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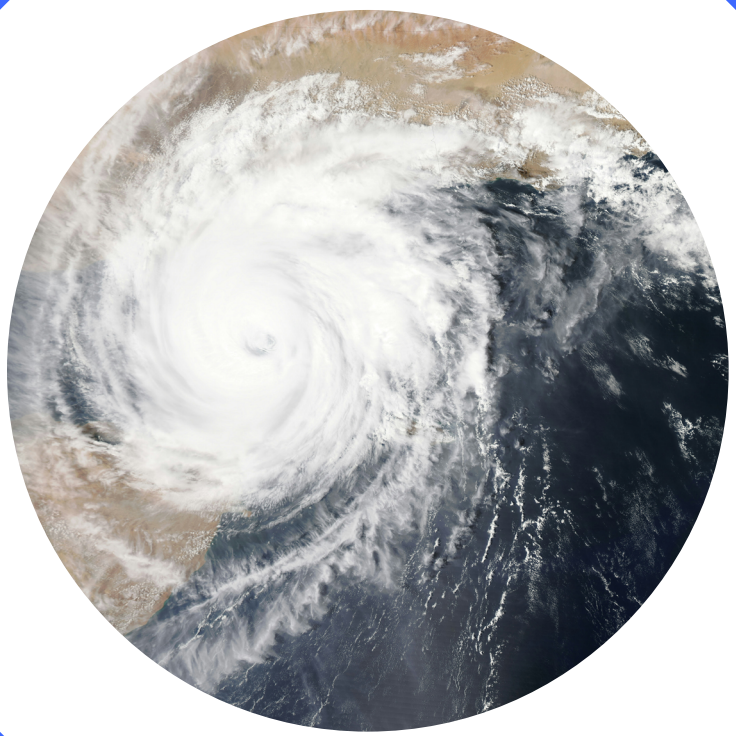
Reinsurance Explained:

A Pillar of Strength for General Insurers



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Executive Summary

An Essential Pillar of Australia's Insurance Market

Every time you pay your home or business insurance premium, a portion of that cost funds the purchase of reinsurance – a global system that keeps Australia's insurance market stable and affordable. This paper explains why reinsurance matters to every Australian consumer and how recent global changes are reshaping the landscape.

Key Findings

Reinsurance saves Australia's insurance industry AUD 23–70 billion in required capital. Without global reinsurance, Australian insurers would need to raise material additional capital or dramatically reduce coverage. The industry currently holds AUD 34 billion in capital but would need at least AUD 57 billion to return to the minimum, or AUD 104 billion to return to current operating levels without reinsurance protection. This capital would come with a funding cost, which would be higher than margins charged by reinsurers due to the diversified nature of reinsurers compared to investors in Australian insurers.

Climate change, along with increased asset value and the shift in the built environment, is fundamentally restructuring insurance costs. Secondary perils like hail, floods, and severe storms now cause more total damage than major hurricanes, cyclones and earthquakes. Global insured losses reached USD 145 billion in 2024, with seven of the last eight years above USD 100 billion. The first half of 2025 alone is already USD 100 billion. This increase in the underlying cost of insurance claims has driven reinsurance prices higher and made coverage terms more restrictive. Importantly, it has brought focus globally on ensuring insurers, and consumers, focus on ways to mitigate risk and damage, accelerating innovation and access to new forms of capital.

Government intervention can deliver consumer benefits. The latest assessment of the Australian Cyclone Reinsurance Pool shows reduced premiums for highest-risk homes and small businesses; however, it has not necessarily delivered affordable premiums due to other non-cyclone related factors sustaining high premiums in northern Australia. Similar pools for other risks like flooding may be less effective on reducing premiums due to the concentrated nature of flood exposures to a small number of consumers, thereby not allowing the appropriate spreading of the cost of these events.

What This Means for Consumers

The rise in underlying cost of insured losses and the desire for reinsurers to keep up with this cost directly impacts insurance premiums. The 2023 global reinsurance market hardening, following Hurricane Ian and significant losses from investment portfolios, led to double-digit premium increases. In Australia/New Zealand, these global factors along with inflation and local events also saw material 2023 premium increases. While 2024 and 2025 renewals have been favourable, the underlying trend toward higher insured catastrophe costs continues.

Australia's geographic diversity relative to the rest of the world provides natural advantages in the global reinsurance market – our natural peril exposures help reinsurers balance their worldwide portfolios. This diversification benefit helps keep our market attractive even as climate change continues to influence the experienced and expected loss from natural disasters.

Looking Forward

The reinsurance market is evolving rapidly, with alternative capital sources like catastrophe bonds growing to USD 115 billion globally and materially outstripping growth in traditional reinsurer's capital. However, Australian regulatory barriers limit access to these potentially cheaper funding sources. APRA's 2024/2025 consultation on reinsurance framework has proposed changes to these regulatory barriers and adjustments could unlock access to these alternative capital sources, leading to better pricing and terms for components of reinsurance.

The paper concludes that reinsurance remains an essential pillar for Australia's insurance market stability and capital relief. Our insurance market faces unprecedented challenges, and we must maintain the fundamental principle of transferring Australian risk overseas while serving consumers locally. Even if the cost may be passed onto consumers, this cost of risk transfer will be less than the cost of uninsured risk. However, ongoing attention to regulatory barriers, risk mitigation and resilience will be crucial for maintaining affordable coverage for Australian households and businesses.

1. Introduction

Key Points

Global economic losses from natural disasters reached USD 368 billion in 2024 – 54% above average, highlighting escalating nature of these perils.

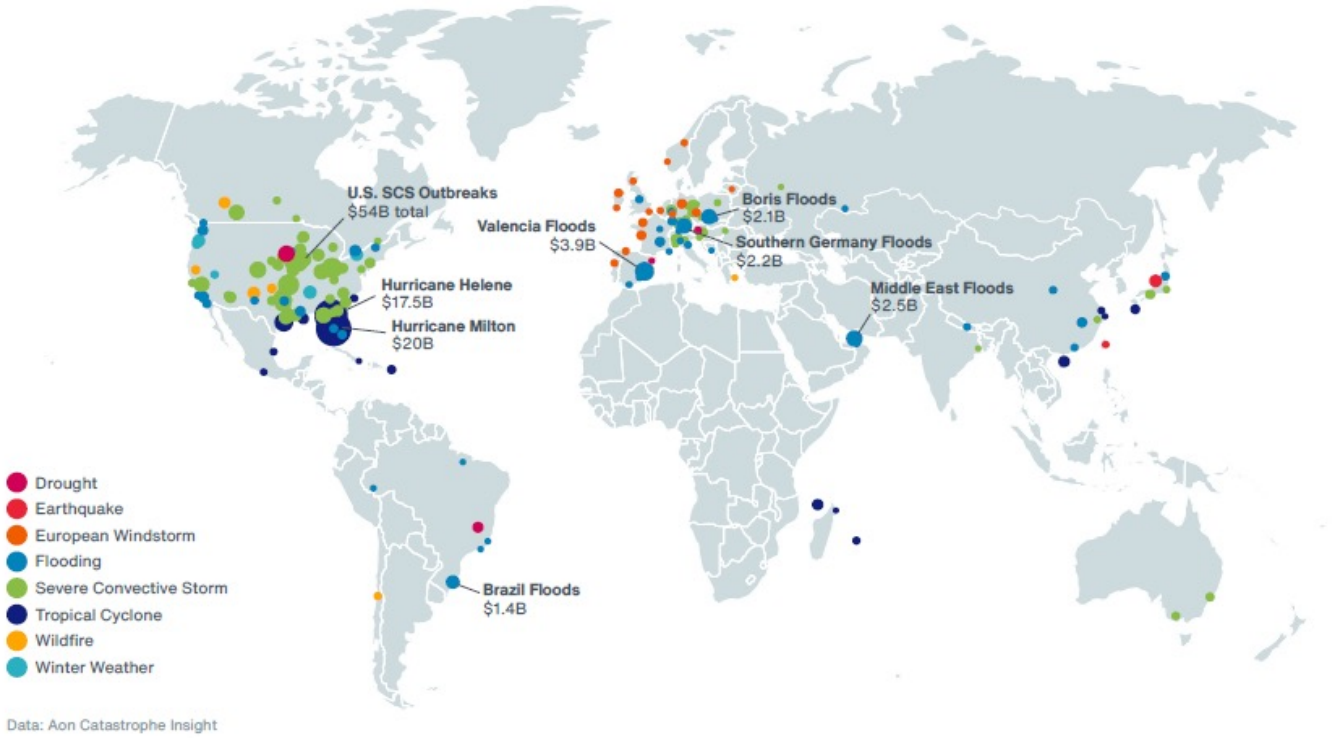
2025 has continued this trend with insured losses reaching USD 100 billion, the second highest first half year on record.

Australian disasters are also accelerating in both frequency and severity and insurers have passed on this cost to consumers, with 1.6 million households struggling with insurance affordability.

1.1 Global Insurance Events

You only have to open a newspaper (or a newspaper app on your phone) to see press about the increasing cost of natural peril events globally. In 2024, the economic cost of global events exceeded USD 368 billion, with the insured loss topping USD 145 billion, 54% above the 21st century average.[1] Within these events, 34 were more than USD 1 billion.

Exhibit 1: Notable 2024 Insured Loss Events (USD Billion)

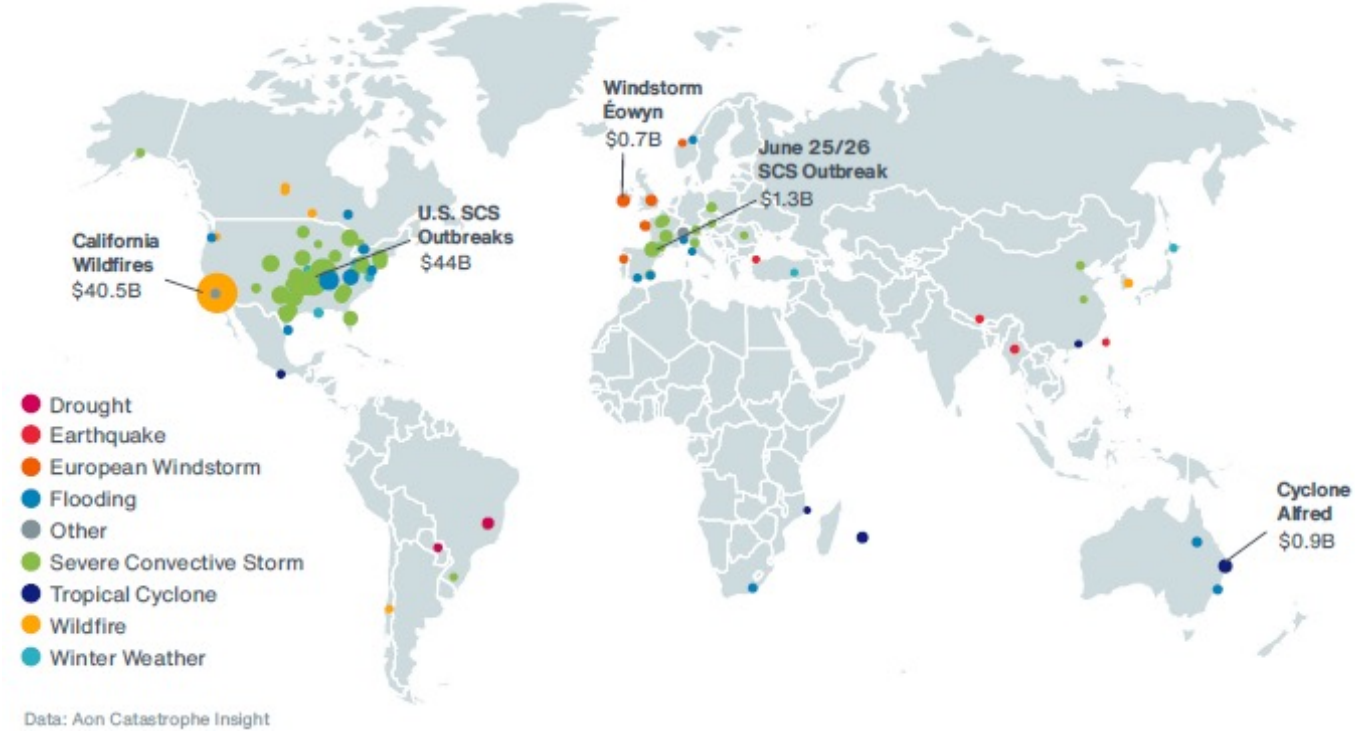


Source: Exhibit 8 of 2025 Climate and Catastrophe Insight, Aon

In addition, in the first half of 2025, there has been insured losses of USD 100 billion, the highest since 2011 and marking the second-highest figure on record. This is driven by the California Wildfires (USD 41 billion) and severe convective storms in the US totalling USD 44 billion.[2]

[1] Aon, *2025 Climate and Catastrophe Insight*, 2025.
[2] Aon, *Global Catastrophe Report, First Half (1H) of 2025*, 2025.

