enjoy preferred or dominant positions in their operating markets resulting in "Neutral" business profile assessments.

On the other hand, as highlighted in this report (see **Exhibits 6** and 7), persistent performance challenges have resulted in a wider range of operating performance assessments, with AM Best-rated MENA reinsurers carrying operating performance assessments that range from "Marginal" to "Strong".

Exhibit 6

MENA Reinsurers – AM Best-Rated Companies

Ratings as of August 25, 2023

AMB #	Company Name	Country	Best's Long-Term Issuer Credit Rating (ICR)	Best's Financial Strength Rating (FSR)	Best's ICR & FSR Action	Best's ICR & FSR Outlook	Rating Effective Date
89190	Arab Reinsurance Co. SAL	Lebanon	bb-	B-	Affirmed	Negative	1-Sep-22
90777	Compagnie Centrale de Réassurance	Algeria	bbb-	B+	Affirmed	Stable	6-Oct-22
85585	Kuwait Reinsurance Co.K.S.C.P.	Kuwait	a-	A-	Affirmed	Stable	16-Jun-23
85454	Milli Reasurans Turk Anonim Sirketi	Turkey	ccc	C	Downgraded	Negative	22-Sep-22
84052	Société Centrale de Réassurance	Morocco	bbb	B++	Affirmed	Stable	16-Dec-22
83349	Société Tunisienne de Réassurance	Tunisia	bb	B	Downgraded[1]	Negative	5-May-23

1: FSR Action: Affirmed

Sources:

Best's Financial Suite - Global, AM Best data and research

Exhibit 7

MENA Reinsurers – AM Best-Rated Companies – Assessment Descriptors

As of August 25, 2023

AMB #	Company Name	BCAR @ VaR 99.6	BCAR Assessment Keyword	Balance Sheet Strength Assessment	Operating Performance Assessment	Business Profile Assessment	Enterprise Risk Management Assessment
89190	Arab Reinsurance Co. SAL	21%	Very Strong	Strong	Marginal	Neutral	Marginal
90777	Compagnie Centrale de Réassurance	41%	Strongest	Very Strong	Strong	Neutral	Marginal
85585	Kuwait Reinsurance Co.K.S.C.P.	39%	Strongest	Very Strong	Adequate	Neutral	Appropriate
85454	Milli Reasurans Turk Anonim Sirketi	-35%	Very Weak	Very Weak	Adequate	Neutral	Marginal
84052	Société Centrale de Réassurance	42%	Strongest	Strong	Strong	Neutral	Appropriate
83349	Société Tunisienne de Réassurance	29%	Strongest	Strong	Adequate	Limited	Marginal

Sources:

Best's Financial Suite - Global, AM Best data and research

Retakaful – Yet to Capitalise on a Growing Takaful Market

"Dedicated" retakaful (Islamic reinsurance) operators have yet to establish a foothold in the MENA region. Despite initial strong momentum from several early dedicated regional retakaful entrants, they have struggled to capitalise on market conditions, and subsequently withdrew from the market. Retakaful capacity in the region is primarily provided through branches, takaful windows or subsidiaries of conventional reinsurers, rather than "dedicated" retakaful operators.

In AM Best's opinion, several factors have constrained the success of retakaful in the region. These include the underachievement and small overall size of the region's direct takaful markets and, most notably, competitive pressure from the conventional reinsurance market. These factors are notably magnified by the acceptance of conventional reinsurance capacity by Shari'a boards to fill retakaful panels (often on the basis of their comparative financial strength).

Until sufficient insurable risks can be ceded consistently to the retakaful market, the opportunity for dedicated retakaful operators in the region remains limited.

AM Best views the potential of a dedicated retakaful market to be highly dependent on the successful development, performance, and management of the region's primary takaful market. The recent establishment of primary takaful regulation and operators in several North African territories, follows the demonstrated success some markets have achieved, and is indicative of the general support for consumers for the segment. If successful, recent initiatives should ultimately generate more contributions that would increase the demand for retakaful capacity. However, given the challenges faced in establishing sustainable, standalone retakaful operators, it is uncertain whether a dedicated retakaful segment will be able to capitalise on these developments in the near term.

For more information about AM Best's ratings in the MENA region, please contact
Vasilis Katsipis, General Manager - MENA, South & Central Asia, at +971 4375 2782 or Vasilis.Katsipis@ambest.com.

