

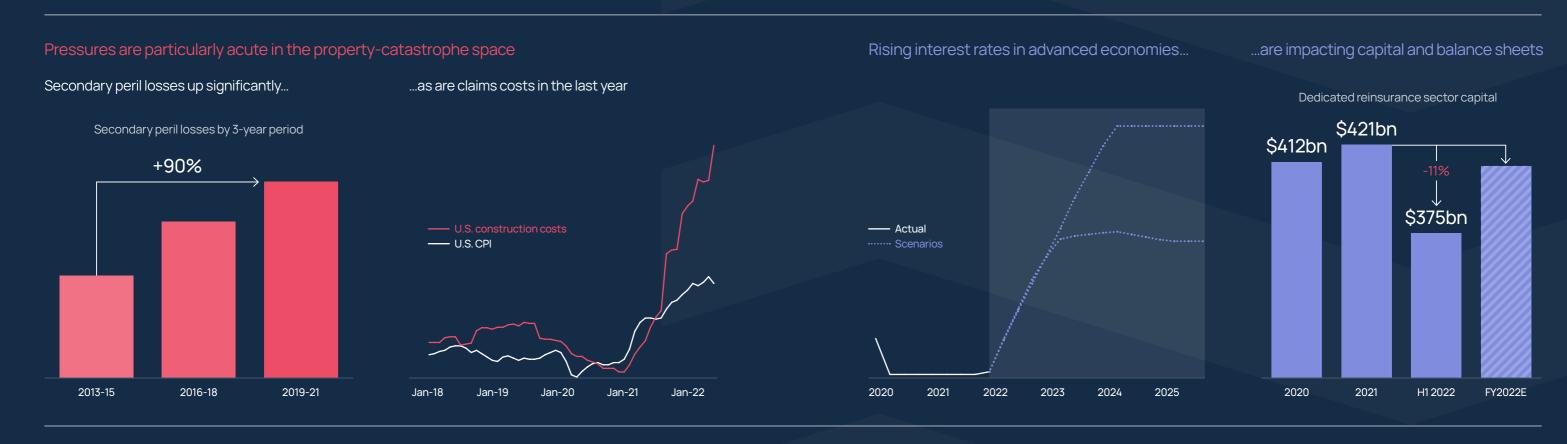
REINSURANCE A TIPPING POINT

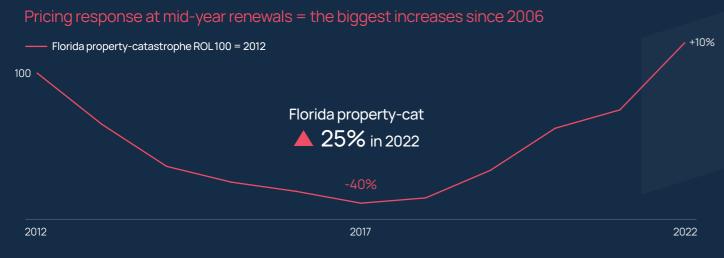
Key takeaways

The reinsurance market has reached a tipping point due to structural changes to the loss environment, along with major macroeconomic and geopolitical realignments. Conditions are hardening in several areas, as the market adjusts to a new world order. Geopolitical tensions are fuelling uncertainty and volatility...



...whilst macroeconomic shocks are changing assumptions around yields and capital





Capacity is constrained and price expectations are shifting in line with the unpredictable operating environment. It is against this challenging backdrop that Howden has announced the impending union of Howden RE and TigerRisk. We look forward to offering clients a differentiated choice and raising the bar from 2023.

Executive summary

The return of Rendez-Vous de Septembre to the reinsurance calendar coincides with a degree of market hardening not seen for the best part of two decades. Monte Carlo has been host to the sector at the onset of market stress before (e.g. 2001 and 2005), and history is repeating itself this year as executives head to the Principality in the face of a series of headwinds that are finally moving the market.

Whereas the shock losses of 9.11 and Hurricane Katrina delivered an immediate market correction, the build-up to this moment in 2022 has been far more gradual. Having initially stood resolute to a series of headwinds from 2017 that included painful weather losses, a global pandemic and accompanying financial market volatility, major macroeconomic and geopolitical realignments this year have exacerbated pressures and changed assumptions around capital, loss costs and yields.

The three Cs of climate, conflict and capital are coalescing to create a tipping point for the reinsurance market, with 2022 mid-year renewals seeing rate increases accelerate to their highest levels since 2006. A decrease in dedicated reinsurance capital of 11% during the first six months of 2022, driven predominantly by asset-driven declines in traditional capital, alongside a rising need for capacity, reveal fundamental shifts in supply and demand dynamics. Crucially, Howden projects dedicated capital at year-end 2022 will decline for the first time since the global financial crisis.



REINSURANCE IS EXPERIENCING A DEGREE OF MARKET HARDENING NOT SEEN SINCE 2006.

A macro reset

A complicated new world order is emerging, ending the era of cheap money (an important contributor to capital growth) and low inflation, and introducing variables like commodity shocks and stagflation not seen since the 1970s and early 1980s. A more recent phenomenon around risk interconnectivity has also shown how apparent 'distinct' perils like pandemics, business interruption, supply chain failures, price shocks or conflict can be linked and strike simultaneously.

With unexpected losses from Ukraine coming fast on the heels of COVID-19, and reported claims to date for the former only representing a fraction of ultimate loss projections, reinsurers' exposure to loss aggregation in this new risk landscape has contributed to the transitioning reinsurance cycle in 2022.

Such heightened volatility is causing conditions to harden in several areas. Pressures are particularly acute in the property-catastrophe space, where reduced capital inflows and rising inflation, along with a succession of expensive 'secondary' peril losses (due in large part to climate change), have strengthened reinsurers' resolve to demand higher returns. As analyses contained herein show, the property-catastrophe market is currently in the eye of a price, risk and supply chain storm.

A hard reality

Reinsurance remains a market shaped by supply and demand economics. The environment of excess capital which persisted for much of the last decade has been replaced by a capacity crunch and increased demand. Pricing and risk appetites are responding accordingly. No two cycles are the same, but new capacity could soon be enticed back into the market, given the higher potential returns on offer.

Capital providers' price expectations have nevertheless shifted in line with structural changes to the loss environment, meaning that 2023's reinsurance renewal cycle is likely to see further pricing pressures, irrespective of whether the wind blows this year or not. Differentiated capital market expertise is just one area where intermediary advice can help cedents secure the best and most cost effective coverage available in the current environment.

It is against this backdrop that Howden is excited to announce the impending union of Howden RE and TigerRisk. Howden Tiger is a milestone for the reinsurance sector, created to offer choice to clients, seize opportunities for the broader market and help secure long-term relevance. We look forward to raising the bar in 2023.

Reinventing the cycle

For a sector conditioned by the cyclicality that comes from absorbing losses following major catastrophes worldwide, reinsurance has been a source of relative stability through the turbulence of recent years. Having endured a prolonged soft market for much of the 2010s, the sector stood resolute to a series of headwinds between 2017 and 2021 that included elevated catastrophe losses, the manifestation of climate change, rising social inflation, a global pandemic, an accompanying macroeconomic shock and new cyber threats.