Exhibit 2: 1H 2025 Insured Loss Events (USD Billion)

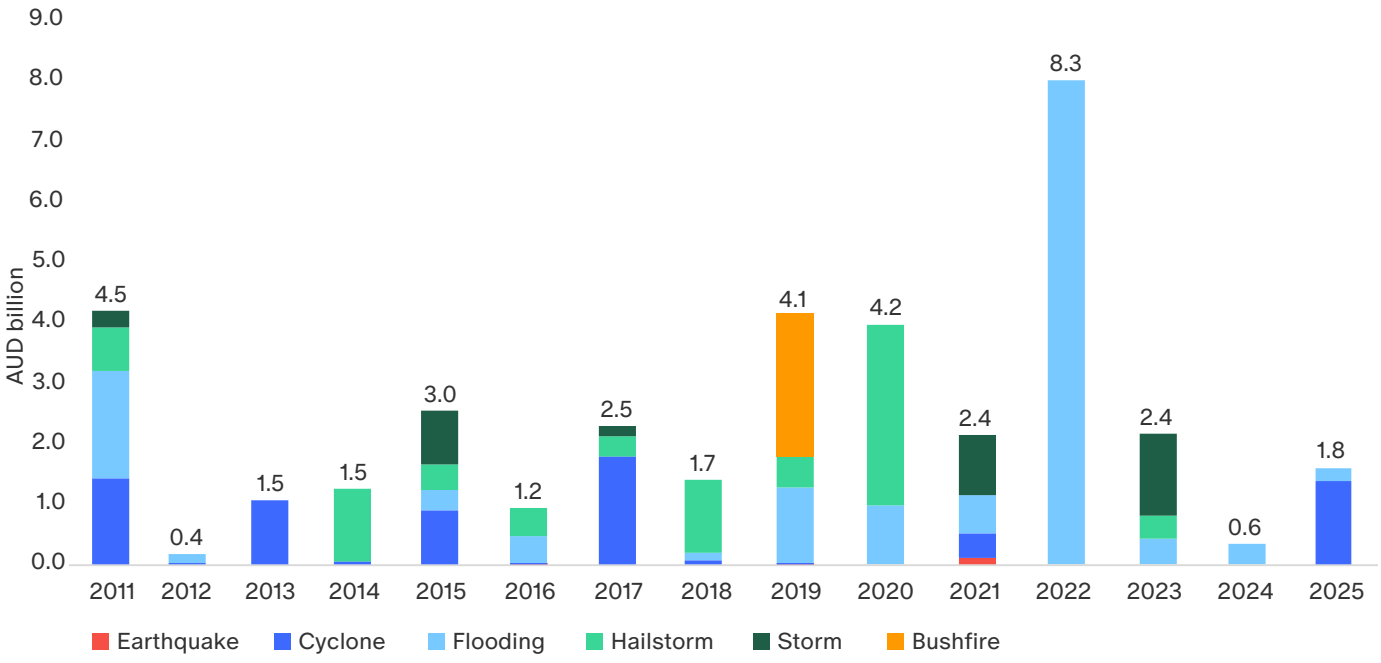


Source: Exhibit 6 of Global Catastrophe Report, First Half (1H) of 2025, Aon

1.2 Local Insurance Events

The global trend in increased losses is also a feature of the recent experience in Australia and New Zealand. The below graph shows the past 14 years of losses for Australia.[3]

Exhibit 3: Australian Insured Loss Events (AUD Billion)



Source: Historical Catastrophe List, Insurance Council of Australia

[3] Insurance Council of Australia, *Historical Catastrophe List*, 2025. Note: 2023 Christmas storms classified as storm (not flood) and Ex-Tropical Cyclone Alfred classified as cyclone (not flood).

In addition, key New Zealand insurer losses over this period are:

- North Island Storm, January/February 2023, NZD 2.0 billion
- Cyclone Gabrielle, February 2023 NZD 1.8 billion
- Kaikoura Earthquake, November 2016, NZD 2.3 billion
- Canterbury Earthquakes, total for 2010-2011, NZD 22.9 billion[4]

The increasing cost of natural perils is a complex one: it is not just the frequency of these losses (which is discussed further in Chapter 3), but also the severity that is increasing. This is driven by general inflation, material costs and labour shortages. The increasing cost of reconstruction is estimated to have risen by 20–30% since 2022. The increased frequency and severity have seen a significant risk in the overall costs of claims and pushed insurers to reevaluate underwriting pricing approaches and materially increase prices for consumers. This is impacting the overall affordability and accessibility of insurance, with 1.6 million households struggling to afford to insure their homes.[5]

In this paper, we look at the role reinsurance plays now and in the future in the ever-evolving insurance landscape, protecting insurers (and therefore consumers) from natural disasters.

[4] The Insurance Council of New Zealand | Te Kāhui Inihua o Aotearoa, *Cost of Natural Disasters*.
[5] Actuaries Institute, *Home Insurance Affordability Worsens in Australia*, 2024.

2. Impact and Influence of Reinsurance

Key Points

Reinsurance is insurance for insurance companies: it transfers risk and protects insurers against catastrophe and other significant losses, resulting in financial stability.

Reinsurance saves AUD 23–70 billion in required capital: without it, Australian insurers would need material additional capital to be raised, at a higher cost due to the diversified nature of reinsurers compared to investors in Australian insurers.

Insurers are charged a premium for reinsurance, with the margin charged by reinsurers needing to be absorbed by the insurer's profit margin or distributed amongst consumers.

2.1 Background: Insurance Premium and Capital Framework

Before discussing reinsurance, it is important to understand the underlying insurance pricing and capital framework. In simple terms, a consumer's premium for their car and home is based on an insurer's assessment of likely frequency and severity of making a claim to determine the expected cost of that claim, plus a loading for their operating expenses and commissions, and a loading to return a profit.[6]

Some aspects of technical premium are very predictable given historical insurer and/or industry experience (e.g., attritional losses for motor) and therefore fall within small range of possible outcomes. However, the natural perils exposure of an insurer is less predictable and will vary materially year on year (see Exhibit 3). The existence of this volatility means insurers must include loadings in their premium (i.e., the profit margin shown to the right) in order to protect their asset base. In addition, insurers meet minimum capital requirements set by the Australian Prudential Regulation Authority (APRA) that consider the insurer's exposure to insurance, asset and operational risks. The capital to operate the insurers comes from investors who desire a return on their investments, such as a share dividend or interest on a debt instrument. This means that stability of earnings is crucial to insurers.

Technical Insurance Premium

Ignoring reinsurance, the technical premium for an insurance policy is composed of the following:

- Expected loss from attritional claims (e.g., fallen tree, small car accident, burst pipe)
- Expected loss from large claims (e.g., total loss due to a fire)
- Expected loss from natural perils (e.g., earthquake, bushfire, flood, hail)
- Insurer's expenses (e.g., commissions, administration and operating expenses)
- Insurer's profit margin

Exhibit 4: Diagram of Composition of Insurance Premium for Short Tail Property

For the purposes of this box, tax, levies and stamp duty have been ignored.

[6] Some insurance companies may in fact operate for the benefit of members (i.e., mutuals) and not necessarily add a margin for profit.

2.2 What is Reinsurance?

It is quite common to be asked to explain reinsurance to a newer audience, and there are two simple methodologies that assist:

1. Reinsurance is simply insurance for insurance companies.
2. Reinsurance is exactly the same as the insurance you buy for your car and home, but on a much bigger scale.

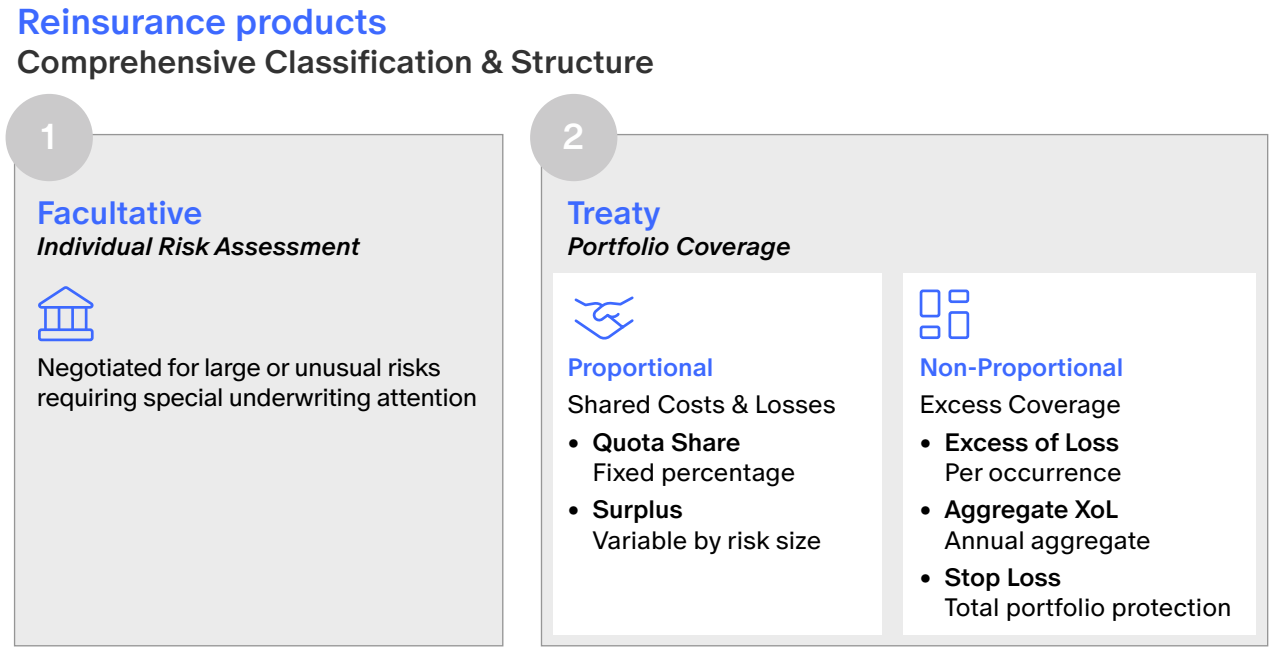
Expanding on the second, it is common for an insurance company to have a portion of a consumer's premium set aside and available to pay claims for attritional losses such as car crashes or for a house to suffer damage due to a fire or a burst pipe. The loss profile to an insurance company for these types of losses is relatively stable and predictable. Whilst an average over many years is predictable for natural disasters (due to historical information and existence of natural disaster models), it can be extremely large in any one year, and it would not be economical for an insurer to have a material level of assets set aside for a major Sydney hailstorm, a big Melbourne earthquake or flooding across a large geographical area. If these events occur, they will have a material detrimental impact on an insurer's financial results for the year and the net assets balance. To mitigate this risk, insurers buy reinsurance.

Reinsurance offers several benefits to an insurance company, including:

- Capital relief
- Financial stability
- Protection against catastrophe losses and significant individual losses
- Increased capacity
- Risk management
- Expertise and support

An insurance company has access to a variety of reinsurance products. These products may cover individual risks (facultative) or groups of risk (treaty). The product will also vary based on what portion of a loss that is covered by the reinsurance (e.g., sharing from first dollar of loss, or after an excess). The products are summarised diagrammatically below, with details of each product set out in Appendix 1.

Exhibit 5: Diagrammatic Representation of Reinsurance Products



In this paper, we focus on the first three benefits listed above, which largely are provided by excess of loss and aggregate excess of loss reinsurance.

Excess of Loss Reinsurance

Under this contract, the reinsurer covers losses that exceed a specified amount, known as the attachment point or retention. The insurer retains economic responsibility for losses up to the attachment point, and the reinsurer has the economic responsibility for the loss amount above the threshold, up to a predetermined limit. The amount above the limit then falls back as an economic responsibility to the insurer. This type of reinsurance is common for insurers seeking protection against high-severity, low-frequency events, allowing them to stabilise financial performance and maintain their capital position.