Sub-Saharan Africa's Reinsurers' Underwriting Performance Remains Resilient Despite Heightened Economic Challenges

In general, Sub-Saharan Africa's reinsurers have been successful in leveraging the global hardening rate environment

Analytical Contacts:
Ben Diaz-Clegg, London
+44 20 7397 0293
ben.diaz-clegg@ambest.com

Kanika Thukral, London
+44 20 7397 0327
kanika.thukral@ambest.com

Tim Prince, London
+44 20 7397 0320
timothy.prince@ambest.com

Editorial Managers:
Richard Banks, London
+44 20 7397 0322
richard.banks@ambest.com

Richard Hayes, London
+44 20 7397 0326
richard.hayes@ambest.com

2023-102.13

Principal Takeaways

- The declining creditworthiness of many African debt issuers has led to increased asset risk and will test the resilience of sub-Saharan Africa's reinsurers' balance sheets
- Despite challenging macroeconomic and political conditions, underwriting results remain resilient
- Even with solid growth in capital in recent years, the capacity offered by Africa-domiciled reinsurers remains insufficient to meet market demand and local players often rely on support from global reinsurers
- A trend of increasing severity of adverse weather events is changing the natural catastrophe dynamic for the region and affecting reinsurers' risk appetites

High commodity prices, volatile and double-digit inflation, and a general deterioration in macroeconomic conditions in the aftermath of the COVID-19 pandemic, have tested the financial strength of sub-Saharan Africa (SSA) reinsurers in recent times. Analysis of AM Best-rated reinsurers across the continent shows the impact of the significant headwinds that the regional sector faced.

Despite the re-opening of economies since 2021, global macroeconomic conditions have remained challenging with the Russia-Ukraine conflict exacerbating inflationary pressures initiated by COVID-19-related supply chain difficulties. The rise in interest rates to contain inflation has also aggravated the debt-repayment burden for many African countries. As a consequence, the creditworthiness of African debt issuers has become increasingly pressured, leading to growing levels of asset risk for reinsurers in the region.

Despite the complex economic environment, in general, SSA reinsurers have been successful in leveraging the global hardening rate environment, reporting another year of robust underwriting profitability.

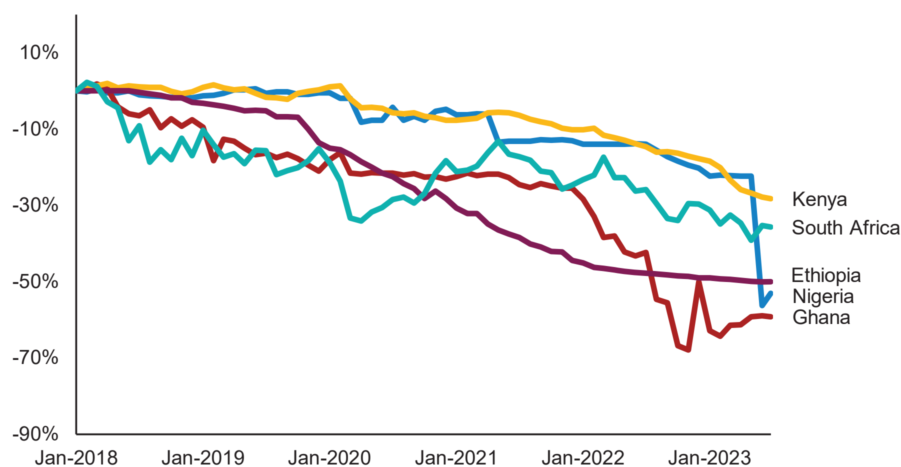
Over the long run, AM Best believes the SSA reinsurance segment has substantial potential for continued and profitable growth. The region has considerable, untapped reserves of natural resources, solid long-term economic growth prospects, and increasing insurance penetration, all of which stand to benefit its reinsurance market.

2022 – Another Turbulent Year Across Africa and Many Other Emerging Markets

(Re)insurance companies operating in Africa and other emerging markets are typically exposed to heightened levels of economic, political and financial system risks. In recent years, these risks have been exacerbated by external shocks.

Soaring commodity prices (the result of supply-chain disruptions and price shocks related to the Russia-Ukraine conflict) have resulted in increased inflation and financial instability across Africa, particularly for those markets reliant on the import of fuel and grain. Softer demand conditions have hampered growth and reduced government revenue, adding to the list of existing challenges faced by many African economies.