Throughout one of the most challenging operating environments in living memory, reinsurance has continued to be a reliable and efficient source of contingent capital for insurance carriers. For successive renewals, strong capitalisation defied predictions of a pricing correction to mirror those taking place in the commercial insurance and retrocession markets, even as reinsurers bore sizeable losses and navigated COVID-induced turmoil in financial markets.

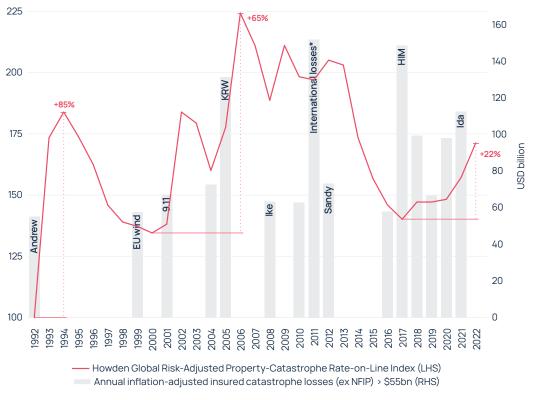
THROUGHOUT ONE OF THE MOST CHALLENGING **OPERATING ENVIRONMENTS IN** LIVING MEMORY, REINSURANCE HAS **CONTINUED TO BE** A RELIABLE AND EFFICIENT SOURCE OF CONTINGENT CAPITAL **FOR INSURANCE** CARRIERS

7

Suppressing the cycle

This is a sector that has matured materially since the days when large catastrophes created massive price volatility. Figure 1 shows how large loss years (greater than USD 55 billion) in the early 1990s and 2000s precipitated dislocation in the property-catastrophe market. The pricing correction in the 2000s (in the order of +65%) came about following a succession of market changing events that included 9.11, the liability crisis and a series of hurricane-related losses, all of which cost (re)insurers somewhere in the region of USD 400-500 billion at the time.

Figure 1: Global property-catastrophe reinsurance pricing vs annual insured catastrophe losses – 1992 to 2022 (Source: NOVA, Swiss Re)



* Including Christchurch earthquake, Tohoku earthquake and Thailand floods



Comparable losses sustained between 2017 and 2021 – starting with hurricanes Harvey, Irma and Maria (HIM) and followed by a series of devastating wildfires, floods, winter storms, derecho events and more tropical cyclones, not to mention unexpected business interruption claims from COVID-19 – had a much more muted pricing impact (+22%), which is all the more noteworthy given the low historical base. Despite the reinsurance market assuming a large portion of these losses, renewals during this time were orderly for the most part.

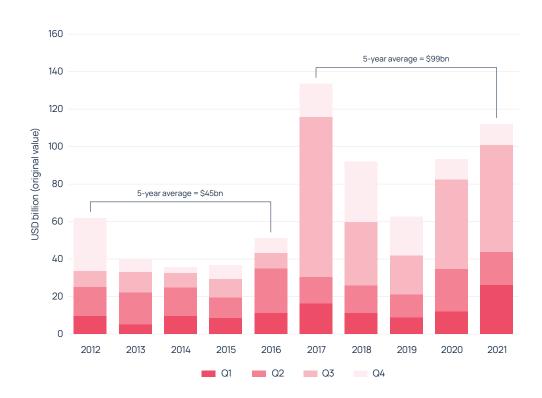


Figure 2: Global insured catastrophe losses by quarter - 2012 to 2021 (Source: NOVA)



9

Alt cap revolution

Such resilience stood apart from anything experienced previously, as the fluidity and flexibility of capital inflows eased post-event capacity constraints and counteracted forces that led to the broad price corrections of years past. Third-party capital specifically made the difference, as yield-seeking investors (pension funds predominantly) moved decisively into the property-catastrophe reinsurance space to take advantage of its low correlations and (at the time) relatively high returns.

Figure 3 shows that alternative capacity more than doubled between 2012 and 2017. This landmark change to the sector's capital structure was market moving, forcing traditional reinsurers to lower price expectations and adapt business models in order to remain competitive. In other words, third-party capital was instrumental in bringing about prolonged soft reinsurance market conditions.

Levels have since plateaued around the USD 90 billion mark in response to the uptick in catastrophe losses, lacklustre returns (post-2017) and concerns about climate change and the attendant credibility of catastrophe models. Some capacity has exited the market as a result, although most providers have continued to maintain allocations without committing more.



Figure 3: Alternative capital growth - 2012 to 2021 (Source: Howden)

These difficulties notwithstanding, capital market investors have made substantial, long-term commitments to the reinsurance space that have altered market dynamics for good. Future allocations will nevertheless be weighed against the changing risk landscape, along with potential opportunities in other asset classes as macro-fundamentals shift.

Macro stimulus

In addition to the entry of USD 50 billion of alternative capital, the capital base of traditional reinsurers also swelled during this time, as strong underwriting profits overall, supported by sustained reserve releases, were boosted further by rising asset values in what was an unprecedented era of ultra-loose monetary policy (see Figure 4).

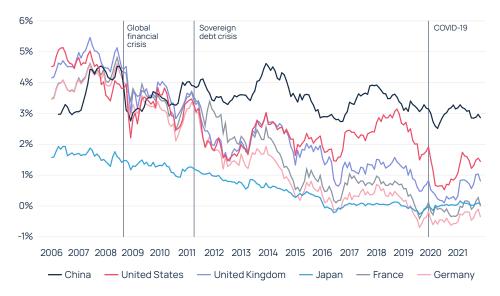


Figure 4: 10-year government bond yields - 2006 to 2021 (Source: Howden, Bloomberg)

Given the reinsurance sector's strong gearing to investment-grade fixed income securities, stimulus provided by central banks through this period was a major contributor to the build-up of traditional reinsurance capital. (The value of fixed income assets rises when interest rates fall.)



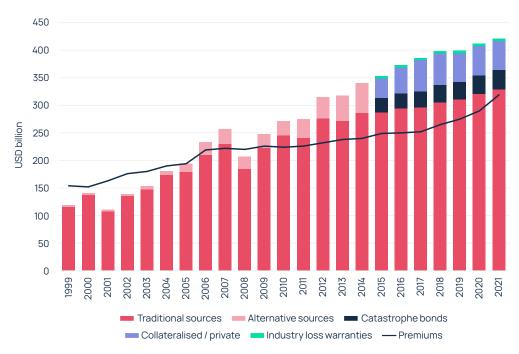
Figure 5: Components of capital growth for Howden's reinsurance composite - YE 2018 to YE 2020 (Source: NOVA)

Figure 5 on page 11 puts this into context by showing how rising bond prices in 2019/20 (as an example) led to a substantial capital boost for Howden's reinsurance composite. Unrealised gains largely offset the negative contributions that came from dividend payments, FX and other items, paving the way for an overall capital increase of 15% after incorporating the gains from net income and issuances. Reinsurers are today having to contend with inverse balance sheet impacts as stimulus is withdrawn, heightening interest rate and liquidity risks.