This reinsurance is typically structured into "layers", allowing the insurer to create differentiated exposure to its overall portfolio and cater to the varying risk appetite of reinsurers. With the use of modelling, the likelihood that an insurer will make a claim on the reinsurance is determined and is often referred to as a "return period". For example, a 1-in-5-year return period denotes that it is expected that the insurer will make a claim on the layer once every five years.

Typically excess of loss reinsurance includes the reinsurer providing the insurer with a reinstatement of cover, whereby the limit is restored after a loss is paid. This reinstatement allows the insurer to continue to have protection for subsequent loss(es). Reinsurance provisions are agreed upfront and may be provided as part of the original price or may include the need for an additional premium to be paid.

Exhibit 6: Diagram of an Example Excess of Loss Reinsurance Structure

$Xm			
$500m	Retained by insurer	Retained by insurer	Retained by insurer
$200m	Layer 5: $300m xs $200m	Reinstatement of Layer 5	Retained by insurer
$100m	Layer 4: $100m xs $100m	Reinstatement of Layer 4	Retained by insurer
$50m	Layer 3: $50m xs $50m	Reinstatement of Layer 3	Retained by insurer
$20m	Layer 2: $30m xs $20m	Reinstatement of Layer 2	Retained by insurer
$10m	Layer 1: $10m xs $10m	Reinstatement of Layer 1	Retained by insurer
$0m	Retention	Retention	Retained by insurer

Aggregate Excess of Loss Reinsurance

Rather than covering a single catastrophic loss, aggregate excess of loss reinsurance responds to the accumulation of catastrophic losses over a period of time, such as a year. The reinsurer covers the economic responsibility for the predetermined limit, once the sum of the retentions to the insurer from catastrophic losses adds over the year to the predetermined "attachment point". This protects the insurer from the cumulative impact of multiple events that, in aggregate, result in significant financial loss.

2.3 Reinsurance Premium Framework

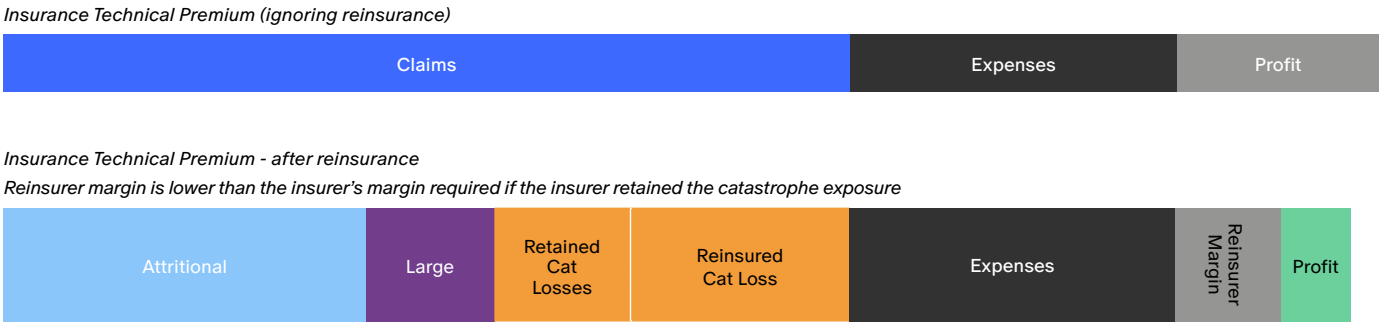
At a high level, a reinsurer's approach to pricing reinsurance is no different than the earlier described process for insurance. The nuances here are:

- There may be less historical data to which they can determine the frequency and severity of claims. Reinsurers supplement this with statistical models.
- The reinsurers operating expenses will be lower (as they don't have the same level of underwriting and staffing costs as an insurance company).
- The reinsurer can take advantage of global diversification, reducing volatility in results and therefore investor expectations of return on their capital may be lower.
- The reinsurer's capital requirements from its regulator may be lower and therefore the dollar return required by investors is lower due to the lower capital of the reinsurer.

Importantly, like insurers, they are taking on risk and their investors desire a return on their investment. This means the reinsurer must charge a margin on top of the expected cost of claims from the insurer.

If we revisit the insurance pricing framework, we apportion the catastrophe losses into three parts: retained cat losses (e.g., the retention shown in Exhibit 6), reinsured cat losses and the reinsurer's margin. Given the reinsurer's lower expenses, lower amount of capital required and diversified nature of its exposure (relative to Australian insurers), the reinsurer's margin will be lower than the insurer's margin should they have retained this catastrophe exposure. Therefore, the diagram of technical premium adjusts, as shown below. The size of the reinsurer margin will change due to reinsurance market dynamics, which are discussed further in Chapter 4.

Exhibit 7: Diagram of Technical Premium with Reinsurance Considerations



2.4 Impact of Excess of Loss Reinsurance

If a reinsurer is going to charge the expected cost of the claims, plus the margin discussed above, why would an insurance company buy the reinsurance? Firstly, the reinsurer margin is lower as shown above. Secondly, the reinsurance provides material protection to the balance sheet of an insurer, reducing economic loss from natural disasters in the years when these events occur. Finally, under the regulatory framework in Australia, this reinsurance is an alternative to capital raised from debt or equity to support the insurance operations.

For an insurer in Australia, the purchase of excess of loss reinsurance for their exposures to natural perils has a material benefit to their APRA capital requirements.[7] This is largely driven by the Insurance Concentration Risk Charge (ICRC), a component of the requirements that represents the net financial impact of a large natural perils event, after the application of any reinsurance.

As of 31 March 2025, the insurance industry in Australia had an ICRC of AUD 3.7 billion, total capital requirement of AUD 18.6 billion and eligible capital of AUD 33.9 billion. This results in capital in excess of the minimum requirements AUD 15.3 billion.[8] Without excess of loss reinsurance, we estimate that the ICRC would increase by AUD 40 billion[9] and the insurance industry in Australia would absorb that AUD 15.3 billion of excess capital and need to raise at least a further AUD 23.2 billion to return to the minimum capital. APRA expects insurers to operate above the minimum. At the industry's current coverage ratio of 1.82 times the current requirement, it would need to raise AUD 70 billion to keep the capital coverage at that 1.82 times.

Exhibit 8: Impact of Reinsurance on APRA Capital Position

Source: APRA Quarterly Statistics as of 31 March 2025, Aon analysis

Note: In this graphic, the aggregation benefit has been deducted from the Asset Risk component for ease of referencing. The decrease seen from current to no reinsurance is due to an increase in the aggregation benefit due. Impacts on Asset Risk and Insurance Risk from the removal of reinsurance has been ignored in this analysis.

[7] See APRA website (www.apra.gov.au) for further details on capital requirements for general insurers.
[8] Based on APRA statistics as at 31 March 2025. https://www.apra.gov.au/quarterly-general-insurance-performance-statistics
[9] Aon estimate of total property catastrophe excess of loss limit purchased by direct insurers in Australia.

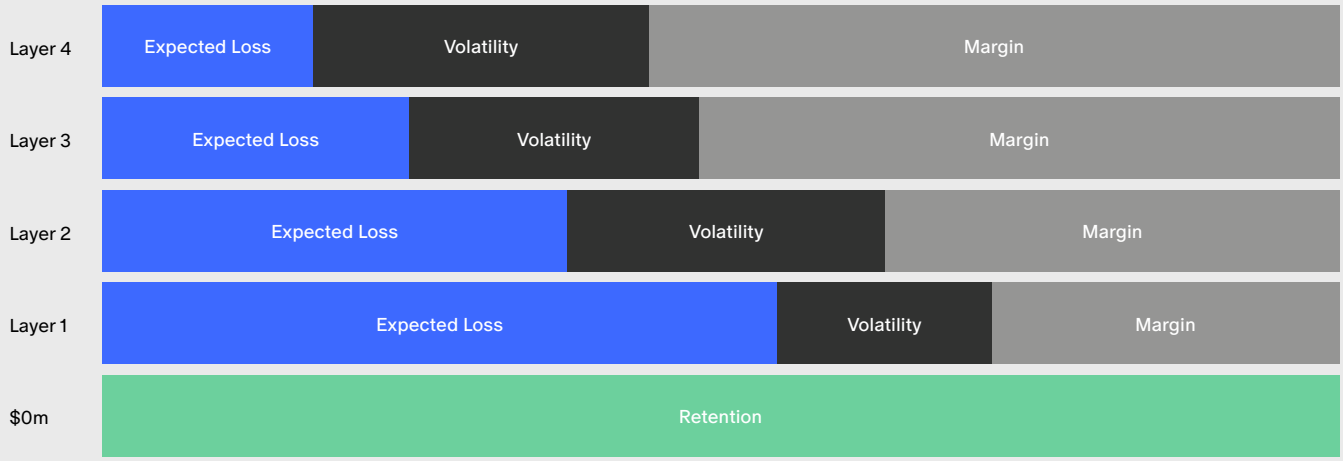
2.5 Cost of Reinsurance

Expected Loss of Catastrophes and Reinsurance Pricing

For natural peril expected losses, reinsurers make use of catastrophe models, either from third party vendors or in-house models. You can read more about catastrophe models in other Actuaries Institute papers.[10] These models produce outputs that assist insurers and reinsurers to understand the exposure to natural perils, at both the Average Annual Loss (AAL) and across the spectrum of return periods.

The higher the expected loss to the reinsurance structure, the higher the frequency of a claim will be and therefore the more expensive it will be. For example, the first layer premium of a reinsurance programme for an insurer could be as much as 55% of the layer limit. For example, a layer of AUD 100 million in excess of AUD 100 million may cost AUD 55 million. This is composed of expected loss (say AUD 40 million), loading for volatility (say AUD 10 million) and expenses and profit (say AUD 5 million). In some years, the insurer will make no claims and others they will claim up to the layer limit. As you increase the retention on a layer, the premium reduces and the highest layer may only be 2% of the layer limit, composed of very little expected loss and mostly premium to meet the reinsurer's desired return on capital for putting the limit at risk to being paid (in part or in full).

Exhibit 9: Example of Components of Excess of Loss Premium



Note that this graphic shows the relative size of the components, the premium for these layers would vary in absolute dollar terms.

It is crucial to note that should reinsurance be removed, insurers will instead need to raise the capital mentioned above via debt or equity from their shareholders in order to continue to operate as an insurer. If this quantum of funding could be raised in the Australian market, the debtholders and shareholders would expect a return on their investment. This expected return is akin to the margin within the premium charged for the reinsurance (i.e., loading for expenses, volatility and profit). That is, removal of reinsurance will not necessarily reduce consumer premiums, When making a determination as to whether to purchase reinsurance. When making a determination as to whether to purchase reinsurance, an insurer will consider the return expectations of investors/shareholders versus reinsurers and make an economic decision. It is routinely the case that the cost of reinsurance funding is cheaper than debt or equity. This will in part depend on the state of the reinsurance market, which is discussed further in Chapter 4.

We estimate that, for the 2025 financial year (1/7/24 to 30/6/25), the general insurance industry's premium for reinsurance protecting their portfolio against natural peril catastrophes was approximately AUD 2.5 billion.[11] This premium reduced the catastrophe exposure (as measured by APRA's ICRC) from the AUD 43.7 billion to AUD 3.7 billion, creating material capital benefit to the industry. It is crucial to not focus on the quantum of the AUD 2.5 billion as the "cost of reinsurance". A large portion of that cost would exist with or without reinsurance, as it is the expected cost of natural perils events that forms part of the expected claims costs that an insurer will determine in pricing, and will likely be determined based on the insurer's address level assessment of the key risks to that policy (e.g., distance to water, distance to bush). What is important is the allocation of the additional portion of reinsurance premium that a reinsurer has charged, being the reinsurer's margin shown in the earlier diagram – their loading for volatility, expenses and profit. There are a number of methods that exist that insurers may use, all of which attempt to allocate this margin to the consumers that generate the original natural perils events.

[10] For example, Actuaries Institute, *Technical Paper: The Use of Catastrophe Model Results*, 2024.
[11] Aon estimate of total property catastrophe premium paid by direct insurers in Australia.

