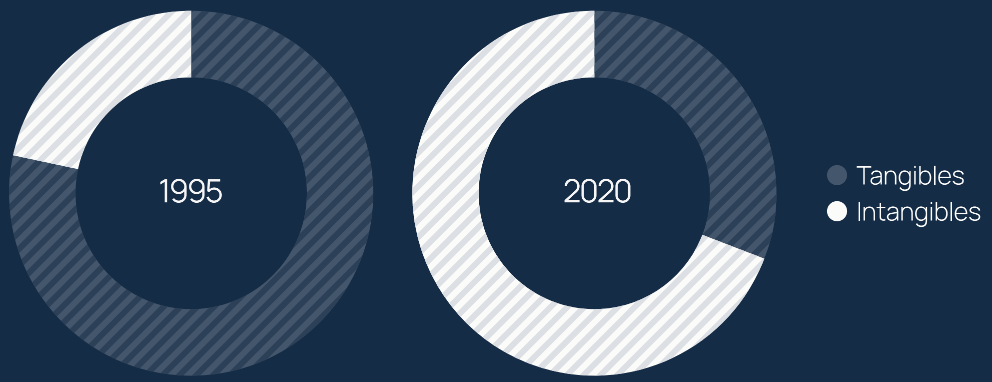
INSURING THE

INVISIBLE

Key takeaways

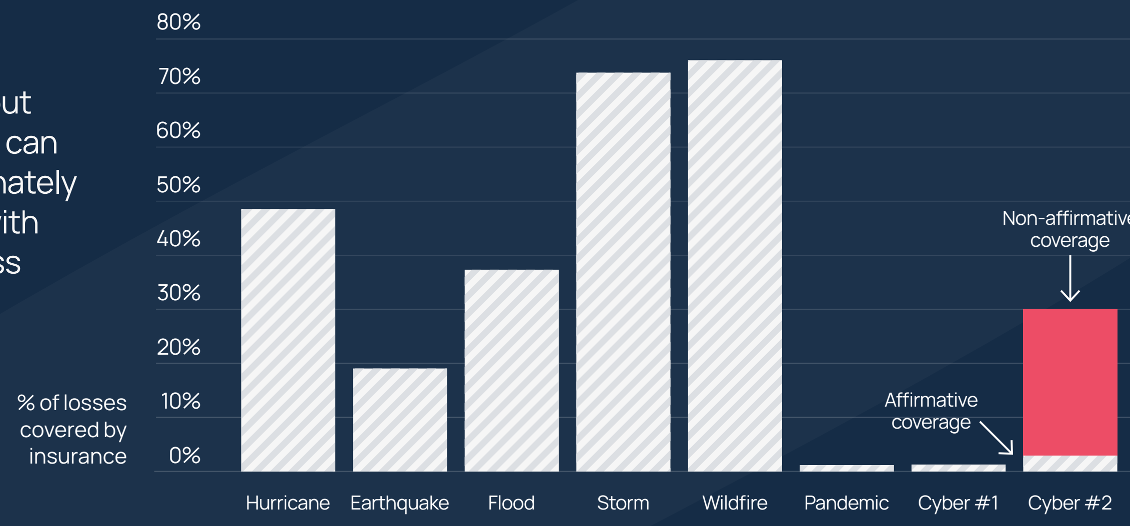
Intangible assets are today the primary source of corporate value, and concomitant risks are increasingly becoming 'invisible'.

Intangible assets as a percentage of corporate enterprise value



THE 'INTANGIBILITY' OF RISK HIGHLIGHTS THE NEED TO REIMAGINE THE SCOPE OF INSURABILITY.