Excess capital

Bringing all this together, Figure 6 shows how Howden's estimate of total dedicated reinsurance capital trended relative to gross reinsurance premiums written from 1999 to 2021. For a sector that started this period with a solvency margin ratio (capital divided by premiums) of less than 80%, it ended it trading closer to 130%. Put simply, low barriers to entry and strong capital inflows created a reinsurance supply glut so large that capital providers were comfortably able to service relatively stagnant levels of demand.

Figure 6: Dedicated reinsurance capital and global gross reinsurance premiums (all lines) – 1999 to 2021 (Source: NOVA, Howden)



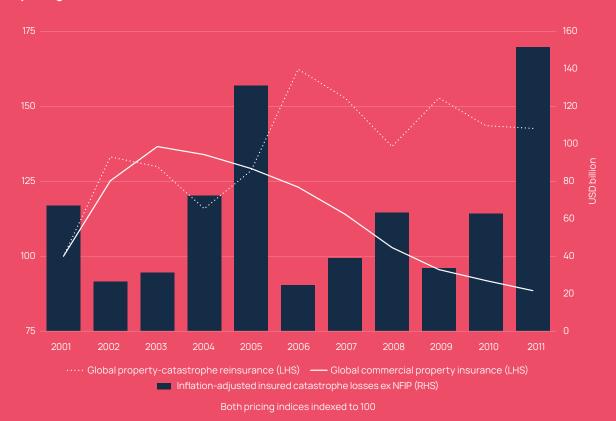
This took place against a backdrop of low core inflation, which saw the liability side of balance sheets benefit from relatively stable loss costs. Conservative loss picks in a structurally disinflationary environment meant reserves were generally robust through this period, which enabled carriers to release large amounts of redundancies into earnings. All of which added to strong carrier capitalisation / profitability, and a highly competitive marketplace.

Price decoupling

Reinsurers' desire to protect market share during this period eclipsed concerns about price adequacy. Cedents were big beneficiaries, as favourable supply dynamics ensured continued access to competitively priced capacity, even as the commercial insurance and retrocession markets started to turn in 2018/19.

This marked an important deviation from previous market cycles, which have typically been reinsurance led. Figure 7 shows how property-catastrophe reinsurance pricing increases surpassed those for commercial property insurance during the hard market of the 2000s, demonstrating the vital role reinsurance can play in insulating insurers from volatility, and, ultimately, capping prices for insurance buyers.

Figure 7: Global property-catastrophe reinsurance vs global commercial property insurance pricing – 2001 to 2011 (Source: NOVA, Swiss Re)



The most recent market turn has defied the historical rulebook, with reinsurance pricing lagging the primary commercial market in several classes of business (see Figures 8 and 9 for pricing trends in the property and casualty markets). Whereas global property-catastrophe reinsurance pricing remained 16% lower at 1 January 2022 relative to its most recent high point in 2012, global property insurance pricing was up more than 40% during the same timeframe.

This partly reflects reinsurers' appetite for profitable underlying casualty portfolios, which have

Figure 8: Global property-catastrophe reinsurance vs global commercial property insurance pricing - 2012 to 2022 (Source: NOVA)

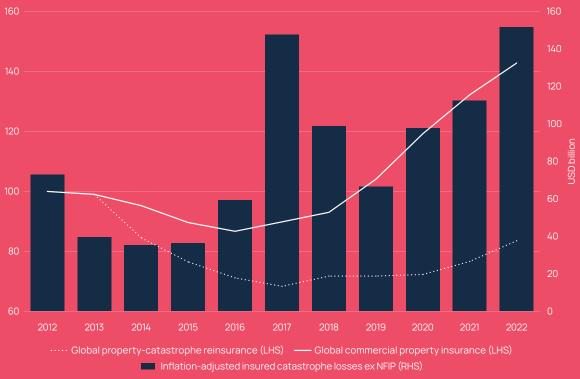


Figure 9: London market casualty reinsurance vs insurance pricing - 2012 to 2022 (Source: NOVA)



Squeezed middle

Alongside a marked correction in the retrocession market, whose steep upward pricing curve from 2017 has moved in tandem with that of property commercial insurance, reinsurers have been squeezed by modest inward pricing gains and significantly higher retrocession costs.

This has had a significant impact on reinsurers' underwriting strategies. Having initially leveraged pricing arbitrage opportunities by writing more catastrophe risk and offloading sizeable portions to retrocessionaires in line with the falling cost of protection from 2013, some reinsurers have reduced appetites in recent years in response to deteriorating loss trends, surging retrocession pricing and concomitant volatility on their net positions. Others, especially those less reliant on the retrocession market, have increased commitments in order to pick up market share and grow into the firming rate environment.

Figure 10: Reinsurers' gross and net probable maximum loss exposures vs non-marine retrocession catastrophe pricing (Source: Moody's, NOVA)



These different strategies are played out in data provided by Moody's in Figure 10, which tracks the evolution of reinsurers' gross and net positions for peak zone catastrophe risks over the last decade. Increased net exposures post-2019 were perhaps inevitable given the degree of price rises in the retrocession market relative to the muted increases achieved for reinsurance. This nevertheless left certain reinsurers vulnerable to outsized losses, just as they were navigating an uptick in claims activity during one of the most adverse loss environments in recent times.

Risk landscape reset

The rapidly deteriorating risk landscape did little to move the reinsurance market initially. For a time, favourable supply factors prevailed over a build-up of pressures that included the second most expensive loss year ever (2017), a succession of unusually expensive 'secondary' peril losses, growing concerns about climate change (and catastrophe model efficacy) and unexpected claims from COVID-19.

This sequence of events nevertheless introduced considerable uncertainty into the reinsurance sector. The challenge for reinsurers resides not only in absorbing losses from the flurry of recent activity, as substantial as they are, but in navigating increased loss frequency from structural changes to the risk environment, with climate change a pre-eminent driver. Issues raised by COVID, and the potential for loss aggregation specifically, have also brought systemic risk to the fore.

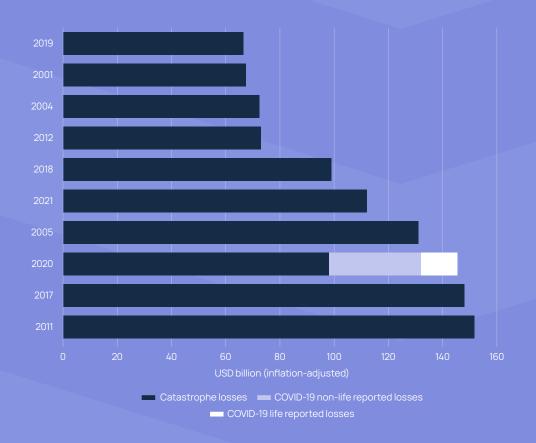
The corollary heading into 2022 was rebalanced supply and demand dynamics across several areas of the market. And with this year so far offering no respite – a war in Europe, the highest rate of inflation in 40 years, continued supply chain disruption and more secondarily peril losses – a decisive shift in deployment appetite, along with macro-fundamentals, is finally moving the market.