2.6 Use of Aggregate Excess of Loss Reinsurance

Insurers also look to aggregate excess of loss reinsurance to support their capital position, or to protect earnings. Aggregate excess of loss reinsurance has been on an interesting journey in Australia and New Zealand over the last decade, with the availability and the price of these structures changing materially. In simple terms, the cover is a protection for the financial year for the accumulation of losses, either only natural perils, or perhaps for the entire portfolio of the insurer. Insurers typically make use of aggregate excess of loss protection as part of the aforementioned APRA capital requirements, which requires the calculation of the net financial impact of a series of material events over a financial year. These covers typically respond after more than one event. For example, the reinsurer may take on economic responsibility for losses once the total of all catastrophic losses for a period meets an agreed level. An alternative is that the reinsurer takes on economic responsibility at a lower retention than the one that applied for the first catastrophic loss. Insurers reduce the retention from a catastrophe to a lower figure to manage the capital requirement and also provide protection to the earnings of the portfolio.

In 2024, Insurance Australia Group purchased a five-year programme to protect earnings from natural peril events, providing up to AUD 680 million of additional protection annually, and up to AUD 2.8 billion over the five-year period. This cover aggregates all natural perils losses over a financial year below IAG's excess of loss reinsurance retention. Based on IAG modelling, in the majority of years of the agreement, a profit commission arrangement delivers a graduated premium offset and the range of potential financial outcomes are weighted to the upside.[12]

In July 2025, Suncorp replaced their traditional reinsurance cover that reduced exposure to a first and second event to AUD 350 million with a structured, multi-year solution. The cover includes a profit-sharing mechanism and reinsurer losses are capped at AUD 600 million over a three-year term. The cost of the cover is lower than the prior year and has further expected upside from the profit-sharing arrangement.[13]

The IAG and Suncorp structures both likely give material capital relief in the APRA ICRC calculation, showing the importance of innovation of traditional reinsurance structures that bring global capital to Australia/New Zealand for reduced ultimate cost to consumers. Whilst the margin above the expected loss will be met by decreased profit for the insurer and/or passed onto consumers, the profit-sharing aspects will dampen this impact. Even without those mechanisms, these two deals bring greater earnings stability and capital relief, critical components to the long-term viability of insurance in Australia.

[12] IAG, *IAG reduces earnings volatility with long-term reinsurance agreements*, 2024.
[13] Suncorp, *FY26 Reinsurance Program Update*, 2025.

3. Reinsurance Market Dynamics

Key Points

The reinsurance market performed poorly 2017–2022: high underwriting losses due to increasing underlying loss activity to insurers were not offset by investment returns and the market had low return on equity for shareholders.

Secondary perils now exceed primary peril losses and reinsurers have adjusted their appetite and pricing to reflect the impact of increasing losses from natural disasters, particularly storms and floods.

2023 was a clear turning point for pricing, however the impact from this point forward has been muted, with insurers experiencing favourable outcomes in 2024 and 2025.

3.1 Reinsurance Market History

The reinsurance market took shape in the 19th century, with the first known reinsurance contract being signed in the 1800s between two German insurers, leading to the establishment of specialised reinsurance companies.[14] The industry expanded significantly in the 20th century, driven by industrialisation, globalisation and the rise of complex risks. Major events, such as natural disasters and wars, highlighted the need for reinsurance to manage large-scale losses.

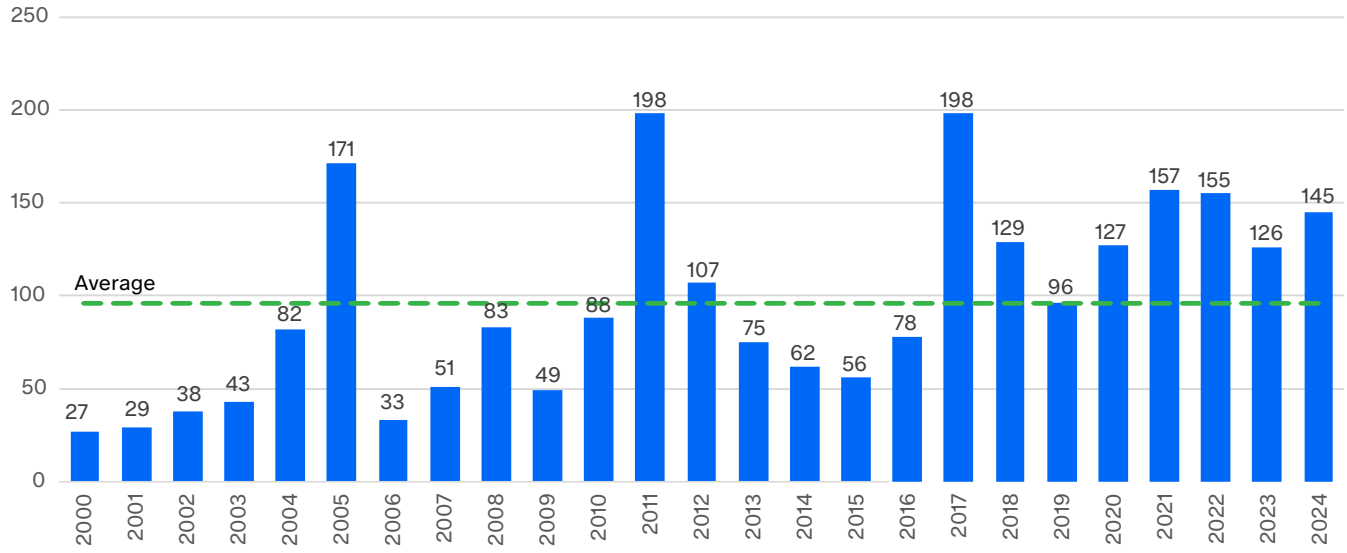
In recent decades, the reinsurance market has continued to evolve, driven by advancements in technology, data analytics and risk modelling. After significant events, reinsurers adapt the terms and conditions of coverage, often imposing exclusions of cover. For example, post the September 11 terror attacks, terror became a common exclusion. Other key exclusions include war/conflict, pandemics, pollution and cyber.

3.2 Reinsurance Market and Natural Perils

Importantly, the reinsurance market is global. In order to flourish, excess of loss reinsurers need to diversify their risk, across perils and geographies. As you see in Chapter 1, natural peril events occur across this spectrum and reinsurers cannot afford to be concentrated to (say) hurricanes or storms in the US. This is of benefit to Australia and New Zealand, because the perils and geography creates a natural diversification for reinsurers. It is worth noting, however, that Australia and New Zealand have significant earthquake and cyclone exposure and are therefore considered to be a major catastrophe market and home to some of the largest catastrophe programmes in the world.

The below graph shows the global insured losses from natural disasters for the past 25 years, normalised to 2024 US dollars.[15]

Exhibit 10: Global Insured Losses from Natural Disasters Since 2000 (USD Billion)



Source: Exhibit 10, 2025 Climate and Catastrophe Insight, Aon

[14] David Holland, *Reinsurance: A Brief History*, 2012.
[15] Exhibit 10, Aon, *2025 Climate and Catastrophe Insight, 2025.*

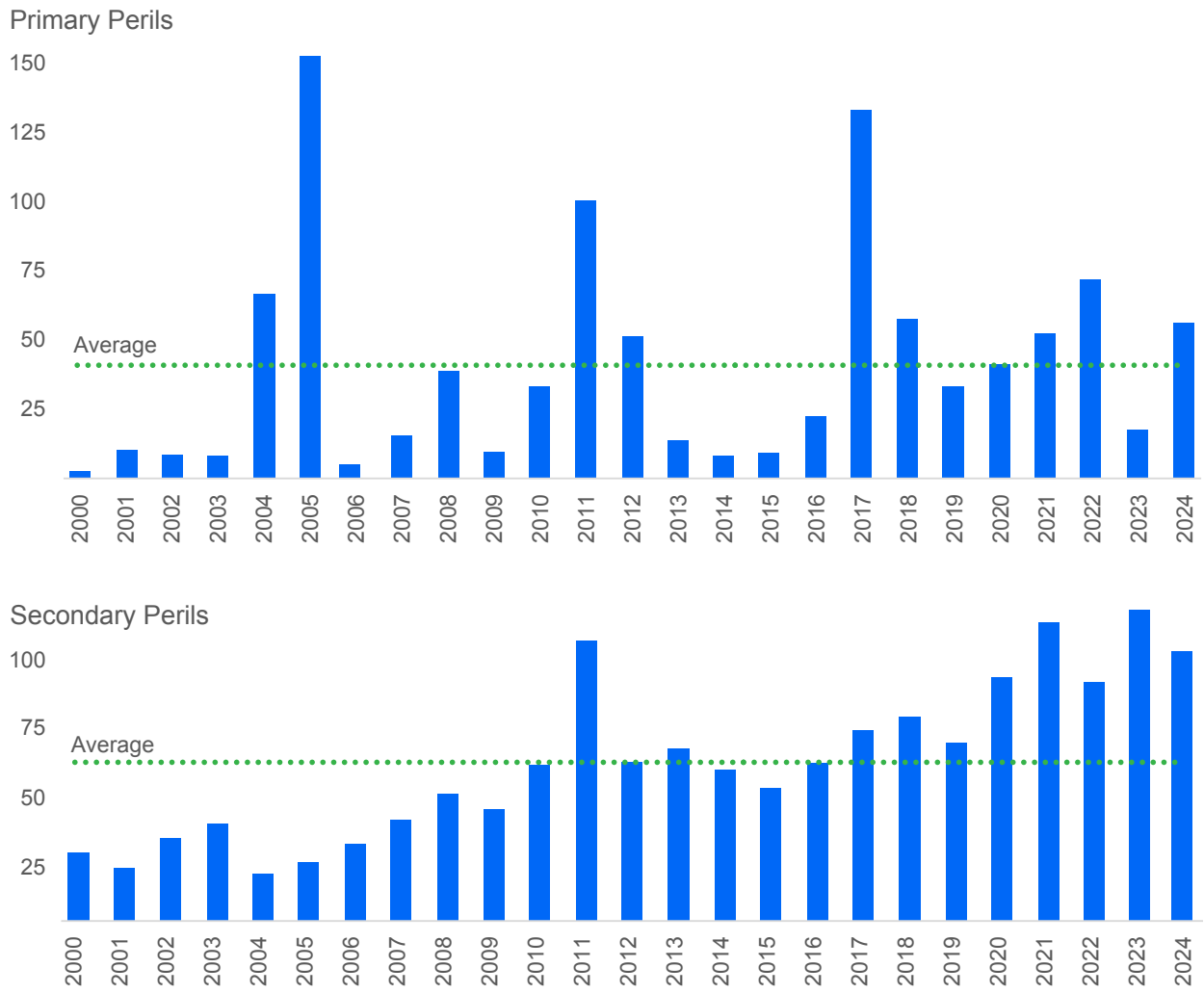
Notable events in this graphic include Hurricane Katrina (August 2005, USD 104 billion), Tohoku, Japan Earthquake and Tsunami (March 2011, USD 49 billion), Hurricane Sandy (October 2012, USD 41 billion), Hurricane Harvey (August/September 2017, USD 39 billion), Hurricane Irma (September 2017, USD 43 billion), Hurricane Maria (September 2017, USD 38 billion), Hurricane Ida (August/September 2021, USD 42 billion) and Hurricane Ian (September 2022, USD 57 billion).[16]

The other interesting trend emerging over this period is the contribution of secondary perils to the overall losses.[17]

Loss Classification

The (re)insurance sector has traditionally split losses into primary and secondary categories, even though their clear definition is not established. **Primary perils** have the potential for substantial individual event losses and significant societal impact. Earthquakes, hurricanes, tropical cyclones and European windstorms are considered primary perils for the purposes of this analysis. In contrast, **secondary perils** are characterised by higher frequency. While secondary perils usually do not cause the costliest individual events, their cumulative impact can result in significant overall losses.

Exhibit 11: Primary and Secondary Peril Losses Split Since 2000 (USD Billion)



Source: Exhibit 15, 2025 Climate and Catastrophe Insight, Aon

These secondary perils now regularly surpass primary perils in terms of total accumulated annual losses. In fact, there were only three years in which primary perils surpassed secondary perils: 2004, 2005 and 2017.

Addressing this trend of gradually increasing secondary losses (globally) requires innovative risk mitigation strategies that prioritise resilience to more frequent, smaller-scale disasters, alongside traditional efforts to manage primary risk perils.