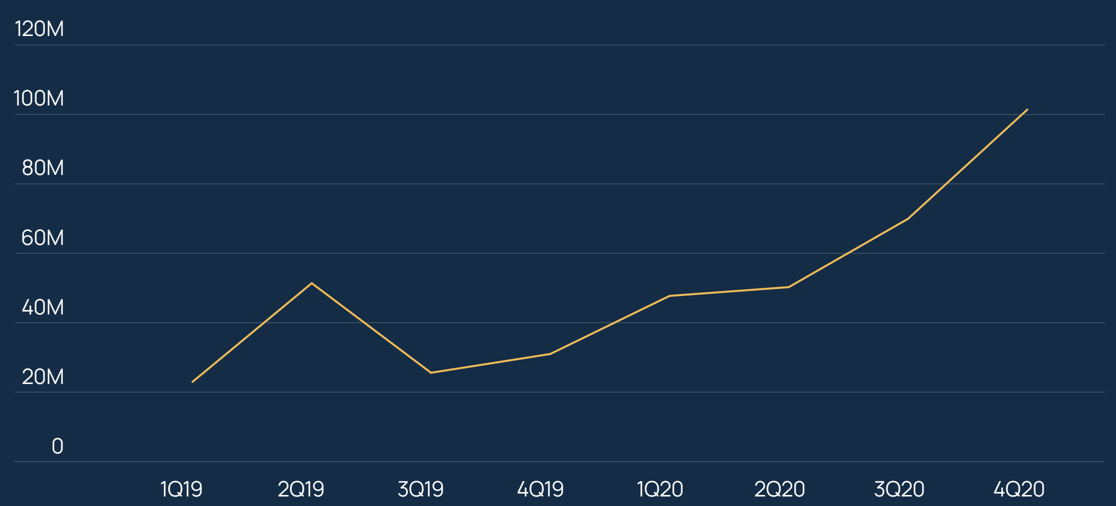
Protection gaps are not a new phenomenon...but their magnitude can be disproportionately large for perils with non-physical loss components.



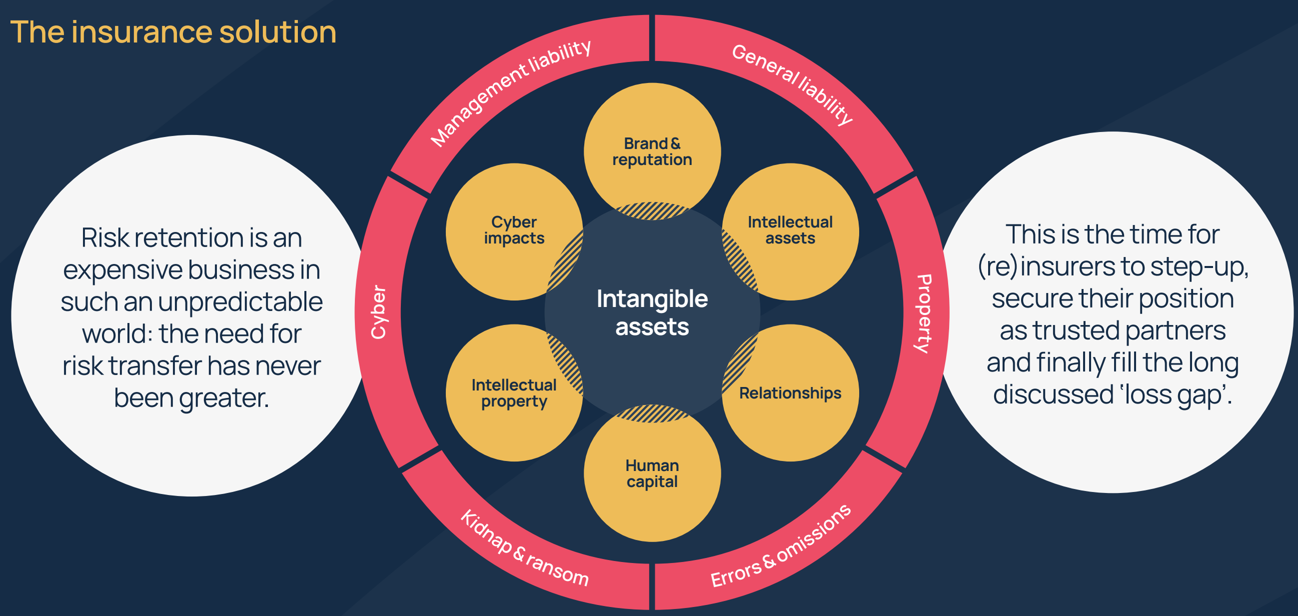
$170K AVERAGE U.S. RANSOMWARE PAYMENT IN 2020

$11tn INTANGIBLE ASSETS FOR TOP 50 GLOBAL COMPANIES

Number of global cyber ransomware incidents



The insurance solution



The invisible trend

The rise of the intangible economy marks one of the most important economic shifts in modern times. A series of megatrends – predominantly technological but also macroeconomic and societal – has transformed business, with the bulk of new value creation and now existing enterprise value emanating from largely uninsured intangible assets such as data, software, brand recognition, human capital and customer relationships.