Major loss cluster

A cursory glance at the industry's ten largest loss years on record – as shown by Figure 11, with National Flood Insurance Program (NFIP) claims excluded – underscores the painful run sustained by insurers and reinsurers in recent times. Indeed, each of the last five years feature, with 2017, 2018, 2020 and 2021 all in the top six.

2022 is on course to be a new entry by year-end, following significant losses from the Ukraine war and an active first half from a climate perceptive. Lower risk tolerance on the back of this sea change to the risk environment, along with rising demand at a time of surging inflation, have been the catalysts for a market correction in 2022.

Figure 11: Top 10 largest loss years on record¹ (Source: NOVA, Swiss Re, Insurance Information Institute)



COVID-19 legacy

COVID-19 was an unexpected and largely unpriced loss for the (re)insurance sector. It stood out for its uncontained nature (geographical and duration) and its misunderstood consequences. The decision by governments to prioritise public health over economic activity during the initial wave of the pandemic meant the bulk of insured losses were pushed from the life market and into the P&C market, the opposite of what was expected.

This unmodelled – and unmodellable – development brought a significant underwriting impact, with a number of carriers assuming heavy losses. Indeed, reported COVID claims (with life included) have now reached a quantum roughly equivalent to the 9.11 terrorist attacks (see Figure 12). This is a major loss for the reinsurance sector, given it is currently expected to absorb close to half the total, albeit over a prolonged period and across multiple lines of business.

Figure 12: Reported COVID-19 losses (including life) vs top 10 insured catastrophe losses¹ (Source: NOVA, Swiss Re, Insurance Information Institute)

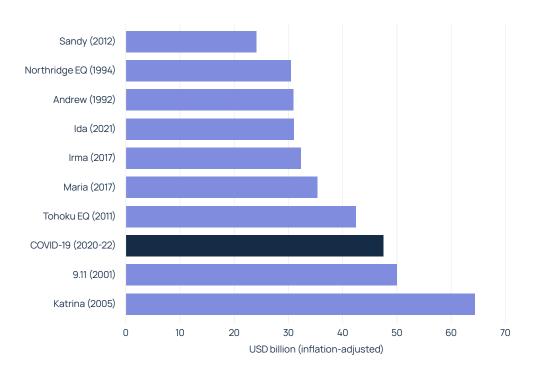




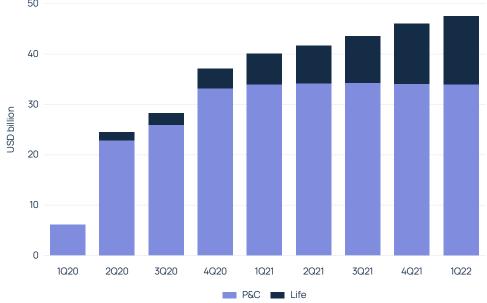
Figure 13 shows that the bulk of COVID (re)insured claims were reported by carriers in 2020. More than USD 35 billion of losses had been announced by the end of that year, 90% of which emanated from the P&C market (event cancellation and business interruption coverage predominantly), with the remainder hitting the life market.

Roles reversed in 2021, when the virus's lingering impact on morbidity and mortality saw life losses surge by USD 8 billion, with another USD 1.5 billion announced in 1Q22. Whilst carriers are likely to see additional life claims through the remainder of this year, levels are falling in line with the considerable drop off in COVID deaths, as demonstrated in 2022.

P&C claims rose by a far more modest rate last year at less than USD1 billion, with the slowdown attributable to reduced lockdown mandates from governments, along with the now widespread use of communicable disease exclusions in (re)insurance contracts.

(Source: NOVA) 50

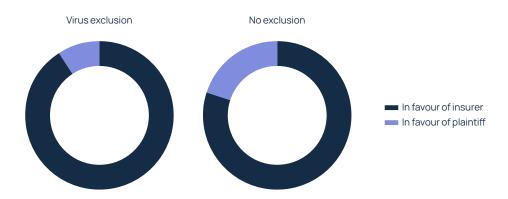
Figure 13: Cumulative reported (re)insured losses for COVID-19 - 1Q20 to 1Q22



The inherent uncertainty associated with COVID-19 brought a conservative reserving response. This stems principally from business interruption disputes, with litigation still ongoing in several jurisdictions. Despite a few notable plaintiff victories outside the United States, Figure 14 on page 20 shows that U.S. insurers have mostly prevailed in court to date, even for policies where no exclusions exist.

Whilst legal setbacks or the emergence of longer-tail liabilities can still not be ruled out at this stage, it looks increasingly likely that (re)insurers have a healthy buffer to withstand any future adverse development.

Figure 14: COVID-19 U.S. judicial business interruption rulings in 2020/21 (Source: Howden, UPenn Law)



Indeed, Figure 15 shows that an outsized portion of COVID losses for a composite of European reinsurers (purple bars) are still booked as incurred but not reported (IBNR). This was the case after 12 months, when COVID IBNR levels stood at 68% versus the more typical 49% for overall P&C portfolios. Whilst IBNR disclosures were more limited at 1H22, an estimated decrease to sub-45% for this period still meant COVID lagged what is considered to be normal P&C development within a 24 month timeframe (dark blue bar of 33%).

Whilst this likely reflects the unique nature (and uncertainty) of COVID losses, elevated IBNR levels in a year's time, when ~20% is typical for P&C portfolios after three years' development, would indicate an element of over-conservatism and portend reserve redundancies. Indeed, there have already been some isolated instances of P&C COVID-related reserve releases, with the potential for more to come should loss trends develop favourably from here.

Figure 15: P&C COVID IBNR development for European reinsurance composite vs overall P&C development (Source: Howden, company reports)



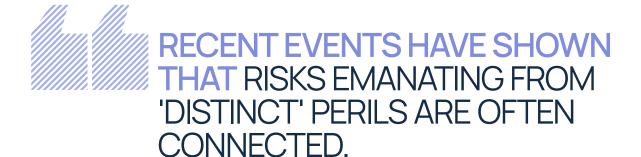
All of which confirms that initial industry loss predictions from some quarters of USD 100 billion plus were wide of the mark. These estimates look increasingly implausible as time passes, even when acknowledging remaining uncertainty associated with the event (see Figure 16).

100 90 80 70 60 USD billion 50 40 30 20 10 n Feb-21 Apr-20 Aug-20 Nov-20 Jun-21 Sep-21 Dec-21 Jul-22 - Low-end loss projection (logarithmic) — High-end loss projection (linear) Reported losses

Figure 16: Reported COVID claims in 2020-22 vs ultimate loss projections (Source: Howden, HSBC)

Whilst COVID looks set to be an eminently manageable loss for the (re)insurance market, it demonstrated the vast loss potential associated with systemic perils. Recent events have shown that risks emanating from what appear to be distinct perils like pandemics, cyber, business interruption, supply chain failures, price shocks or war are often connected and can strike simultaneously. They straddle multiple classes of business and bring sizeable loss accumulation potential by flouting traditional controls around correlations, boundaries and duration.

With shock industry losses from Russia's invasion of Ukraine coming fast on the heels of COVID, and coinciding with several warning shots from the other big systemic threat of our time (cyber), reinsurers' exposure to loss aggregation have contributed to the transitioning reinsurance cycle in 2022. Concomitant effects on capital, risk perceptions and pricing have been significant, as the market adjusts to a new world order.