Exhibit 1
Cumulative Change in Value of Selected Currencies Against the US Dollar, Jan 2018 to Jun 2023
(% using 1 Jan 2018 as the base reference rate)



Source: Yahoo Finance

In response to the inflationary pressures, several central banks have raised interest rates, increasing borrowing costs. At the same time, the rapid devaluation of many emerging market currencies has increased the repayment burden of foreign-currency-denominated debt (see **Exhibit 1**).

These issues have contributed to large capital outflows amid a “flight to security”, leaving affected countries with restricted access to external funding, which makes refinancing debt increasingly difficult and more expensive.

A number of African countries are facing an unsustainably high debt servicing burden, which has in some cases contributed to sovereign default. As a consequence, certain SSA reinsurers’ results for 2022 and 2023-to-date already reflect the damaging impact of foreign exchange (FX) volatility and asset impairments due to the most recent debt restructuring in Ghana.

The impact derived from such events varies greatly across companies. It has been most pronounced for reinsurers with high levels of geographical concentration of operations and/or investments in countries experiencing sovereign debt stress, and they have seen their solvency and liquidity diminished greatly.

Moving through 2023 and into 2024, AM Best expects the debt burden of many African countries to remain high, and possibly increase. As the cost of servicing debt rises, there is increased risk that more countries will be forced to consider debt re-structuring or outright default, particularly if inflationary pressures persist for longer than expected.

It is in times of volatility and heightened systemic risk where the resilience and risk management capabilities of SSA reinsurers will be most acutely tested. Those players that demonstrate effective and proactive risk management practices will be best placed to absorb, and even take advantage of, these challenges.

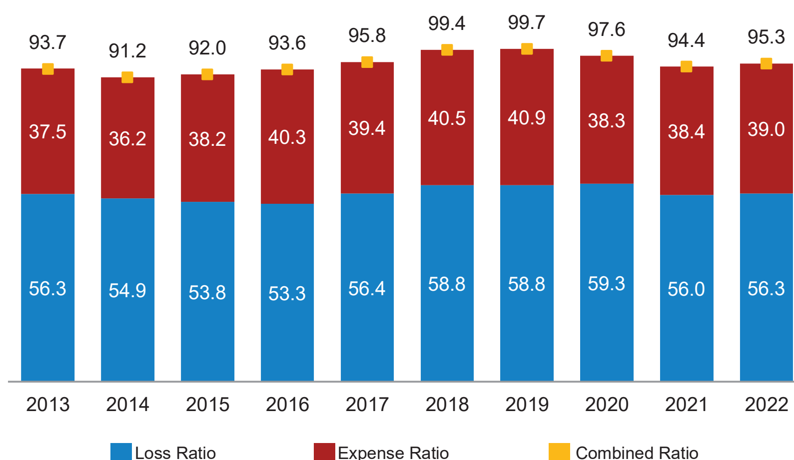
Local Focus and Improving Reinsurance Market Conditions Underpins Underwriting Results

The long-standing focus on local African risks by SSA reinsurers has largely underpinned their consistently profitable underwriting results (see **Exhibit 2**). However, business tends to be

concentrated in some of the largest markets on the continent, including South Africa, Nigeria and Kenya, giving rise to some concern about risk accumulation.

Despite a modest level of volatility in underwriting results, the market has been consistently profitable for more than a decade. In part, volatility can be explained by negative FX movements—particularly of the Nigerian naira—given that a significant portion of premiums derived from Nigeria is priced and transacted in US dollars. For certain classes of business that operate entirely in US dollars, accounting practices can result in loss ratio volatility, even when the underlying economics of the risks being reinsured are stable.

Exhibit 2
Sub-Saharan Africa – AM Best-Rated Reinsurers, Weighted Average Combined Ratio, 2013-2022
(%)



Sources: BESTLINK
Best's Financial Suite – Global, AM Best data and research

The years 2017 to 2020 marked a turbulent period for the region's players. Many of the cohort of AM Best-rated SSA reinsurers looked overseas for growth and diversification. Most notably, some grew their exposures within the Indian subcontinent, and subsequently were hit by losses from state subsidised crop insurance schemes. In the wake of unfavourable results, there has been a decline in appetite of SSA reinsurers to write non-African business. This has partially aided the steady recovery in the combined ratio of the cohort since 2020.