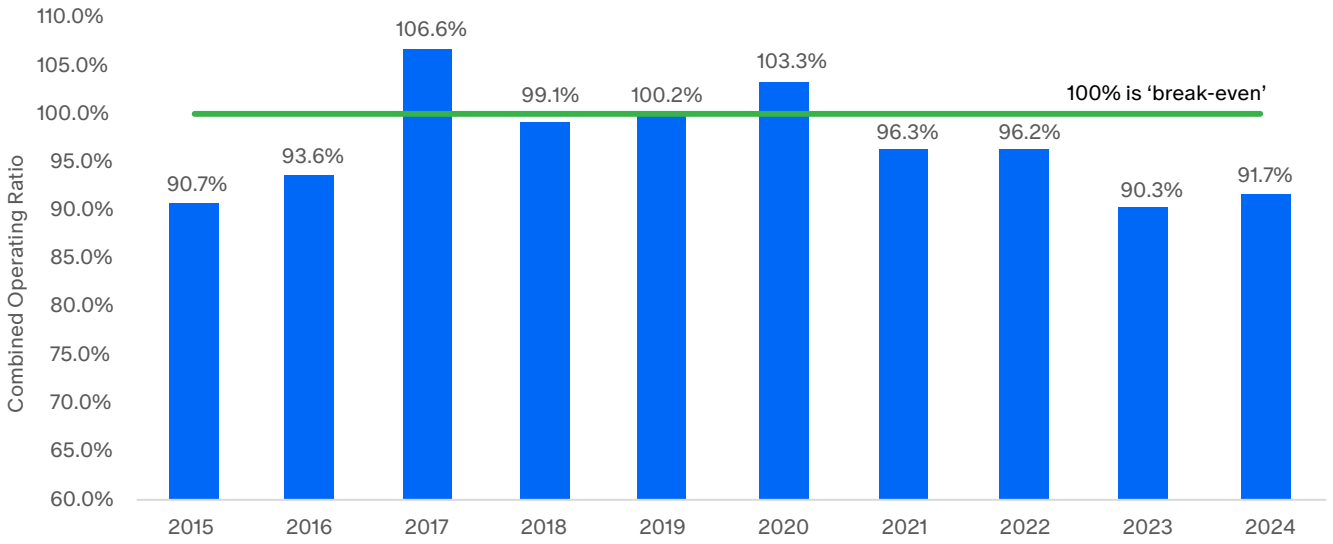
[16] Exhibit 50, Aon, *2025 Climate and Catastrophe Insight, 2025.*
[17] Ibid, *Exhibit 50*

3.3 Reinsurance Market Results in Past 10 Years

These natural disasters have driven the underwriting result and this, coupled with investment results, have driven the capital position of the key reinsurers in the world. The below graphics show the reinsurance sector combined operating ratio (COR) and reinsurer capital for the past 10 years.[18]

COR is the total of losses and expenses, expressed as a percentage of premium. If this is below 100%, (re)insurers have made an underwriting profit. If above 100%, (re)insurers have made an underwriting loss. This is supplemented by investment and other income to determine the profit/loss result for a (re)insurer.

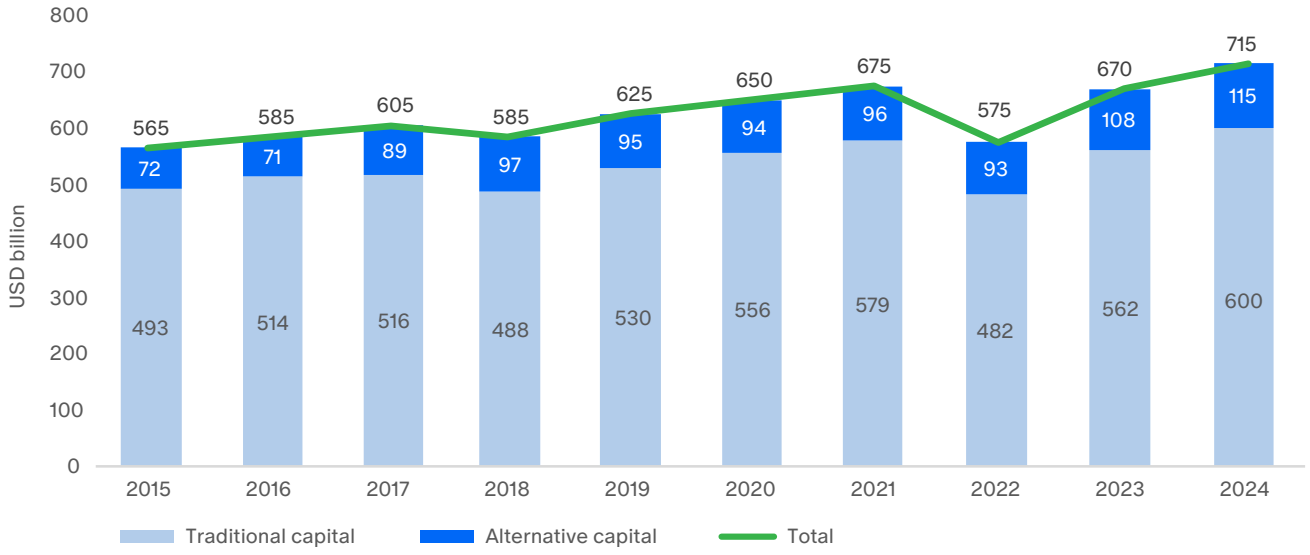
Exhibit 12: Reinsurance Sector Combined Operating Ratio Since 2015



Source: Company Financial Statements / Aon's Reinsurance Solutions

Capital is the financial resources available to a re(insurer) to support operations, underwriting and ensure solvency is met. For traditional capital, this is the equity and other capital instruments of the reinsurers. For alternative capital, this is the limit issued by these investors. For more information on alternative capital, see Chapter 5.

Exhibit 13: Reinsurance Sector Capital Since 2015



Source: Company Financial Statements / Aon's Reinsurance Solutions

[18] Exhibits 1 & 2, Aon, *Reinsurance Market Dynamics, April 2025 Renewal,* 2025.

In Exhibits 12 and 13, you can see the impact of the Harvey/Irma/Maria hurricanes in 2017, with the highest COR driving a small decrease in reinsurer capital. Other global events have often been offset by above average market returns. Interestingly, the largest drop in reinsurer capital in the last decade occurred in 2022 which, whilst impacted by Hurricane Ian, was mostly driven by investment portfolios being impacted by material unrealised losses as a result of rising bond yields, widening credit spreads and declining equity markets. These effects undermined overall earnings and eroded reported book values.

3.4 Reinsurance Market Turn: 2023 Renewals

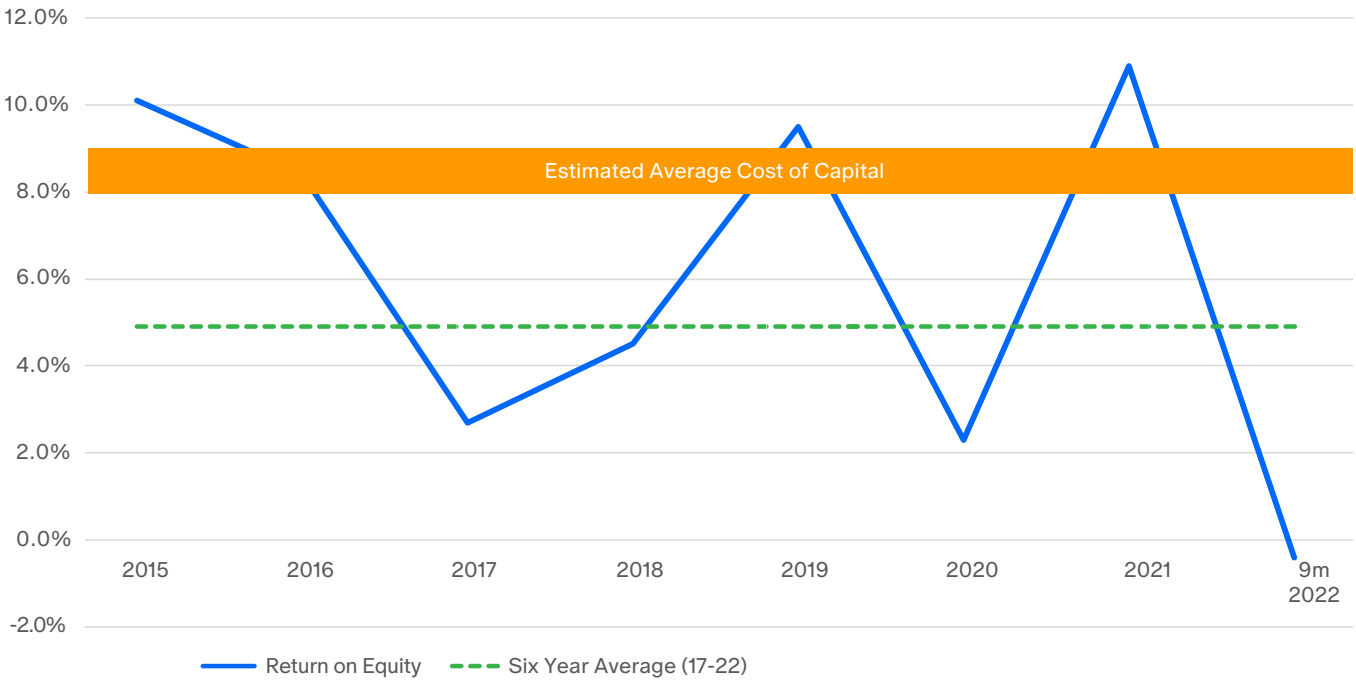
Despite strong capital levels, Q3 2022 brought a new realisation: reinsurers had generally performed poorly since 2017 — in the six years from 2018–2022, the average combined ratio was above 100 percent (as shown in Exhibit 12) and the average return on equity was just under 5%.[19]

This six-year trend, coupled with the impact of Hurricane Ian and investment losses, drove a turning point for the reinsurance market in the 1 January 2023 renewals. This significantly challenging renewal saw a fundamental shift in pricing and risk appetite, especially for property catastrophe risk. Different from prior market cycles, there were a number of exogenous factors including 40-year record inflation, unrealised investment losses, climate change driving investor sentiment and a war in Europe.

Pricing for US property catastrophe and global property retrocessional business hit multi-decade highs on 1 January 2023. Reinsurers demanded that insurers retain a higher share of natural disasters when compared to prior years, encouraging discussion and investigation into mitigation and resilience to secondary perils. Reinsurers also sought to redraw the scope of property catastrophe protection with narrower coverage definitions and more excluded perils.

This global outcome in early January 2023 had flow on effects for Australian and New Zealand renewals, the majority of which occur in July of each year. This was exacerbated by major catastrophe losses, including cyclone and flood losses in New Zealand in the first quarter. The interesting quirk for this renewal was the implementation of the new Australian Cyclone Reinsurance Pool (Cyclone Pool), which covers approximately 90% of the market's cyclone exposure for household, strata and small business property insurance policies being covered by the Cyclone Pool rather than market reinsurance.[20] This removed 10–15% of the total catastrophe limit purchased compared with the prior year, easing demand-supply pressure at renewal. Based on catastrophe modelling only, there was a clear decrease in expected loss to these programmes. However, this impact was largely offset by reinsurer's revised view of secondary perils in Australia and New Zealand, inflationary pressures and reinsurer desire to increase their return on equity.

Exhibit 14: Reinsurance Sector Return on Equity, 2015 to Q3 2022



Source: Company Financial Reports / Aon's Reinsurance Solutions

[19] Aon, 2023 *Reinsurance Market Dynamics*, 2023.

[20] For more information about the Cyclone Pool, see Chapter 6. Also refer: https://arpc.gov.au/reinsurance-pools/cyclone/. Note that all insurers are required to participate in the Cyclone Pool, unless their cyclone related premium is below an AUD 10 million threshold. Large insurers were required to join by 31 December 2023 and small insurers were required to join by 31 December 2024. Therefore not all eligible policies were covered by the pool as of 1 July 2023.

Overall, the Australian and New Zealand renewal was successfully completed. Key outcomes included:

- Rate increases: The impact of the two large New Zealand losses (Cyclone Gabrielle and North Island Storm, both in early 2023) plus the prior year's AUD 6 billion flood loss in NSW/Queensland saw double-digit rate increases in 2023 in the region, with the surprise aspect of the New Zealand losses driving further rate increases for that territory.
- Significant uplift in retention levels: reinsurers reassessed catastrophe pricing and their view of secondary perils. The support for cyclone and earthquake exposures was robust, but reinsurers sought to move retention levels away from being exposed to losses from secondary peril events like bushfire, hail and flood events. As a result, insurers had to retain more of the first part of natural peril events and modelled return periods for the catastrophe programmes increased to around 1-in-6-year from 1-in-3-year levels. This increased focus and attention to strategies that sit outside of reinsurance such as mitigation and resilience.
- Higher net retentions and increased earnings volatility: insurers intensified efforts for portfolio optimisation and they explored opportunities for capital relief, such as additional non-catastrophe structures like quota share on liability business and stop loss. It was, without a doubt, felt most by small and regional insurers who had relied more heavily on reinsurance to meet regulatory capital requirements.