This phenomenon is occurring across multiple sectors and geographies. Companies of all shapes and sizes – from technology giants and conglomerates to nimble incumbents and asset-light disruptors – are harnessing data and digitalisation to grow and differentiate. The direction of travel is clear: nearly all future economic value added will be derived from intangibles and concomitant risks will take on an increasingly 'invisible' disposition.

BY SPEARHEADING THE INTANGIBLES CHARGE, HOWDEN IS LIVING UP TO ITS REPUTATION AS THE CHALLENGER BROKER.

The measureable impact

Whilst this shift was well underway before COVID-19, the pandemic, a shock event whose substantial insured losses involved mostly non-physical damage, has revealed companies' acute exposures to intangible risks. The virtual school, work and social environments so ubiquitous in the pandemic's wake have enhanced society's and businesses' reliance on digital technologies. As a result, cyber exposures have escalated to unprecedented levels and brought associated risks such as reputational damage, loss of data and intellectual property (IP) security into sharp focus.

The 'invisibility' of risk in today's rapidly changing environment presents significant challenges for the (re)insurance sector. An underwriting model long reliant on defined perils fitting conveniently into siloes of pre-existing coverages is no longer sufficient. Today's volatile and highly complex market of new and emerging intangible risks demands a different approach.

The propagation of intangible risks means corporations are significantly more exposed to economic losses today than they were a decade or two ago. This is less of a choice than a prerequisite in today's virtual economy: the need for applicable and accessible risk transfer products has never been greater.

The insurance solution

All of this represents a clear opportunity for (re)insurers to step-up, secure their position as trusted partners and finally fill the long discussed 'loss gap'. The range of impacts associated with the intangible assets proliferation will only grow post-COVID, and clients are looking to their insurers to provide solutions. Advances in data and analytics, alongside creative thinking around structures and parametric triggers, have increased the insurability of intangible assets.

Given the importance of the issue, Howden is working with clients and markets to close protection gaps and ensure intangible exposures are adequately managed. There is much work to do on this front, but in today's challenging market especially, differentiated advice can unlock capacity across multiple coverages to facilitate the transfer of residual risk to the insurance market.

The long-term goal must be more ambitious, namely, offering businesses comprehensive coverage for both tangible and intangible risks across several different coverages with 'one-shot' policies. Such a solution requires close collaboration between insurers and reinsurers, along with potential backing from governments to protect against extreme loss scenarios that transcend sectors and geographies and cause huge loss accumulations.

01

New age of risk

The changing risk landscape is front of mind, as societies and economies navigate one of the most important periods of change in living memory. The potential human and economic impacts associated with the changing climate have dominated agendas in recent years (see Figure 1), only for a global pandemic, with all of its attendant perils, to blindside businesses and governments.

Figure 1: Global risk landscape
(Source: HX Analytics, World Economic Forum)

TECHNOLOGICAL, ECONOMIC AND ENVIRONMENTAL UNCERTAINTY **HAS RESET THE GLOBAL RISK LANDSCAPE**

This has understandably raised concerns about low probability, high impact perils – which extend to catastrophic cyber events and chemical, biological, radiological and nuclear (CBRN) terrorist attacks, to name a few – and the need to rethink long-held assumptions around accumulations, correlations, boundaries and duration.

But an equally important, and comparatively overlooked, structural change has occurred in recent years, as economic value has shifted from tangible to intangible assets. The proliferation of data, technology and automation has revolutionised the way people live, interact, work and travel. It has also transformed the composition of companies' assets: today, most corporations value IP, brand and reputation ahead of property, plants and equipment (PP&E). Even organisations that manufacture physical goods now typically offer complementary data and advisory services. Cyber risk has been one of businesses' biggest exposures for some time.