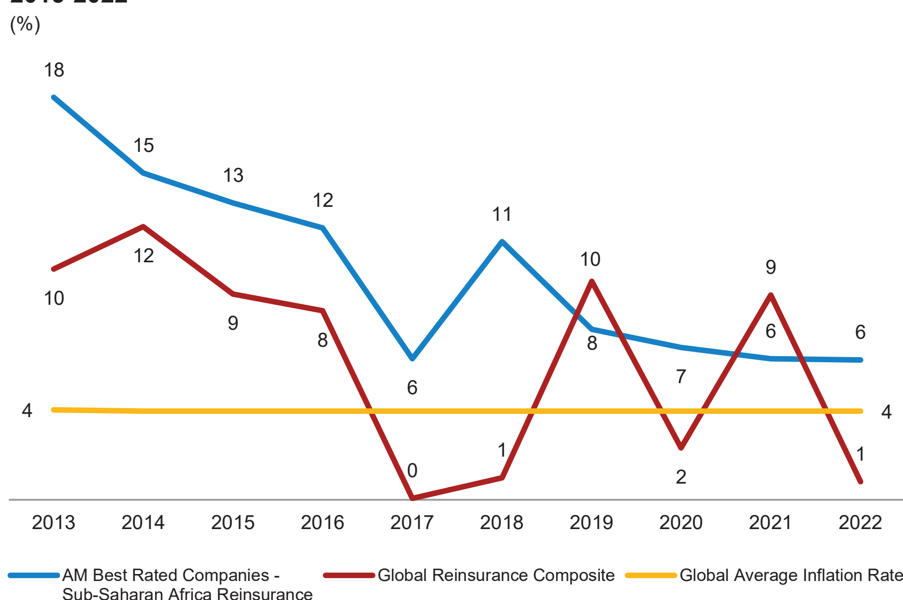
While the underwriting results of AM Best-rated SSA reinsurers have shown a steady recovery since combined ratios peaked in 2019, they are yet to rebound to pre-2017 levels. Soft market conditions continue in certain large primary markets such as Kenya. Those conditions have—to varying degrees—impacted the loss ratios of reinsurers geared towards proportional treaties where rate increases have become more difficult to achieve.

Notwithstanding the global economic challenges that persist, AM Best has observed continued positive steps being taken by regulators and other important stakeholders in the SSA reinsurance markets. Interventions have ranged from setting revised minimum rates to the introduction of much stricter regulations to promote the more timely collection of premiums. Among others, these developments reinforce expectations that the improving trend in performance is sustainable.

How Do the Results of the Region's Reinsurers Compare to Their Global Counterparts?

Over the 10 years 2013 to 2022, the cohort of SSA reinsurers' reported loss ratios have been consistently lower than AM Best's Global Reinsurance Composite, at 56% and 65%, respectively. SSA loss ratios have also been less volatile than for global players over this period, with a standard deviation of 2% and 7%, respectively. The consistently lower loss experience of the SSA reinsurance composite is largely explained by the highly protectionist regimes in certain local reinsurance markets (which typically reduces competition), as well as the generally lower catastrophe risk across large parts of the continent.

Exhibit 3
Sub-Saharan Africa – AM Best-Rated Reinsurers, Return on Equity, 2013-2022
(%)



Return on equity figures are calculated on a weighted average basis for the purposes of this report.
Sources: BESTLINK
Best's Financial Suite – Global, AM Best data and research

Conversely, the typically high cost of doing business in SSA, along with the relatively small size of locally domiciled reinsurers, tends to temper overall underwriting results. Many market participants are unable to realise the economies of scale that larger global companies can achieve. The weighted average expense ratio reported in 2022 by the AM Best SSA reinsurance composite was 39%, 11 percentage points higher than 28% for the Global Reinsurance Composite.

Measured by return on equity (ROE), AM Best-rated SSA reinsurers have returned greater levels of profitability to their shareholders, compared with the Global Reinsurance Composite (see **Exhibit 3**). Over the longer term this is demonstrated by a 10-year average ROE for the SAA reinsurers of 10%, compared with 6% reported for the Global Reinsurance Composite.