3.5 Current Reinsurance Market Position

2024 Renewals

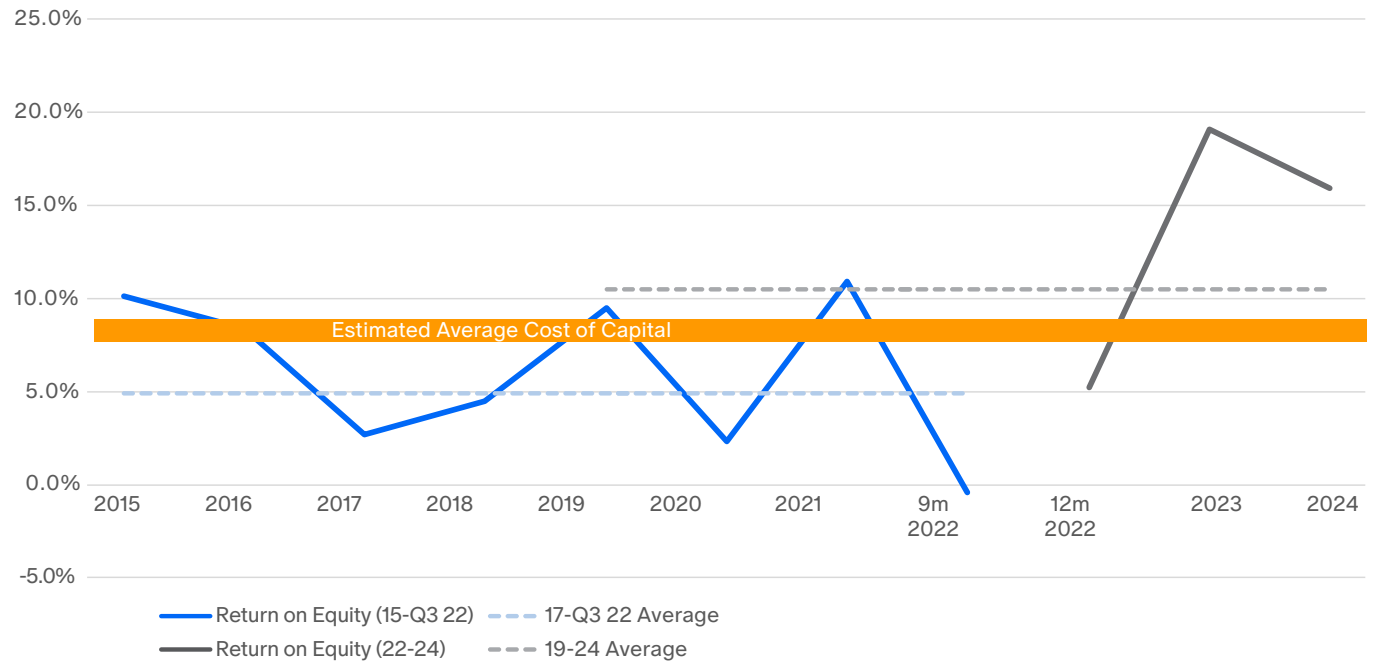
In January 2024, renewals proceeded relatively smoothly, as a rebound in profitability, rebuilding capital positions and greater availability of retrocession capacity encouraged many reinsurers to display increased appetites at the enhanced terms established in 2023. Higher primary insurance pricing provided support in most areas, offset by continued uncertainty around the ongoing impact of change in climate, inflation, litigation funding and geopolitical risk on the cost of natural peril and other insurance claims. In a marked change from the 2023 renewals, most reinsurers entered the renewals with ambitions to grow in property catastrophe reinsurance and the market was therefore more consistent in its approach to pricing and terms.

We saw this trend flow through into July 2024 renewals, with the benign catastrophe losses over the 12 months in Australia and New Zealand leading to positive renewal outcomes. Capacity was more than adequate to meet demand, with pricing flat on a risk-adjusted basis, with many insurers experiencing reductions in the low-single digits.

2025 Renewals

Hurricane Milton (October 2024, 20 billion) and Hurricane Helene (September 2024, USD 18 billion) were significant events but not of a magnitude to dampen reinsurer appetite and ample capacity resulted in risk-adjusted price reductions for 2025 January renewals. The rebound of results in 2023 and 2024 that drove more favourable results can be seen by the material increase in return on equity for the reinsurance sector, shown below by the addition of three new data points relative to Exhibit 14.[21]

Exhibit 15: Reinsurance Sector Return on Equity Since 2015



Source: Company financial statements / Aon's Reinsurance Solutions

[21] Aon, *Reinsurance Market Dynamics*, 2025.

California Wildfires – January 2025

During the second week of 2025, two large fires (referred to as Palisades and Eaton) in southern California ignited and would go on to cause unprecedented and catastrophic damage across parts of Los Angeles County. The fires were active for almost a month, destroying thousands of buildings in the county. There were many factors behind the severity of these fires, including long-term drought, high temperatures, fire-exacerbating vegetation, and terrain. In addition to these drivers, the most impactful factor for fire spread was the Santa Ana Winds. These extremely dry and strong katabatic winds originate from the Intermountain West, such as the Great Basin which covers much of Nevada. Here, winds flow out from a high-pressure airmass and flow over the Sierra Nevada Mountain range, sweeping away a great deal of atmospheric moisture in the process. Unfortunately, fire suppression efforts were also partially hindered due to these winds oscillating in strength for over two weeks following January 7.[22]

The Palisades and Eaton Fires (estimate USD 38 billion at end Q1) along with severe convective storms saw the insured losses for Q1 2025 reach USD 53 billion, the second highest total on record after Q1 2011. Losses from these wildfires that will be passed onto reinsurers appear to have absorbed 25–33% of major reinsurers' annual allowances for catastrophes, resulting in heightened sensitivity to additional loss activity in the remainder of the year. It is notable, however, that increased earnings guidance for 2025 provided by Hannover Re, Munich Re and Swiss Re has not been revised in the wake of these events. Interestingly, these wildfires had little impact on capacity, pricing and terms for Asia Pacific renewals in April 2025.[23]

The only significant catastrophe loss event for Australia and New Zealand was Cyclone Alfred, however the net impact on the insurance market was greatly reduced by the Cyclone Pool covering over 80 per cent of insured losses. The July 2025 renewals in Australia and New Zealand built on the stable environment from the year prior and capacity was more than adequate to meet demand. Property catastrophe placements achieved high single or low double digit rate reductions, along with stable coverage, terms and conditions.

What Lies Ahead?

It is impossible to predict what future renewals will look like, globally or locally, but the past tells us that reinsurance markets will continue to support insurers in protecting consumers from natural disasters. The events that unfold over each year, whether primary or secondary perils, will undoubtedly affect pricing in the short term, and will bring further focus globally on ensuring insurers, and consumers, focus on ways to mitigate risk and damage, accelerate innovation and access new forms of capital to respond to increasing and evolving risks. The next chapter expands on the topic of alternative capital sources that will act as a counterweight to any large increases in traditional reinsurance pricing.

[22] Aon, *Q1 2025 Global Catastrophe Recap*, 2025.
[23] Aon, *Reinsurance Market Dynamics*, April 2025 Renewal, 2025.

4. Alternative Reinsurance Products

Key Points

Alternative capital reached USD 115 billion globally in 2024: these alternative products introducing a new set of investors who see insurance risk as a diversifier to their broader investment risk.

Alternative capital growth has outstripped traditional reinsurance capital growth and can create some pressure on traditional reinsurance pricing.

Australian usage remains limited: regulatory barriers restrict domestic insurers exploring meaningful use and APRA's proposed changes may make use of cat bonds and other products economical.

Brief Explanation of Alternative Reinsurance Products

Insurance-Linked Securities (ILS): A collection term for financial instruments that transfer insurance or reinsurance risk to capital market investors who are looking for returns from uncorrelated risks.

Industry Loss Warranty (ILW): A reinsurance contract that pays out when industry-wide losses from a defined peril (such as a hurricane or earthquake) reach a threshold rather than the individual insurer's losses.

Catastrophe Bonds (Cat Bonds): A security that pays out if a predefined catastrophic event occurs, otherwise the investors principal plus interest is returned.

Sidecars: Special purpose vehicle that allow third-party investors (often hedge funds, pension funds, or other institutional investors) to participate directly in specific portions of an insurer's or reinsurer's business.

Collateralised Reinsurance: A form of reinsurance where the reinsurer's obligations are fully backed by collateral, minimising credit risk for the insurer.

Further details on these products can be found in Appendix 2.

4.1 What is Alternative Reinsurance?

In addition to the traditional reinsurance products discussed, there are also non-traditional methods of transferring risk, often involving capital markets rather than conventional reinsurance companies. These instruments are generally called insurance-linked securities (ILS) and include catastrophe bonds, industry loss warranty, sidecars and collateralised reinsurance. These products provide additional capacity, complementary capacity and capital diversification for insurers and reinsurers, often focusing on specific types of risk, such as natural catastrophes, cyber and terrorism.

4.2 Global Market History

The market began to take shape in the 1990s, driven by the need for additional capacity following large catastrophe events and catastrophe bonds ("cat bonds") emerged as a way to transfer risk directly to capital markets. Additionally, since catastrophe bonds are fully collateralised using highly-rated collateral, insurers were attracted to the minimal credit risk especially for low probability and high severity events. The market grew significantly in the 2000s, with more sophisticated products and increased investor interest. Advances in risk modelling and analytics have improved attractiveness and reliability of these products. In the 2010s, we also saw the development of new structures like sidecars and collateralised reinsurance.

4.3 Global Current Market Position

The market ended 2024 at an all-time high at nearly USD 115 billion.[24] Alternative capital growth has been achieved through strong investor returns and the low correlation of ILS to other asset classes, such as credit and equity markets. In addition, demand for ILS products from cedants is increasing because of inflation, evolving views of risk and the broader dynamics of traditional reinsurance and capital markets.

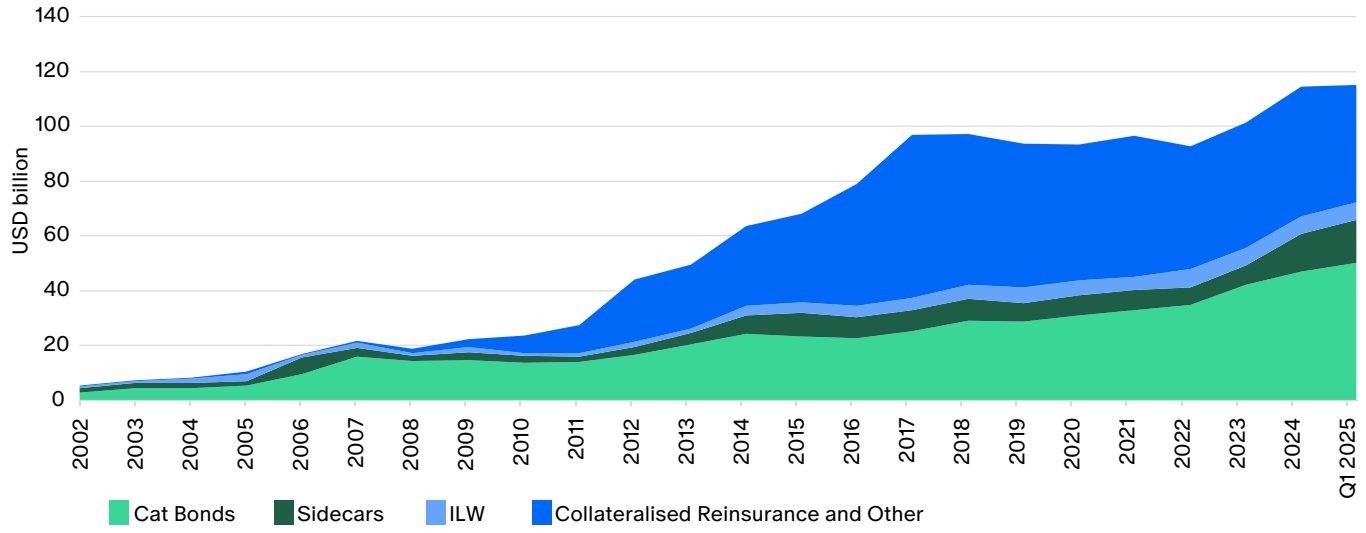
Despite paying out billions of dollars of claims, investors continue to invest into the asset class as it provides attractive risk-adjusted returns. ILS managers continue to focus on building diversified portfolios of catastrophe bonds to mitigate the size of the losses from individual events.