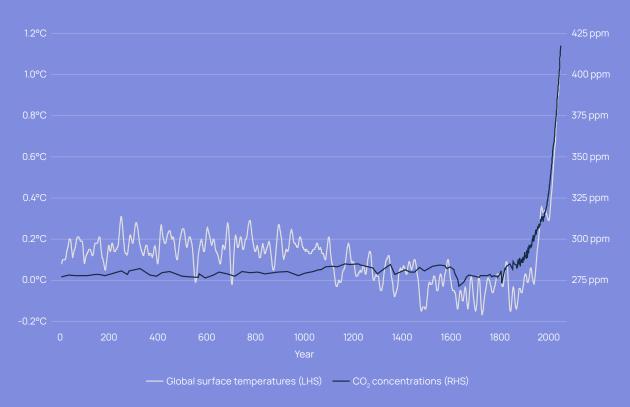
Climate: the new normal

Climate risk is the other pre-eminent driver of market change. Major losses caused by extreme weather events in recent years exceed historical precedent and add to evidence that climate change is influencing the frequency and intensity of weather-related perils.

Research published last year by the UN's Intergovernmental Panel on Climate Change (IPCC) leaves little room for doubt: key findings show it is 'unequivocal' that human influence is warming the atmosphere, oceans and land, and that certain 'unprecedented' and 'irreversible' impacts are already being observed across the climate system.

Figure 17 shows that carbon dioxide (CO_2) emissions and the level (and pace) of global warming are without parallel during the last two millennia.

Figure 17: Changes in global surface temperatures and CO_2 concentrations in last 2,000 plus years (Source: IPCC AR6, NOAA)



More extreme weather events, and their associated economic costs, are translating into higher insured catastrophe losses. Figure 18 shows the distribution of weather-related insured losses in real terms over the last 50 years assuming an exponential trajectory towards the end of the timeframe whereas man-made events have experienced a flatter loss trend overall. This stresses the underlying increase in weather-related insured losses in the last decade or two especially, even when allowing for inflation and increased insurance penetration during this period.

Figure 18: Distribution of property insured losses for weather events vs man-made events - 1970 to 2021 (Source: NOVA, Swiss Re)



2021 was another active year for extreme weather events, with the USD 100 billion insured loss threshold breached for only the third time on record. 2022 has also got off to a difficult start, with record flood losses recorded in Australia and South Africa, as well as major storms in Canada and France and another drought in South America. The result was the most costly first half in terms of insured losses for non-U.S. catastrophes since 2011.

Cumulative insured losses since 2017 are now approaching USD 500 billion – driven by the effects of climate change, but also higher asset values, infrastructure vulnerabilities and rising loss settlements. Figure 19 shows that perils once regarded as 'secondary' or 'non-peak' have been the biggest component of loss since 2013 in all but one year (2017). At the same time, losses from severe weather have come close to surpassing those from global tropical cyclones (see Figure 20).

The 'primary' and 'secondary' distinctions of the past are becoming increasingly redundant due to the effects of climate change.

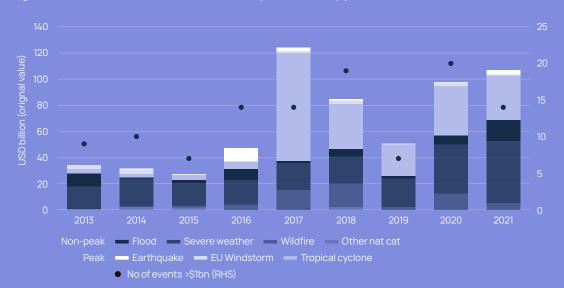
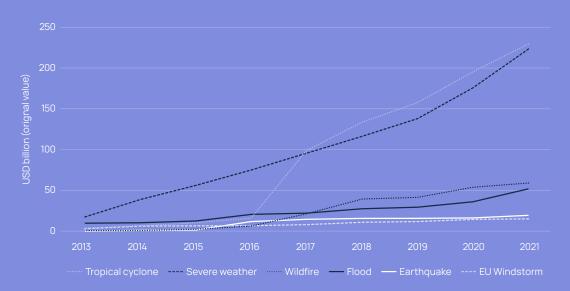


Figure 19: Global insured natural catastrophe losses by peril - 2013 to 2021 (Source: NOVA)





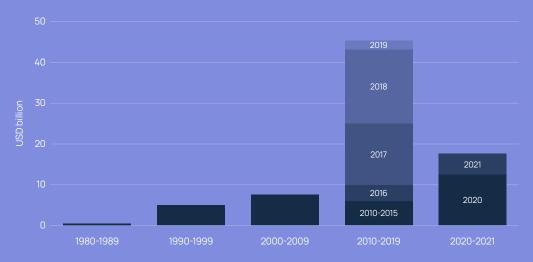
This significant shift in loss experience has led to some high profile exits from the property-catastrophe reinsurance market in 2022. Damaging losses in recent years from convective storms, floods, winter storms, derechos and wildfires, along with increased severity from more established risks such as tropical cyclones (Florida and the menace of litigation risk being a prime example), have prompted some reinsurers to conclude that price alone is not sufficient to compensate for the inherent volatility of catastrophe business.

Figure 21, which tracks insured losses from global wildfires by decade, underscores the degree of change (re) insurers are navigating for certain perils. Whilst cumulative insured losses from global wildfires was less than USD 15 billion in the first three decades shown (1980s to 2000s), they jumped to USD 45 billion in the 2010s. In California alone, USD 50 billion of insured damage from wildfires has been reported since 2017.

Extreme heat in Europe this year served as a stark reminder of how climate change is affecting wildfire frequency and severity beyond North America and Australia.

Figure 21: Global wildfire insured losses by decade – 1980s to 2020s

(Source: NOVA, Swiss Re)



There are, of course, separate demographic factors at play in driving claims up, including higher asset values and exposures, rapid population growth and the lure of living in areas exposed to extreme weather (see Figure 22). Any expectation that loss experience for climate-sensitive perils will revert back to the old normal is unrealistic. The past is no longer a guide to the future.

Figure 22: Population and house price change for hurricane-exposed U.S. states over last decade (Source: Howden analysis using data from U.S. Census Bureau and Federal Housing Finance Agency)



All these factors are now starting to tell, with signs of distress at mid-year renewals. The return of inflation is adding momentum to the market correction, driving insured values and claims costs higher.

Coinciding with other external headwinds such as capital markets turmoil, war-related losses and a commodities crisis, the reinsurance sector enters peak hurricane season more exposed to losses and broader macro / geopolitical risks than it has been in the last 15 to 20 years.

A hard reality

Current market conditions are being shaped by fundamental, long-terms shifts to the loss environment, as well as a confluence of exacerbating factors that include rapidly rising core inflation, supply chain disruption, a war in Europe and, crucially, changing assumptions around capital, yields and loss costs.