The ROE for SSA reinsurers must be considered with care. Some AM Best-rated SSA reinsurers report in US dollars and the majority of incumbents have generally high levels of risk-adjusted capitalisation (see **Exhibit 4**), as measured by Best's Capital Adequacy Ratio (BCAR), both of which temper ROE. However, for companies operating in local currencies, their returns will often be somewhat lower on a real basis, after taking into account the impact of the local inflationary environment.

Limited Regional Capacity

The larger reinsurers in SSA (excluding South Africa) tend to be either national or supranational entities, and often benefit from compulsory cessions and/or have a mandate to develop the local (re) insurance industry. With a few exceptions, African reinsurers tend to focus on local and regional markets. Further competition comes from a relatively small group of sophisticated global reinsurers, and a handful of smaller privately-owned African companies.

Despite solid growth in capital in recent years, the capacity offered by Africa-domiciled reinsurers remains low, and insufficient to meet the needs of local primary markets fully, particularly where major property and energy risks are concerned. As the region's economies have industrialised, their insurance needs have grown at a faster pace than the local market's capacity. This is evidenced by rising levels of premium written but declining levels of retention for SSA reinsurers who have relied on retrocession to provide capacity (see **Exhibit 5**). As well as capacity, local players often lean on more sophisticated global reinsurers for the expertise needed to underwrite complex risks.

Exhibit 4

Sub-Saharan Africa – AM Best-Rated Reinsurers, Capital & Surplus (C&S)

Company Name	2022 C&S (Including Minority Interests) (USD 000s)	2021 Best's Capital Adequacy Ratio (VaR 99.6%)	Assessment Effective Date
African Reinsurance Corporation	991,063	64.7	9-Dec-22
CICA Re	159,875	58.6	9-Mar-23
Continental Reinsurance PLC	113,167	39.8	9-Dec-22
East Africa Reinsurance Co. Ltd.	49,769	44.5	16-Sep-22
Ghana Reinsurance PLC	51,671	36.5*	10-Aug-23
Kenya Reinsurance Corporation Ltd.	333,105	44.6*	14-Jul-23
WAICA Reinsurance Corporation PLC	122,886	36.3*	26-Jul-23
ZEP-RE (PTA Reinsurance Co.)	309,314	61.9	16-Sep-22

* 2022 data.

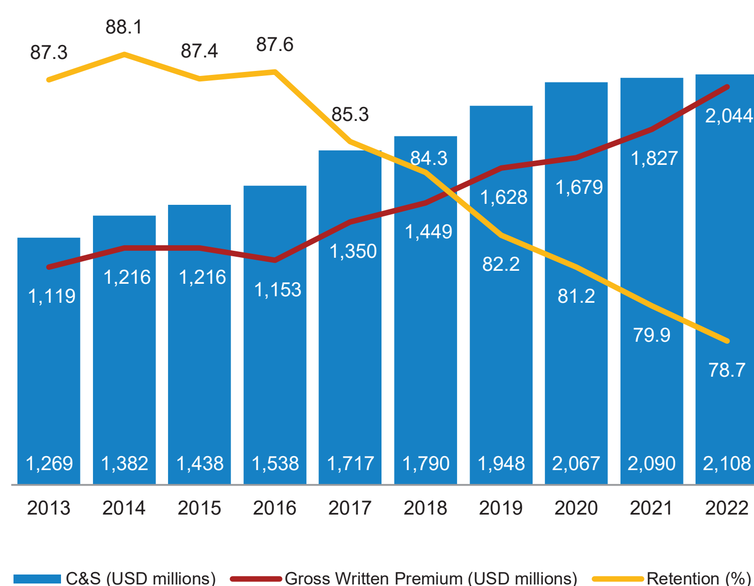
Sources:

Best's Financial Suite - Global, AM Best data and research

Exhibit 5

Sub-Saharan Africa – AM Best-Rated Reinsurers, Capital & Surplus, Gross Written Premiums vs. Retention, 2013-2022

(C&S; GWP: USD millions; Retention: %)



Sources:

Best's Financial Suite – Global, AM Best data and research

AM Best-rated Reinsurers in the Region

AM Best rates a number of reinsurers in the region (see **Exhibit 6**). Best's Credit Rating Methodology (BCRM) provides a comprehensive explanation of AM Best's rating process. Key rating factors—including a reinsurer's balance sheet strength, operating performance, business profile, and enterprise risk management (ERM)—are qualitatively and quantitatively evaluated during the rating process. Full details of the process can be found in *Best's Credit Rating Methodology (BCRM)* on AM Best's website.