[24] Aon, *Reinsurance Market Dynamics, April 2025 Renewal*, 2025.

For example, portfolio diversification meant that the impact of the California wildfires to the cat bond market has so far been limited, due to a combination of prudent structuring and that the market was underweight in California wildfire exposure. Investors place high value on diversifying peril regions, such as Australia and New Zealand, since the market is roughly 85 percent concentrated in US perils. Whilst the cat bond market has assumed fewer losses from recent events due to their higher positioning in the reinsurance program, collateralised reinsurance and sidecar instruments are generally more volatile due to their lower positioning in the reinsurance program or their proportional structures. Despite recent loss activity, the sidecar market continues to produce positive returns to investors given the rate increases catalysed by Hurricane Ian in 2022.

The cat bond market and broader alternative capital markets' growth has outpaced that of traditional reinsurance capital, despite significant loss activity since 2017. For example, cat bond capital has grown 123% from 2016 versus traditional reinsurer capital growth of 18% over the same period. The market currently provides over 105 entities globally with the ability to source effective risk transfer solutions beyond the traditional reinsurance market. These entities are regulated and/or domiciled in the United States, Bermuda, the United Kingdom, Spain, France, Germany, Italy, Japan, New Zealand, China and Hong Kong, and are comprised of insurers, reinsurers, government entities and/or corporate cedants. In each jurisdiction listed above, the cat bond product is viewed favourably by the regulator given the multi-year and fully collateralised nature of the product.

Exhibit 16: Alternative Capital Deployment (Limit in USD Billion)



Source: Aon' Securities, LLC

4.4 Use of Alternative Reinsurance in Australia

The use of alternative reinsurance in Australia is relatively limited. The use of capital markets-based transactions by APRA-regulated entities has continued to lag behind the global insurance and reinsurance industry, with the primary reason being the regulatory hurdles in Australia. Despite domestic general insurers purchasing some of the largest reinsurance programs globally, the use of alternative capital is in the low single-digit percentages and, in some instances, zero. As a result, domestic general insurers have had less opportunity to diversify their reinsurance counterparties, take advantage of opportunistic pricing environments to drive reinsurance pricing tension, and access multi-year reinsurance arrangements.

APRA launched a consultation in November 2024 on adjustments to its general insurance reinsurance framework, "seeking to promote access to all forms of reinsurance and reduce regulatory burden."[25] The proposals, in part, aimed to remove some of the hurdles to the use of alternative reinsurance. In addition, APRA has proposed technical refinements to its framework to reduce regulatory burden, including giving the Appointed Actuary the responsibility for determining the capital outcome for certain reinsurance arrangements.

APRA's consultation acknowledged that the requirements within the current framework relating to:

1. reinsurance needing to cover all perils;
2. reinsurance needing a contractually agreed reinstatement at inception; and
3. the cost of reinstatement premiums in the capital calculation.

can constrain access to certain types of reinsurance, particularly alternative reinsurance arrangements where these features are not commonly available. As a result, APRA noted it had an appetite to review these requirements and make adjustments to give insurers better access to alternative products. If implemented, the proposed changes may make cat bonds and parametric solutions more attractive to insurers, which may generate a better outcome for consumers.

The APRA consultation closed in February 2025 and APRA is expected to release a response before the end of the year.

[25] See https://www.apra.gov.au/consultation-on-targeted-adjustments-to-general-insurance-reinsurance-settings

5. Government Involvement in Reinsurance

Key Points

Government pools work for concentrated risks: cyclone exposure is geographically focused and well-modelled. The Cyclone Pool is now fully implemented and has seen cost savings for high-risk homes and businesses.

A flood pool will be less effective: there is an insufficient number of consumers to share the cost of this natural disaster if only those who have some flood exposure are included in the pool.

Risk mitigation will be crucial in reducing the impact of the increasing cost of natural disasters in Australia.

As outlined in Chapter 3, the margin charged within reinsurance premiums is ultimately passed onto consumers or absorbed by insurers in their own profit margin. It is important to recognise that this cost is not necessarily more expensive than an insurer retaining the loss and raising capital from debt or equity, because the cost of this equity or debt capital may be higher than a global reinsurer who can rely on diversification. However, each reinsurer is tasked by its Board and shareholders in making a profit.

5.1 Australia's Cyclone Pool

The introduction of the Cyclone Pool is an example of the desire by Government to remove that profit loading to create relief for the underlying consumer. In 2021, the Australian Government announced its intention to establish a reinsurance pool covering the risk of property damage caused by cyclones and cyclone-related flood damage. It was designed to lower insurance premiums for households, strata and small businesses by reducing the cost of reinsurance, which is a significant component of premiums for policies with high cyclone and related flood damage risk. The scheme is designed to require insurers[26] to reinsure cyclone risks with the Australian Reinsurance Pool Corporation (ARPC) which is at a lower cost than in the private reinsurance market, where ARPC pricing is designed to be cost-neutral over time and backed by a Commonwealth guarantee. As of 1 January 2025, 2.9 million households, 90,000 small businesses and 78,000 residential strata properties are covered.

In its May 2025 update, the ARPC released analysis showing that the Cyclone Pool is delivering significant downward pressure on insurance premiums and improving insurance availability for Australians living in cyclone-prone areas. The key findings included home insurance premiums for the highest cyclone risks decreased by an average of 39% from pre-cyclone pool levels, Small and Medium-sized Enterprise premiums in high-risk areas decreased 31% and quote success rates increased (i.e., consumers purchasing the cover after seeing the proposed premium) across all risk bands.[27]

The Cyclone Pool has been subject to a number of inquiries and reports, and further details can be found in the Final Report on the Cyclone Reinsurance Pool.[28] Of note, there has been discussion about other measures to address insurance availability and affordability in Northern Australia. These include an increase to time limit for flood coverage (e.g., from the current 48 hours to seven days), or coverage for flood from other sources than cyclone. In its July 2025 report,[29] the Australian Competition & Consumer Commission (ACCC) found:

"…the availability of insurance [in Northern Australia] has been relatively unchanged with the [Cyclone] pool's introduction. No new insurers have entered northern Australian markets, and there has been limited appetite from existing insurers to expand or increase their exposure overall."

The report goes on to say:

"There are clear indications the pool is having an impact on the premiums of policyholders who live in areas with higher cyclone risk. However, there continues to be a range of non-cyclone related factors that together are acting to sustain very high premiums. It therefore appears unlikely that the pool, on its own, can deliver the necessary affordable premiums for consumers in Australia's cyclone-risk regions."

[26] Refer to footnote 20 regarding the mandatory nature of the Cyclone Pool
[27] ARPC, *Cyclone Reinsurance Pool Premium Assessment*, 2025.
[28] Joint Select Committee on Northern Australia, *Final Report on the Cyclone Reinsurance Pool*, 2025.
[29] ACCC, *Insurance monitoring: Fourth report following the introduction of a cyclone and cyclone-related flood damage reinsurance pool*, 2025.

Government Pools

Further information about the use of Government Pools in response to catastrophic risk can be found in the CASS Business School (Now Bayes Business School) Paper, *Between State and Market: Protection Gap Entities and Catastrophic Risk*.[30] In this paper, the authors explore the use of pools to intervene in market dynamics to remove risk, redistribute risk, or a combination of the two.

5.2 Flood Risk in Australia

In the case of flood in Australia, a redistribution of risk may be an option – whereby the risk of loss by a relatively small group of highly-exposed consumers is redistributed across the wider pool of variably exposed consumers. In this model, low-risk consumers pay a slightly higher premium than what would truly reflect their risk, in order to subsidise an affordable premium for those who are highly exposed to the risk. However, for this to be successful, there needs to be sufficient relevant consumers to share the required premium pool across. For example, in analysis by the Actuaries Institute,[31] it was noted that most consumers who have little or no flood risk pay no flood premium.

Therefore, if a flood pool only shared risk between consumers who have meaningful exposure to flood risk and therefore pay part of their premium to cover for flood risk, such a small group would be unlikely to significantly improve affordability given its size. It was concluded that capital cost savings from low-risk householders would be a fraction of the total premiums from low and medium flood risk households, and therefore grossly insufficient to meaningfully reduce premiums for all households with high flood premiums. This means a pool would be ineffective without financial support from government or an industry levy.

The other challenge with this type of solution is that it shifts focus away from risk mitigation – at both the individual and broader level. The reduction in premium could induce moral hazard, whereby those consumers at the highest risk of repeated loss are not incentivised to reduce their risk. In addition, this market signal of high premiums could be seen as a prompt to improve risk mitigation, such as improve methods of building in highly exposed areas or changes in planning permission. Of note, the Cyclone Pool design includes incentives for insured consumers to invest in mitigation and therefore dampen moral hazard. This is clearly a complex topic and one where further debate and discussion is required.

As concluded by the Actuaries Institute paper:

"The key element of a long-term sustainable solution to reducing flood risk and therefore improving flood insurance affordability is through well-designed, effective risk reduction activities. Investment in risk reduction activities pre-event is well recognised as being able to provide substantial savings on funding post-event. The National Emergency Management Agency (NEMA) finds that every dollar spent on disaster risk reduction provides an estimated $9.60 return on investment (NEMA, n.d.). In recognition of the growing need to address the high funding costs post-disaster, there have been numerous projects funded by governments. With the formation of NEMA in 2022, we expect greater alignment and end-to-end oversight on risk reduction, prevention, preparedness, response and recovery across all states and territories with the implementation of the United Nations Office of Disaster Risk Reduction (UNDRR) Sendai Framework.

"Affordability pressure, however, is acute and there is a need to address this urgently. In order to tackle this holistically, short- and medium-term measures are necessary. Government direct actions and cost sharing arrangements could complement in the short- and medium-term to reduce and redistribute the costs, thereby lowering insurance premiums faster than otherwise possible for those who are the most affordability-stressed. Central to any optimal mix of solutions being adopted is that strong risk mitigation activities must be part of the program to extract long-term benefits for all Australians and Australian society."

It is therefore crucial that stakeholders in the industry engage now on the strategies to mitigate the long-term ramifications of climate change and improve the resilience for the long-term stability of the insurance industry and economy.

[30] Jarzabkowski et al., *Between State and Market,* 2018
[31] For further explanation see Box 1, p.19, in Actuaries Institute, *Funding for Flood Costs: Affordability, Availability and Public Policy Options,* 2023.

6. Conclusion

Key Points

Reinsurance remains essential: Material capital relief as well as stability to insurer results demonstrates the necessity of this global market.

Regulatory reform could improve outcomes: reducing alternative capital barriers will create market tension and likely result in reduce costs to consumers.

Climate adaptation is increasingly important: secondary perils require mitigation and resilience focus alongside traditional catastrophe protection via reinsurance

6.1 The Reinsurance Reality

Reinsurance is not merely a technical aspect of insurance operations – it is a significant pillar that enables Australia's insurance market to function. The AUD 23–70 billion in capital relief that reinsurance provides, along with the stability to insurer returns, represents the difference between an insurance market that can serve consumers affordably and one that may become inaccessible to many consumers.

The market's evolution from 2017–2025 illustrates both challenges and opportunities ahead. Poor performance in the six-year period to 2022 resulted in fundamental review of underlying perils and expected losses, and the market saw dramatic repricing in 2023. This has created a more sustainable but more expensive market, driven by the increasing underlying cost of natural disasters. For Australian consumers, this means higher premiums but greater confidence that insurers will remain solvent and stable when disasters strike.

6.2 Key Structural Changes

Three fundamental shifts are permanently altering the reinsurance landscape:

Climate change impact: Secondary perils now dominate loss patterns, with hail and floods causing more total damage than major hurricanes and earthquakes in almost all years. This challenges traditional risk models and pricing structures. It also serves as a reminder that investment in mitigation and resilience must complement this re-assessment of risk.