Tectonic shifts

Although these tectonic shifts started long before the manifestation of any global pandemic, COVID-19 has compounded what was an already complicated operating environment. As well as creating unexpected risks of its own (more on this later), COVID has intensified pre-existing ones. The rapid roll out of digital solutions, the move to remote working environments, global economic uncertainty and supply chain and business interruption vulnerabilities have all increased as a result the pandemic, creating exposures on a scale that that did not exist pre-COVID.

Conversely, ingenuity and innovative thinking to mitigate the effects of the pandemic have expedited important technological developments that have helped sustain economies over the last year, and offer huge long-term opportunities in terms of growth, digitalised product development, client experience and efficiencies.

Testing the boundaries

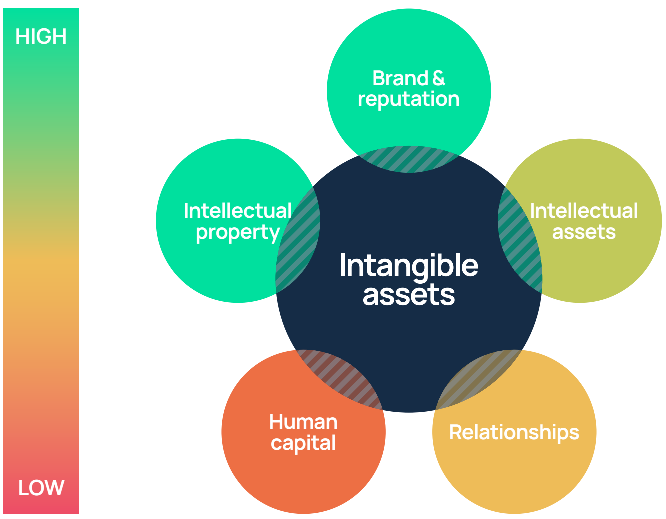
The implications of all this on the insurance sector in terms of future relevance are just as stark as those associated with climate change. Intangible assets present significant challenges for an industry built on underwriting mainly tangible risks, and being guided in the process by historical loss data and assumptions around accumulations and correlations that no longer necessarily apply.

Intangibles are difficult to value by their very nature: they are not usually recognised by current accounting standards unless they have been acquired, and there is a high degree of subjectivity when attempting to measure items like brand, reputation, IP, data, supply chains and human capital. The unpredictable nature of risks associated with intangibles also exposes them to significant volatility: hard-won reputations and competitive advantages can be dismantled quickly but not so easily recovered.

Insurability is of course an evolving notion, and recent advances in data and modelling, product development and creative thinking around structures and parametric triggers, along with rising demand, have shifted perceptions around some of the more measurable risks shown in Figure 2.

Figure 2: The intangibility of economic value (Source: HX Analytics)

Perceived insurability



Brand & reputation
The most visible intangible asset…
…and one of the most valuable

Intellectual assets
Informing business models and decision-making…
…use of proprietary and external data and software

Relationships
A key driver of value – strong relationships with…
…customers, markets, suppliers

Human capital
One of the more intangible – and differentiating – assets…
…talent, revenue, experience and knowledge