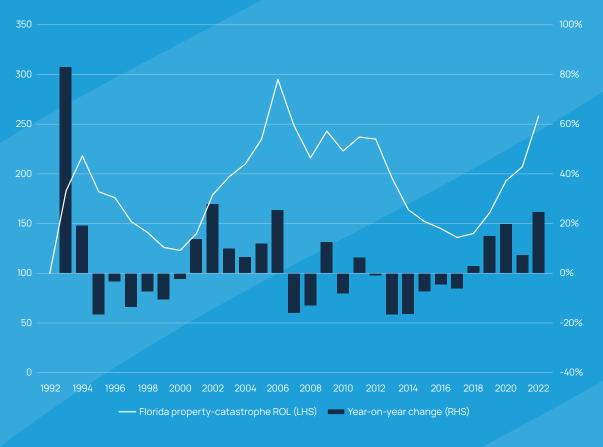
The macroeconomic and geopolitical tectonic plates have shifted, ending the era of cheap money (an important contributor to capital growth) and low inflation, and introducing variables like commodity shocks and stagflation not seen since the 1970s and early 1980s. These major realignments are having a tangible effect on supply and demand dynamics in several areas of the reinsurance market.



A tipping point

The result at mid-year renewals was the biggest collective reinsurance rate increase in more than 15 years. Property-catastrophe pricing for Florida business rose by an average of 25% at 1 June (see Figure 23). A cumulative increase of 90% in the last five years has seen Howden's Florida ROL index rise to its highest level since 2007.

Figure 23: Howden 1 June Risk-Adjusted Property-Catastrophe Rate-on-Line Index - 1992 to 2022 (Source: NOVA)



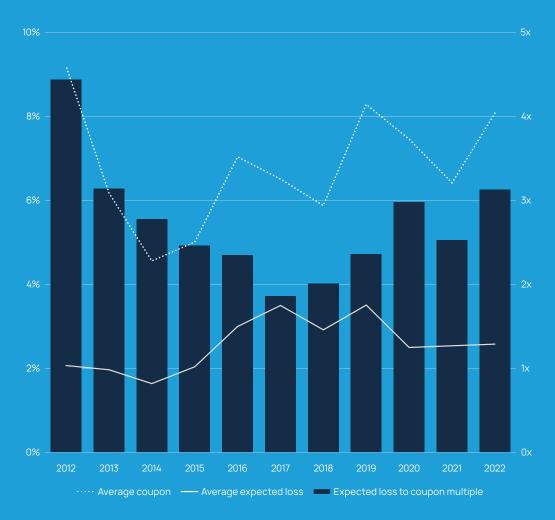
Double-digit pricing corrections were not the preserve of the (dislocated) Florida market only. Capacity was constrained at both 1 June and 1 July, with capacity utilisation levels reaching long-term highs as demand increased in response to rising inflation.

Whereas U.S. nationwide catastrophe programmes saw price rises in the mid-single digit range at 1 January 2022, equivalent renewals were up in the mid-teens at mid-year. Capacity shortfalls for lower layers in particular reflected capital providers' continued reluctance to underwrite frequency exposures, irrespective of price (a true hard market characteristic).

This led to higher attachment points across a number of accounts at mid-year, as insurance carriers did what was necessary to secure capacity. Cedents also used the full range of the market, including alternative vehicles, to complement traditional coverage and fill placements. Whilst capacity for collateralised quota share and sidecar vehicles remained restricted, the catastrophe bond market continued to function through financial market volatility.

But even here, capacity was only allocated if (higher) return hurdles were met. This led to several catastrophe bond issues in 2Q22 being priced at the top end, or often far in excess of initial guidance. Figure 24 shows catastrophe bond spreads over the last decade, with average yields rising sharply in 2022 whilst expected losses remained relatively stable. The multiple of these two inputs so far this year (at 3.13x) is the highest since 2014.

Figure 24: Catastrophe bond market spreads and multiples – 2012 to 2022 YTD (Source: Artemis)



Structural headwinds

Challenging reinsurance renewal conditions look set to be sustained through the rest of this year and into 2023 as major macroeconomic and geopolitical realignments, along with pre-existing pressures, coalesce to create some of the most dislocated market conditions for the best part of two decades.

1. UKRAINE WAR

Whilst claims from the war in Ukraine are likely to be manageable overall for the (re)insurance sector, the concentration of losses amongst premium-light lines of business will lead to disproportionate pain. Specific segments of the speciality reinsurance market, covering niche areas like aviation (war), marine, political risk, political violence and trade credit, are undergoing marked corrections following Russia's invasion and the sizeable losses that are likely to transpire, albeit over a prolonged period.

Figure 25: Reported (re)insured losses for Ukraine war vs ultimate industry loss estimates (Source: Howden, company reports)

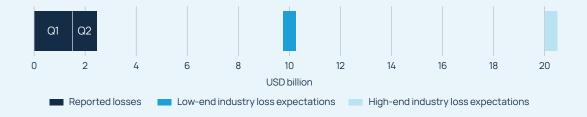


Figure 25 shows war-related losses reported by (re)insurers so far this year. The expected wave of new announcements in 2Q22 did not materialise due to ongoing hostilities (making access for loss adjustors difficult) and little additional visibility on how aviation losses will develop. Most carriers to report losses have yet to include aviation in their provisions, which will act as an overhang for those exposed until more details emerge.

With current industry loss expectations ranging from USD 10 billion at the low end to USD 20 billion plus on the high, booked losses have a long way to travel before they get close to these figures. More immediate impacts have included significant repricing of specialty treaties and a reassessment of composite covers ahead of renewals at 1 January.

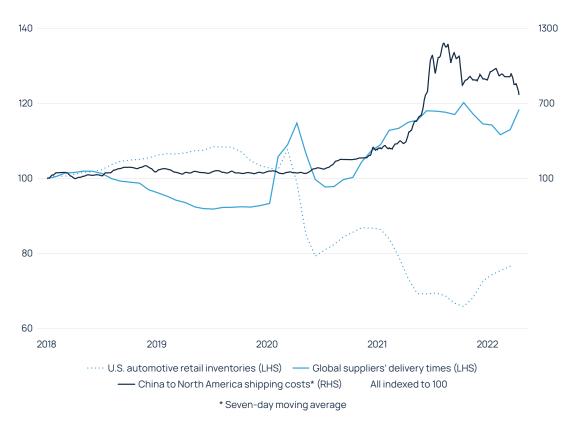


2. INFLATION

The fallout from the war has reset macro-fundamentals, as soaring commodity prices have sent inflation to multi-decade highs and exacerbated supply chain disruption. Supply chains were already in disarray from COVID-induced shocks, with bottlenecks occurring in a number of areas, but Russia's invasion of Ukraine completes a perfect storm of events that have pushed businesses' procurement strategies to breaking point (see Figure 26 for impacts to shipping costs, motor inventories and delivery times).

This is having major repercussions on inflation and growth expectations. The challenges and cost inefficiencies that come from building greater resilience into supply chains (e.g. near-shoring or reshoring) are only adding to inflationary pressures, especially at a time of heightened gas supply uncertainty in Europe and a global shortage of semiconductors.