Exhibit 6

Sub-Saharan Africa – AM Best-Rated Reinsurers

Ratings as of August 10, 2023

AMB #	Company Name	Domicile	Best's Long-Term Issuer Credit Rating (ICR)	Best's Financial Strength Rating (FSR)	Best's ICR & FSR Action	Best's ICR & FSR Outlook	Rating Effective Date
83411	African Reinsurance Corporation	Nigeria	a	A	Affirmed	Stable	9-Dec-22
93852	CICA Re	Togo	bbb-	B+	Affirmed	Stable	9-Mar-23
78723	Continental Reinsurance PLC	Nigeria	bbb-	B+	Affirmed	Stable	9-Dec-22
77803	East Africa Reinsurance Co. Ltd.	Kenya	bb+	B	Affirmed	Stable	16-Sep-22
90035	Ghana Reinsurance Co. Ltd.	Ghana	bb-	B-	Affirmed	Negative	10-Aug-23
85416	Kenya Reinsurance Corporation Ltd.	Kenya	bb+	B	Affirmed	Stable	14-Jul-23
94468	WAICA Reinsurance Corporation PLC	Sierra Leone	bb+	B	Affirmed	Negative[1]	26-Jul-23
78388	ZEP-RE (PTA Reinsurance Co.)	Kenya	bbb	B++	Affirmed	Stable	16-Sep-22

* ICR Outlook - Negative, FSR Outlook - Stable

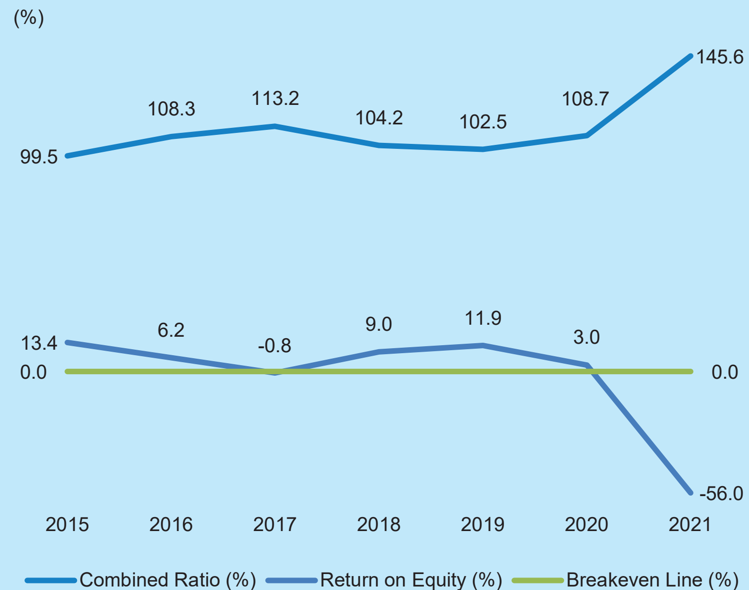
Sources:

Best's Financial Suite – Global, AM Best data and research

South Africa

South Africa, the continent's largest reinsurance market, generated GWP in excess of ZAR 35 billion (USD 2.2 billion) in 2021, according to AM Best's data and research.

Exhibit 7
Sub-Saharan Africa – South Africa, Reinsurance, 2015-2021
(%)



Sources: KPMG Insurance Survey (includes life business), AM Best data and research

The weighted average combined ratio for the South African reinsurance market was 146%, and has consistently exceeded 100% in each year since 2015 (see **Exhibit 7**). Performance of the market's reinsurers has been significantly impacted by soft pricing conditions, a spate of severe weather, and incidents of social unrest.

In recent years, South Africa's reinsurance market has also faced a series of blows with the COVID-19 pandemic compounding pressures in 2020 and 2021. Following a December 2020 court ruling, which overturned an appeal by Guardrisk Insurance Company Limited, the insurance market commenced settling contingent business interruption claims associated with the pandemic.

South Africa has also been hit by a spate of adverse weather events. In 2021, Cyclone Eloise, as well as floods and wildfires in the Western Cape, resulted in major losses for the market. In 2022, severe flooding in the KwaZulu-Natal (KZN) province in April highlighted the trend of increasing severity of adverse weather events in the region. Incurred losses associated with the KZN floods, rank among the largest natural catastrophe losses in the South African insurance market's history.