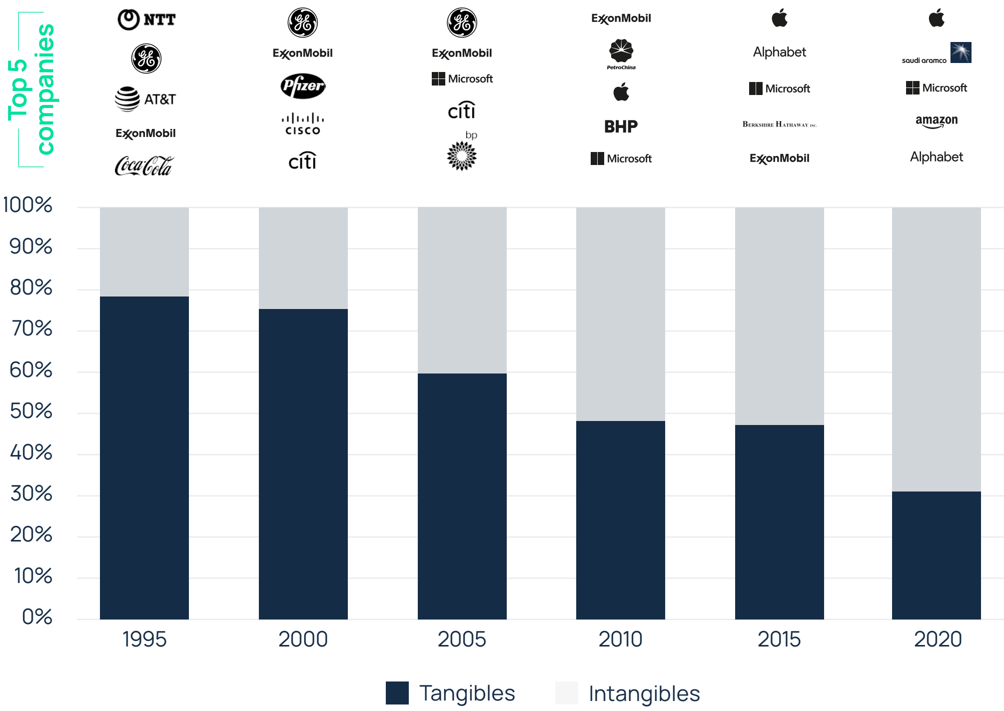
Intellectual property
The bedrock of competitive advantage…
…patents, copyrights, trademarks, trade secrets

Touching the intangible

Only a small sample of intangible assets typically appear in company financial reports, even though they have been a major source of enterprise growth in recent years and today account for the bulk of corporations' valuations.

Figure 3 brings some visibility to undisclosed or hidden intangibles by showing the composition of the top 50 global companies' assets as a percentage of enterprise value, at five-year intervals since 1995. The shift towards intangibles during this time is unmistakable, with a marked acceleration in the last five years in particular. In 2020, physical assets accounted for only 30% of enterprise value. Or, to put it differently, intangible assets are now responsible for 70% of total business value for the 50 biggest companies globally. This compares to 50% 10 years ago and just 20% in 1995.

Figure 3: Tangible vs intangible assets as a percentage of enterprise value for top 50 global companies – 1995 to 2020[1]
(Source: HX Analytics, Bloomberg)



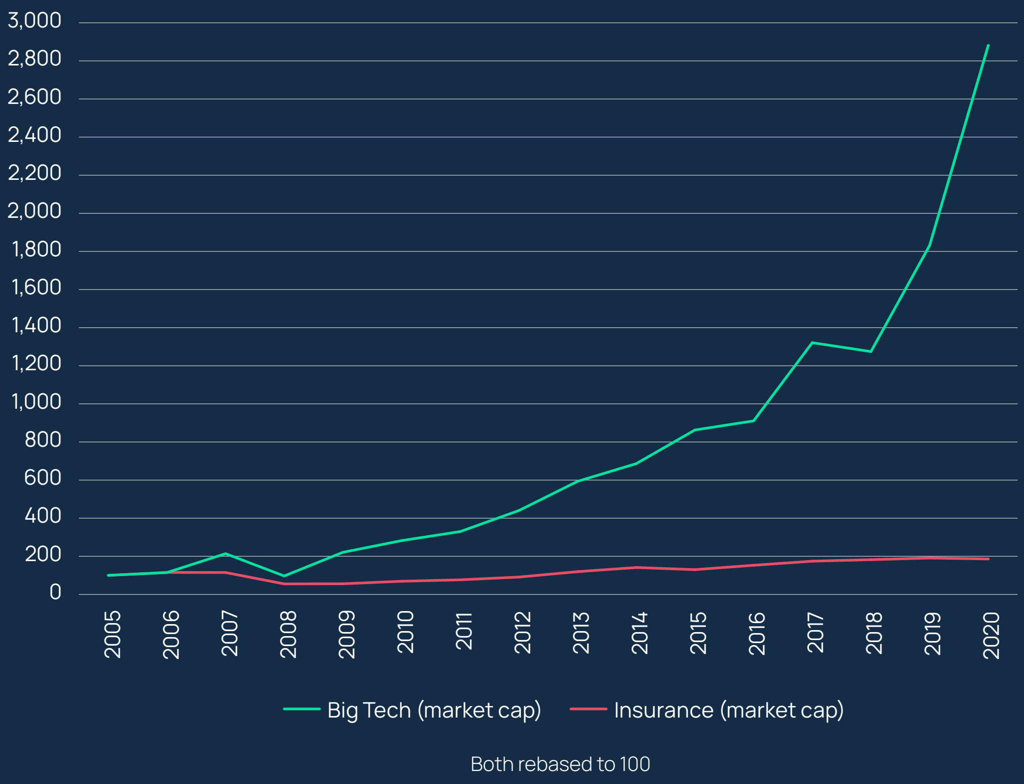
This radical shift is also reflected by the list of the world's largest corporations. Whereas asset-heavy, conglomerate companies dominated the list 25 years ago, asset-light, technology-focused companies are prevalent today.