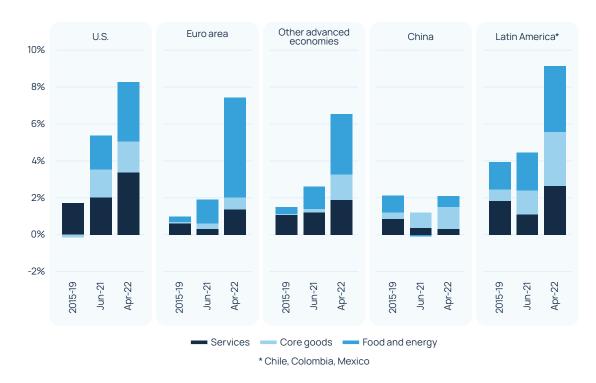
Figure 26: Supply chain pressures – 2018 to 2022 (Source: Howden, Bank of International Settlements)



Prices were rising rapidly even before Russia's invasion of Ukraine, however, and whilst the war's effect on energy costs has been a major factor in pushing CPI up to levels not seen in 40 years, pressures outside of commodities have seen inflation become entrenched in economies.

This is reflected by data in Figure 27, which shows a significant jump in food and energy costs for regions most exposed to the crisis, but also broadening price rises in other areas of economies, with the cost of services consistently higher across all territories in 2022.

Figure 27: Sector contribution to inflation – 2015-19 average vs 2021 and 2022 (Source: Howden, Bank of International Settlements)



Inflationary impacts are building in a number of sectors as a result, and the underlying drivers are starting to manifest across multiple lines of business. The property reinsurance market is particularly exposed to price rises currently, as elevated costs (materials and labour) and replacement values, in addition to supply chain issues and longer delivery times, add significantly to claims severity.

Figure 28 shows how these dynamics have pushed construction costs up substantially higher than headline inflation in select advanced economies. Reinsurers have been quick to increase property-catastrophe pricing in response this year. Inflation is also fuelling demand for protection as underlying portfolios are revalued. The motor market is likewise experiencing sharp price pressures from high vehicle values, rising costs for labour and parts and extended repair times.

Figure 28: Construction costs vs overall CPI in select advanced economies – 2018 to 2022 YTD (Source: Howden analysis using data from BLS, ONS and Destatis)

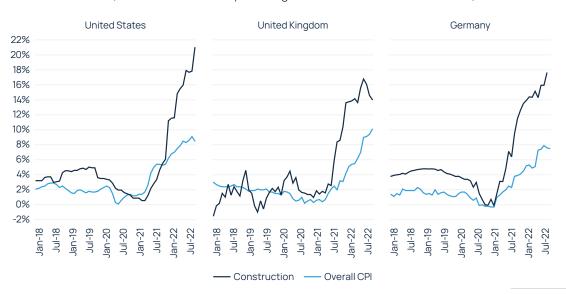
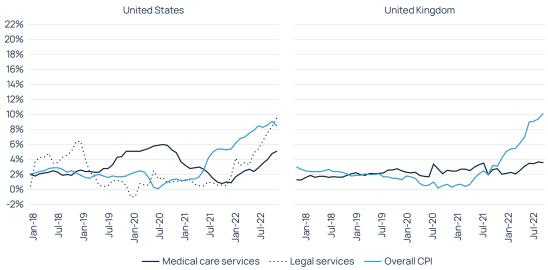


Figure 29: Medical and legal costs vs overall CPI in the U.S and U.K. - 2018 to 2022 YTD (Source: Howden analysis using data from BLS and ONS)



Liability lines are also starting to feel the impact of broadening inflation, although pressures here are currently less acute. Whilst short-tail lines such as property and motor are in the eye of a price and supply chain storm, liability lines are more exposed to subsets of wage, medical and legal costs, areas that have generally lagged overall CPI so far in most advanced economies.

Figure 29 shows that the trajectory for medical and legal expenses is nevertheless up this year. The inherent lag related to these components could see associated costs continue to rise for some time to come, potentially even after overall CPI peaks.

Managing inflation risks

Cedents' underwriting actions in response to higher inflation are now coming under close scrutiny from reinsurers. Requests for insurers to show how they are managing inflation risks were a major feature of mid-year renewals, and expectations for greater data transparency and granularity are only likely to increase next year.

Clear communication around how cedents are looking to control inflation-driven exposure impacts on portfolios and what underwriting actions are being taken is likely to be an area of differentiation for some time to come. Pricing increases are now widespread, but their degree can be contained by demonstrating decisive actions around underlying rates, deductibles, asset valuations and claims procurement, as well as working with broking partners to leverage market relationships.

This is just one area where expert intermediary advice can help cedents secure the best and most cost effective coverage available in the current marketplace.

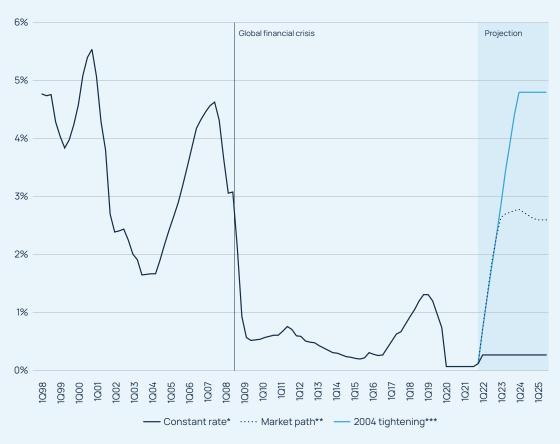
3. CAPITAL

Central banks have raised short-term interest rates significantly to counter soaring inflation. Higher yields further down the curve have brought considerable balance sheets impacts for carriers. First and foremost, these sharp yield increases have coincided with a negative impact on reinsurers' assets as the value of fixed income investments has declined. This is the opposite effect of what transpired during the recent, prolonged period of loose monetary policy: equities and bond values have fallen in unison for the first time in over 40 years as fiscal and monetary stimulus is withdrawn.

Figure 30 shows the degree of monetary tightening expected in 2022 and beyond. Current expectations are for average policy rates in advanced economies to settle close to 3% through this cycle of tightening, a significant increase from the historically low starting point.

Whilst this shift is likely to be manageable for reinsurers, an even more rapid correction (akin to the rapid rise in U.S. interest rates recorded between 2004 and 2006), especially if accompanied by prolonged inflation or a major catastrophe loss, would further stress balance sheets and potentially create liquidity problems for certain carriers. Looming recessionary forces could nevertheless weigh against such a forceful monetary response, as policymakers navigate the challenging inflation versus growth trade-off.

Figure 30: Monetary policy in advanced economies – 1998 to 2025F² (Source: Howden, Bank of International Settlements)



* Policy rates in line with May 2022 levels

^{**} Policy rates move in line with financial market expectations as of May 2022

^{***} Rates increase from 2Q22 at the same degree as in the U.S. between 2004 and 2006

²Weighted average of projected outcomes for a sample of 12 advanced economies, based on GDP at purchasing power parity exchange rates.

³The year-end capital estimate is sensitive to market movements, government bonds especially, meaning the figure could deviate significantly depending on what happens in financial markets.

Likewise for catastrophe losses – normalised activity is anticipated for

our FY2022 estimate.