The arrest of the former South African president, Jacob Zuma, in 2021, led to riots and looting in some of country's major urban centres. The state-owned South African Special Risks Insurance Association (SASRIA), the specialist insurer covering losses relating to politically motivated crimes in the country, estimated an insurance industry loss of approximately ZAR 30 billion. In response, the South African government was forced to allocate ZAR 22 billion of additional funding to prevent SASRIA from becoming insolvent. A material proportion of these losses have ultimately fallen on the world's largest reinsurers through their South African subsidiaries, along with the Lloyd's market.

For more information about AM Best's ratings in the Africa region, please contact Dr. Edem Kuenyehia at +44 20 7397 0280 or *Edem.Kuenyehia@ambest.com*.

Analytical Contacts/Contributors

Helen Andersen, Oldwick
Jessica Botelho-Young, London
Steve Chirico, Oldwick
Ben Diaz-Clegg, London
Greg Dickerson, Oldwick
Valeria Ermakova, London
Dan Hofmeister, Oldwick
Jason Hopper, Oldwick
Antonietta Iachetta, Oldwick
Mathilde Jakobsen, Amsterdam
Edward Kohlberg, Oldwick
Konstantin Langowski, Amsterdam
Stratos Laskarides, Oldwick
Christie Lee, Hong Kong
Chris Lim, Singapore
Sridhar Manyem, Oldwick
David Mautone, Oldwick
Emmanuel Modu, Oldwick
Victoria Ohorodnyk, Amsterdam
Christopher Pennings, Oldwick
Ricardo Rodríguez Pérez, Mexico City
Doniella Pliss, Oldwick
Timothy Prince, London
Elí Sánchez, Mexico City
Wai Tang, Oldwick
Emily Thompson, London
Kanika Thukral, London
Matt Tuite, Oldwick
Stephen Vincent, Oldwick
Carlos F. Wong-Fupuy, Oldwick

Published by AM Best

BEST'S SPECIAL REPORT

A.M. Best Company, Inc.
Oldwick, NJ
CHAIRMAN, PRESIDENT & CEO **Arthur Snyder III**
SENIOR VICE PRESIDENTS **Alessandra L. Czarnecki, Thomas J. Plummer**
GROUP VICE PRESIDENT **Lee McDonald**

A.M. Best Rating Services, Inc.
Oldwick, NJ
PRESIDENT & CEO **Matthew C. Mosher**
EXECUTIVE VICE PRESIDENT & COO **James Gillard**
EXECUTIVE VICE PRESIDENT & CSO **Andrea Keenan**
SENIOR MANAGING DIRECTORS **Edward H. Easop, Stefan W. Holzberger, James F. Snee**

AMERICAS
WORLD HEADQUARTERS
A.M. Best Company, Inc.
A.M. Best Rating Services, Inc.
1 Ambest Road, Oldwick, NJ 08858
Phone: +1 908 439 2200

MEXICO CITY
A.M. Best América Latina, S.A. de C.V.
Av. Paseo de la Reforma 412, Piso 23,
Col. Juárez, Alcadía Cuauhtémoc, C.P. 06600, México, D.F.
Phone: +52 55 1102 2720

EUROPE, MIDDLE EAST & AFRICA (EMEA)
LONDON
A.M. Best Europe - Information Services Ltd.
A.M. Best Europe - Rating Services Ltd.
12 Arthur Street, 8th Floor, London, UK EC4R 9AB
Phone: +44 20 7626 6264

AMSTERDAM
A.M. Best (EU) Rating Services B.V.
NoMA House, Gustav Mahlerlaan 1212, 1081 LA Amsterdam, Netherlands
Phone: +31 20 308 5420

DUBAI*
A.M. Best - MENA, South & Central Asia*
Office 102, Tower 2, Currency House, DIFC
P.O. Box 506617, Dubai, UAE
Phone: +971 4375 2780
*Regulated by the DFSA as a Representative Office

ASIA-PACIFIC
HONG KONG
A.M. Best Asia-Pacific Ltd
Unit 4004 Central Plaza, 18 Harbour Road, Wanchai, Hong Kong
Phone: +852 2827 3400

SINGAPORE
A.M. Best Asia-Pacific (Singapore) Pte. Ltd
6 Battery Road, #39-04, Singapore
Phone: +65 6303 5000

Best's Financial Strength Rating (FSR): an independent opinion of an insurer's financial strength and ability to meet its ongoing insurance policy and contract obligations. An FSR is not assigned to specific insurance policies or contracts.