[1] Tangible assets measured as net fixed assets plus net current assets (e.g. inventories, cash and receivables).

A tech virtual reality

The big four tech companies of Alphabet (parent company of Google), Amazon, Apple and Facebook own relatively few assets, and derive much of their value by integrating innovative software and design into their respective brands. The combined market capitalisation of all four companies today stands at approximately USD 5.8 trillion, compared to just USD 0.9 trillion back in 2012.

Figure 4: Growth of Big Tech vs insurance market – 2012 to 2020
(Source: HX Analytics, Bloomberg)



The level of performance shown in Figure 4 is testament to the incredible growth potential of Big Tech, fuelled by rising intangible asset values and exuberant investor sentiment. Contrasted with the insurance market, which has merely doubled in value over the last 15 years, it quickly becomes apparent that companies of this type and size are retaining significant amounts of intangible risks on their own balance sheets and only using traditional risk transfer at the margin. This points to an issue of insurance supply and applicability.

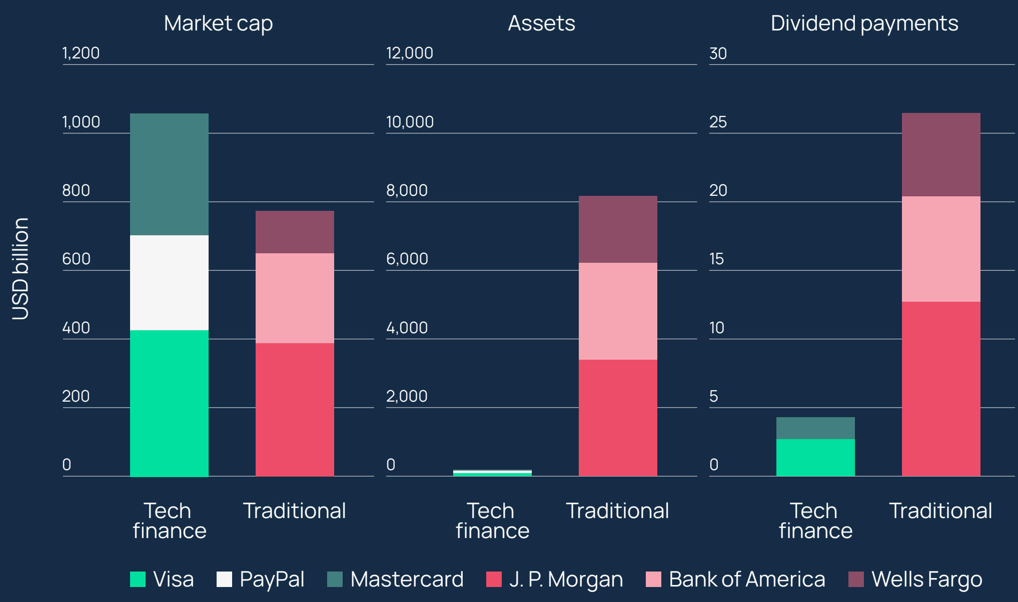
Protection gaps have also been exposed by the emergence of new types of virtual companies and business models. The sharing economy, for example, built on a foundation of peer-to-peer exchange that connects consumers to intermittently utilised possessions, has also distorted once well-defined demarcations between personal and commercial use of assets. It has done so without the cost burden associated with unit ownership, not to mention company fixed assets and headcount.