This sea change to macro-fundamentals begun as reinsurance capital was at historically high levels. Despite moderated inflows in recent years, dedicated sector capital was 30% higher at year-end 2021 compared to 2012, when reinsurance pricing last peaked.

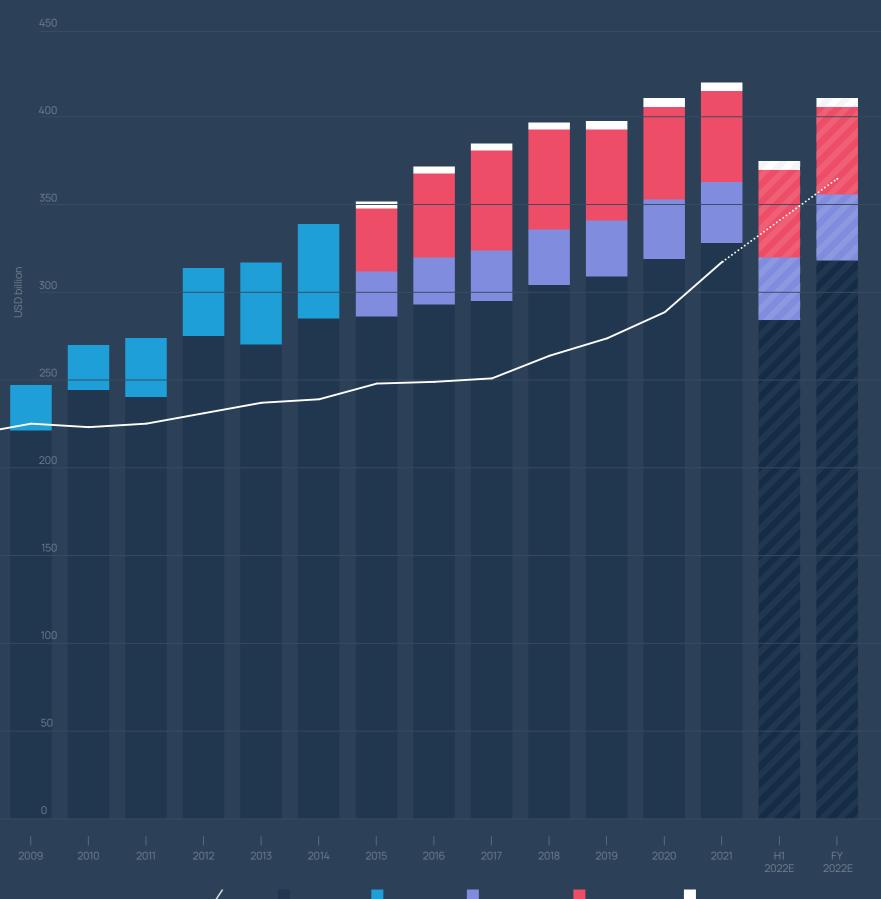
2022 could nevertheless represent an inflection point for the sector. Figure 31 incorporates updates to Howden's dedicated reinsurance capital chart to reveal a fundamental shift in supply and demand dynamics. A capital impairment of 10.7% for the market overall during the first six months of the year, driven predominantly by traditional capital decreases, together with significantly higher premiums, has sent the sector's solvency margin ratio back to levels last recorded during the depths of the global financial crisis. On this occasion, alternative capital inflows are unlikely to make up some of the difference (unlike in 2011/12 or 2017/18).

This is a major development for a sector accustomed to strong capital growth. Static or reduced supply, accompanied by higher demand, is likely to persist into 2023. Even accounting for some normalisation of financial market volatility in the second half of 2022, which is far from assured, capital losses are unlikely to recover fully at year-end (see full-year projection in Figure 31).³

Any year-on-year decline in reinsurance capital at the end of December would represent the first full year reversal since 2008 – likewise with risks assumed exceeding traditional capital – and provide further impetus for a period of market firming.



Figure 31: Sizeable reductions in dedicated reinsurance capital levels for 2022 (Source: NOVA, Howden)



04

Expert advice during extraordinary times

2022 is likely to go down in history as a landmark year for the reinsurance market. After years of excess capacity, loss uncertainty and the changing world order have combined to create some of the most challenging market conditions in two decades.

The financial shocks and geopolitical realignments of 2022 are likely to be felt for years to come. Combined with structural changes to the loss environment, the need for risk transfer will continue to grow as heightened risk aversion stimulates demand. Risks are escalating as the world lurches from one crisis to another, and the value and importance of reinsurance comes to the fore during such volatile times.



Climate risk and inflation are likely to remain centre stage for some time to come, as capacity providers focus on generating stronger, risk-adjusted returns. Financial market volatility and the potential for asset shocks will also linger due to escalating geopolitical tensions, with recent events in Taiwan demonstrating the potential for additional flashpoints. This backdrop is already having an adverse effect on the reinsurance market, with buyers having to navigate a shortage of capacity and price corrections in certain areas.

All of which reinforce expectations that 2023's reinsurance renewal cycle will see further pricing pressures, irrespective of whether the wind blows this year or not. Innovative thinking around matching risk to capital is needed now more than ever.

With pricing and structures responding to the fast evolving loss environment and higher inflation, the prospect of higher returns should entice capacity back into the reinsurance market. Market hardening during recessionary periods, especially when risk aversion is high, is an important reason why reinsurance can be counter-cyclical to the rest of the economy.

Capital inflows are nevertheless likely to be disciplined and distributed across multiple structures, requiring the very best intermediary advice to secure access. Reinsurance brokers have a crucial role to play here. Unlocking capital in order to find solutions for risks that may soon outgrow the sector's capital base will be crucial to maintaining relevance and offering clients coverage that meets their rapidly changing needs.

This is the biggest motivating factor behind the impending union of Howden RE and TigerRisk. Howden Tiger will be a new broking force that is differentiated by better data, world class analytics, scale and, crucially, a unique blend of capital markets and risk transfer. Unparalleled capital markets capabilities will be unleashed to deliver the best form of direct or contingent financing to cedents.

In these market conditions, clients demand a new approach to broking that is innovative, aggressively entrepreneurial and home to the sector's strongest talent. This demand will be met by Howden Tiger. Come and talk to us.

Contacts

Julian Alovisi

Head of Research +44 (0)7593 576 024 julian.alovisi@howdengroup.com

Bradley Maltese

CEO, Howden RE +44 (0)7513722476 bradley.maltese@howdenre.com

David Flandro

Head of Analytics +44 (0)7719 928 552 d.flandro@howdengroup.com

Elliot Richardson

Chairman, Howden RE +44 (0)7967 292 457 elliot.richardson@howdenre.com

Michelle To

Head of Business Intelligence +44 (0)7710 705 627 m.to@howdengroup.com



Howden

One Creechurch Place, London, EC3A 5AF

T +44 (0)20 7623 3806

F +44 (0)20 7623 3807

E info@howdengroup.com

www.howdengroup.co.uk

This document or any portion of the information it contains may not be copied or reproduced in any form without the permission of Howden. Howden Broking Group Limited is registered in England & Wales under company registration pumber 62(4279). Positive address: One Crosch usb Place London ECA 545 Copyright © 2022, Post 7775