Capital market evolution: Alternative capital has grown to USD 115 billion globally, demonstrating that capital markets are increasingly willing to take insurance risk, if regulatory barriers can be addressed.

Government intervention: The Cyclone Pool's reported premium reductions prove government pool intervention can work when risks are geographically concentrated and well-understood. This may not be easily replicated for flood given the differing nature of this risk and the number of consumers exposed to these natural disasters, and we must resist the urge for this to be a default solution, instead investing in mitigation and resilience strategies.

6.3 Looking Forward

Australia's insurance market faces unprecedented challenges from climate change, market volatility, and evolving risk patterns. **The key to success lies in maintaining the fundamental principle that has made Australia's insurance market successful: the ability to transfer risk globally while serving consumers locally.** This requires continued access to global reinsurance markets, removal of regulatory barriers to innovation, and investment in resilience and risk mitigation. Finally, consumers and the community must recognise that the cost of risk transfer –while sometimes high – is always less than the cost of bearing uninsured risk.

Glossary

Factors	Definition	First reference
Alternative reinsurance capital	Non-traditional method of transferring insurance risk, often involving capital markets rather than conventional reinsurance companies.	Chapter 4
Attritional claims	The smaller, more frequent claims that occur regularly and are typically predictable in nature. Examples include small car crashes, fallen trees and burst pipes.	Chapter 2
Average Annual Loss (AAL)	The expected loss per year, averaged over a long period. It is used to estimate the financial impact of natural disasters. It is calculated by considering the probability of different events occurring and the potential losses associated with each event. It is a long-term view of the risk, and an insurer's actual losses will vary considerably year to year compared to this measure.	Chapter 2
Catastrophe bonds	A security that pays out if a predefined catastrophic event occurs, otherwise the investors' principal plus interest is returned.	Chapter 4
Collateralised reinsurance	A form of reinsurance where the reinsurer's obligations are fully backed by collateral, minimising credit risk for the insurer.	Chapter 4
Combined operating ratio	This is the total losses plus expenses, expressed as a percentage of premium.	Chapter 3
Economic loss	The total financial impact caused by a natural disaster including physical damage and secondary effects that occur as a consequence of the disaster, such as business interruption, loss of productivity, and social and environmental costs.	Chapter 1
Facultative reinsurance	Reinsurance negotiated for individual risks or contracts, typically used for large or unusual risks.	Appendix 1
Industry Loss Warranty	A reinsurance contract that pays out when industry-wide losses from a defined peril (such as a hurricane or earthquake) reach a threshold, rather than the individual insurer's losses.	Chapter 4
Insurance-linked securities	A collection term for financial instruments that transfer insurance or reinsurance risk to capital market investors who are looking for returns from uncorrelated risks.	Chapter 4
Insured loss	The portion of the estimated economic loss from a natural perils event that is insured by an insurance company or government pool.	Chapter 1
Large claims	Claims that typically have more significant payouts due to substantial losses. They are typically less frequent than attritional claims but can have a considerable impact on an insurer's results. An example is a total loss of a home due to a fire.	Chapter 2
Primary perils	Natural disasters that have the potential for substantial individual event losses and significant societal impact. Examples include earthquakes, hurricanes, tropical cyclones and European windstorms.	Chapter 3

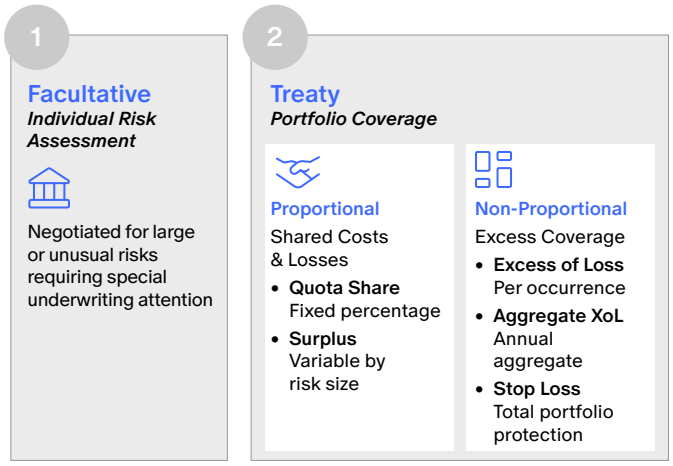
Factors	Definition	First reference
Reinstatement	A provision within an excess of loss reinsurance contract that allows the insurer to restore the coverage limit after a loss has been paid, ensuring the insurer continues to have protection for subsequent losses. Reinstatement provisions are agreed upfront and may be provided as part of the original price or may include an additional premium to be paid by the insurer.	Chapter 2
Reinsurance	Purchase of insurance by an insurance company.	Chapter 2
Reinsurance premium	The upfront cost of the reinsurance structure. The premium includes the expected cost of claims, and loadings for expenses, volatility and profit.	Chapter 2
Retrocession	Purchase of reinsurance by a reinsurance company.	Chapter 2
Return period	A statistical measure used to estimate the frequency at which a particular event is expected to occur. It is expressed in years and represents the average interval between occurrence of the event.	Chapter 2
Secondary perils	Natural disasters that have a higher frequency than primary perils. Whilst individually they may not have the highest cost, their cumulative impact can result in significant losses. Examples include hail, floods and bushfires.	Chapter 3
Sidecars	Special purpose vehicle that allows third-party investors (often hedge funds, pension funds, or other institutional investors) to participate directly in specific portions of an insurer's or reinsurer's business.	Chapter 4
Treaty reinsurance	Reinsurance negotiated for a portfolio of risks. Will be either proportional (premium and losses shared in a pre-determined ratio) or non-proportional.	Chapter 2

Appendices

Appendix 1: Types of Traditional Reinsurance Products

This Appendix provides details of the types of traditional reinsurance products.

Reinsurance products
Comprehensive Classification & Structure



There are two main types of reinsurance: **facultative** reinsurance (box 1 above) and **treaty** reinsurance (box 2 above).

Facultative reinsurance

Facultative reinsurance is negotiated for individual risks or contracts. It is typically used for large or unusual risks that require special underwriting. This facultative reinsurance may be used for property exposures (e.g., large commercial property which is outside of the insurer's appetite or its treaty arrangements), casualty exposures (e.g., liability cover on high-risk industries like oil, gas or construction), marine, aviation and other specialty risks. This reinsurance involves specific assessment of the individual risk, whereby the potential reinsurer(s) undertake risk assessment and underwriting, individually price the coverage needed. Then the two parties will negotiate and reach agreement on premium and other terms and conditions.

Treaty reinsurance

Treaty reinsurance is a contract between the insurer and reinsurer(s) that covers a portfolio of risks. The reinsurer agrees to accept all risks within the scope of the treaty. For example, all motor, home, caravan and boat policies issued by the insurer between 1 January 2025 and 1 January 2026. Treaty reinsurance will be either proportional or non-proportional. These terms relate to the way in which premium and claims are shared between the insurer and reinsurer.

Proportional

For proportional reinsurance, the premiums and losses are shared in a predetermined ratio, known as the cession. Proportional treaty reinsurance is a structure that helps insurers manage risk and expand their business while providing reinsurers with a share of the premiums and exposure to losses. **Quota share** reinsurance is where the premium and losses are shared at a fixed percentage for all risks covered by the treaty. On the other hand, **surplus** reinsurance is where the insurer retains a certain amount of the risk, and the reinsurer covers the surplus above this limit. This is decided upfront, whereby the percentage per risk is then used to share premium and losses. For example, the insurer decides to keep the first AUD 1 million. For a risk with a sum insured of AUD 5 million, the insurer keeps 20% (1/5) and cedes 80% of premium for that risk and any losses for that risk. For a risk with a sum insured of AUD 10 million, the insurer keeps 10% (1/10) and cedes 90% of premium for that risk and any losses for that risk.

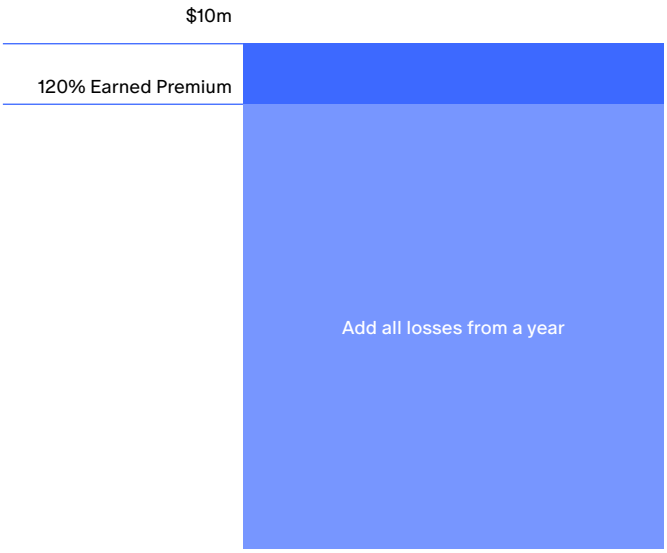
Exhibit 17: Diagram of an Example Quota Share Reinsurance

Under a quota share or surplus treaty, the reinsurer will pay a commission to the insurer for acquiring and managing the business, and compensates the insurer for expenses related to underwriting, policy issuance and claims handling. This commission rate is negotiated between the parties and will vary based on the reinsurer's view of the loss ratio and the profit margin they wish to achieve from the treaty. For an insurer, they will desire that the commission rate is at least as high as the actual expense ratio they are experiencing, but this may not be the case.

Non-proportional

For non-proportional reinsurance, the reinsurer covers losses that exceed a specified threshold, known as the attachment point, or retention. This cover focuses on protection from large or catastrophic losses, allowing the insurer to manage large losses and protect financial stability. The treaty will have a limit of liability, specifying the maximum amount the reinsurer will pay for losses above the attachment point. For a risk treaty, any amount above the attachment plus limit falls back to the insurer, which they may retain or may purchase facultative reinsurance. Types of non-proportional reinsurance include excess of loss treaty, aggregate excess of loss treaty and stop loss treaty. See Chapter 2 for a description of the first two types. **Stop loss** treaty is where the reinsurer covers losses once the insurer's total losses exceed a specified amount over a defined period. An example is a stop loss treaty with an attachment point set to 120% of earned premiums with a limit of liability of $10 million.

Exhibit 18: Diagram of Stop Loss Reinsurance



Pricing for non-proportional reinsurance is typically based on the likelihood and potential size of losses exceeding the attachment point. The reinsurer will assess the risk profile and historical loss data to determine the premium.

Appendix 2: Types of Alternative Reinsurance Products

This Appendix provides details of the types of alternative reinsurance products.

Insurance-Linked Securities (ILS)

A collection term for financial instruments that transfer insurance or reinsurance risk to capital market investors. These securities allow insurers and reinsurers to access alternative sources of capital beyond traditional reinsurance markets. They provide investors with returns that are generally uncorrelated with traditional financial markets while offering insurers diversified risk transfer mechanisms.

Industry Loss Warranty (ILW)

A reinsurance contract that provides coverage based on total industry losses from a specific catastrophic event, rather than the individual insurer's own losses. The ILW pays out when industry-wide losses from a defined peril (such as a hurricane or earthquake) exceed a predetermined trigger amount within a specified time period. Unlike traditional reinsurance, the payout is not dependent on the buyer's actual losses, making it a form of parametric coverage.

Catastrophe Bonds (Cat Bonds)

Insurance-linked securities that transfer specific catastrophe risks from insurers to capital market investors. Cat bonds are typically issued with a three-to-five-year maturity and pay investors a spread over risk-free rates. If a predefined catastrophic event occurs (based on parametric triggers, industry losses, or company losses), investors may lose part or all of their principal, which is used to compensate the insurer for catastrophe losses. If no trigger event occurs, investors receive their principal back plus interest.

Sidecars

Special purpose vehicles that provide reinsurance capacity alongside traditional reinsurers, typically structured as quota share arrangements. Sidecars allow third-party investors (often hedge funds, pension funds, or other institutional investors) to participate directly in specific portions of an insurer's or reinsurer's business. They are usually established for defined time periods and specific lines of business, providing additional capacity during hard market conditions.

Collateralised Reinsurance

A form of reinsurance where the reinsurer's obligations are fully backed by collateral held in trust or other secure arrangements. The collateral (typically high-quality securities) ensures that funds are immediately available to pay claims, eliminating credit risk for the ceding insurer. This structure is often used when working with unrated reinsurers or when cedants require additional security beyond the reinsurer's financial strength rating.

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