Best's Issuer Credit Rating (ICR): an independent opinion of an entity's ability to meet its ongoing financial obligations and can be issued on either a long- or short-term basis.

Best's Issue Credit Rating (IR): an independent opinion of credit quality assigned to issues that gauges the ability to meet the terms of the obligation and can be issued on a long- or short-term basis (obligations with original maturities generally less than one year).

Best's National Scale Rating (NSR): a relative measure of creditworthiness in a specific local jurisdiction that is issued on a long-term basis and derived exclusively by mapping the NSR from a corresponding global ICR using a transition chart.

Rating Disclosure: Use and Limitations

A Best's Credit Rating (BCR) is a forward-looking independent and objective opinion regarding an insurer's, issuer's or financial obligation's relative creditworthiness. The opinion represents a comprehensive analysis consisting of a quantitative and qualitative evaluation of balance sheet strength, operating performance, business profile, and enterprise risk management or, where appropriate, the specific nature and details of a security. Because a BCR is a forward-looking opinion as of the date it is released, it cannot be considered as a fact or guarantee of future credit quality and therefore cannot be described as accurate or inaccurate. A BCR is a relative measure of risk that implies credit quality and is assigned using a scale with a defined population of categories and notches. Entities or obligations assigned the same BCR symbol developed using the same scale, should not be viewed as completely identical in terms of credit quality. Alternatively, they are alike in category (or notches within a category), but given there is a prescribed progression of categories (and notches) used in assigning the ratings of a much larger population of entities or obligations, the categories (notches) cannot mirror the precise subtleties of risk that are inherent within similarly rated entities or obligations. While a BCR reflects the opinion of A.M. Best Rating Services, Inc. (AM Best) of relative creditworthiness, it is not an indicator or predictor of defined impairment or default probability with respect to any specific insurer, issuer or financial obligation. A BCR is not investment advice, nor should it be construed as a consulting or advisory service, as such; it is not intended to be utilized as a recommendation to purchase, hold or terminate any insurance policy, contract, security or any other financial obligation, nor does it address the suitability of any particular policy or contract for a specific purpose or purchaser. Users of a BCR should not rely on it in making any investment decision; however, if used, the BCR must be considered as only one factor. Users must make their own evaluation of each investment decision. A BCR opinion is provided on an "as is" basis without any expressed or implied warranty. In addition, a BCR may be changed, suspended or withdrawn at any time for any reason at the sole discretion of AM Best.

Version 0041423

AM Best is a global credit rating agency, news publisher and data analytics provider specializing in the insurance industry. For more information, visit www.ambest.com.

AMERICAS

WORLD HEADQUARTERS

A.M. Best Company, Inc.
A.M. Best Rating Services, Inc.
1 Ambest Road, Oldwick, NJ 08858
Phone: +1 908 439 2200

MEXICO CITY

A.M. Best América Latina, S.A. de C.V.
Av. Paseo de la Reforma 412, Piso 23
Col. Juárez, Alcadía Cuauhtémoc, C.P. 06600, México, D.F.
Phone: +52 55 1102 2720

EUROPE, MIDDLE EAST AND AFRICA (EMEA)

LONDON

A.M. Best Europe - Information Services Ltd.
A.M. Best Europe - Rating Services Ltd.
12 Arthur Street, 8th Floor, London, UK EC4R 9AB
Phone: +44 20 7626 6264

AMSTERDAM

A.M. Best (EU) Rating Services B.V.
NoMA House, Gustav Mahlerlaan 1212,
1081 LA Amsterdam, Netherlands
Phone: +31 20 308 5420

DUBAI*

A.M. Best - MENA, South & Central Asia*
Office 102, Tower 2, Currency House, DIFC
P.O. Box 506617, Dubai, UAE
Phone: +971 4375 2780

*Regulated by the DFSA as a Representative Office

ASIA/PACIFIC

HONG KONG

A.M. Best Asia-Pacific Ltd
Unit 4004 Central Plaza, 18 Harbour Road, Wanchai, Hong Kong
Phone: +852 2827 3400

SINGAPORE

A.M. Best Asia-Pacific (Singapore) Pte. Ltd
6 Battery Road, #39-04, Singapore
Phone: +65 6303 5000