The ability to create value from intangibles is encapsulated by these companies, as they have leveraged ideas, innovation, brand, data and customer relationships and eschewed more capital-intensive items like property, equipment and other physical assets such as inventories, with ever more efficient supply chain management.

Extracting value from intangibles has not been restricted to the rise of mega-tech companies or peer-to-peer disruptors. It is also reflected by the proliferation of online retail brands, often to the detriment of established, brick-and-mortar high street businesses, and the success of tech-savvy companies that derive value from digital platforms and data.

Constant (re)investment into proprietary product development may not typically be recognised under current accounting standards, but the (future) growth potential associated with these companies clearly grows equity and market capitalisation, even when they pay minimal dividend payments today (as shown by the banking case study in Figure 5). This is all about what investors think the future holds. Incumbent organisations are attempting to develop digital solutions of their own in order to stay competitive.

Figure 5: Tech finance vs traditional banking at YE2020
(Source: HX Analytics, Bloomberg, Ziggma)



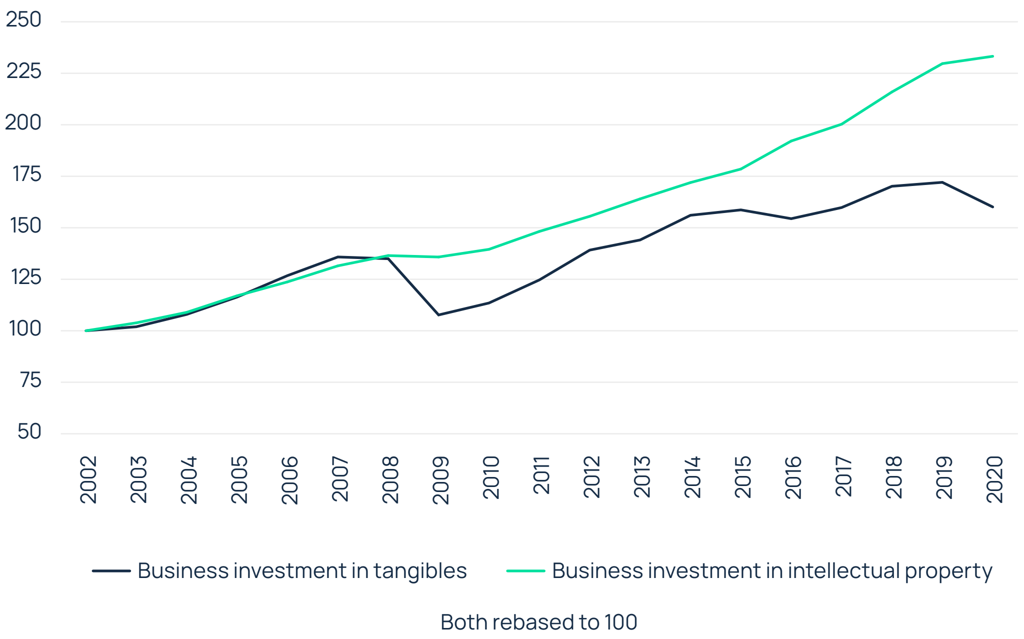
Covid booster

The speed of the economic transformation has been remarkable, and COVID-19 has accelerated the process beyond even the most ambitious of predictions. According to a McKinsey study[2], the pandemic has brought forward the digitalisation of businesses' customer and supply chain interactions by three to four years, whilst the roll out of digital offerings has been accelerated seven years. Equally important, companies are investing heavily in areas like data security and cloud migration in order to solidify advancements made.

The commitment and quantum of these intangible investments matter, as they provide a benchmark against business spend across all company sizes and sectors in more tangible areas like PP&E, and offer insights into the areas organisations deem to be most valuable and worthy of funding. This is especially true during times of economic strain, when budgets are tight and there are competing pressures for investment. It is also an important indicator of where (re)insurance buyers' needs lie.

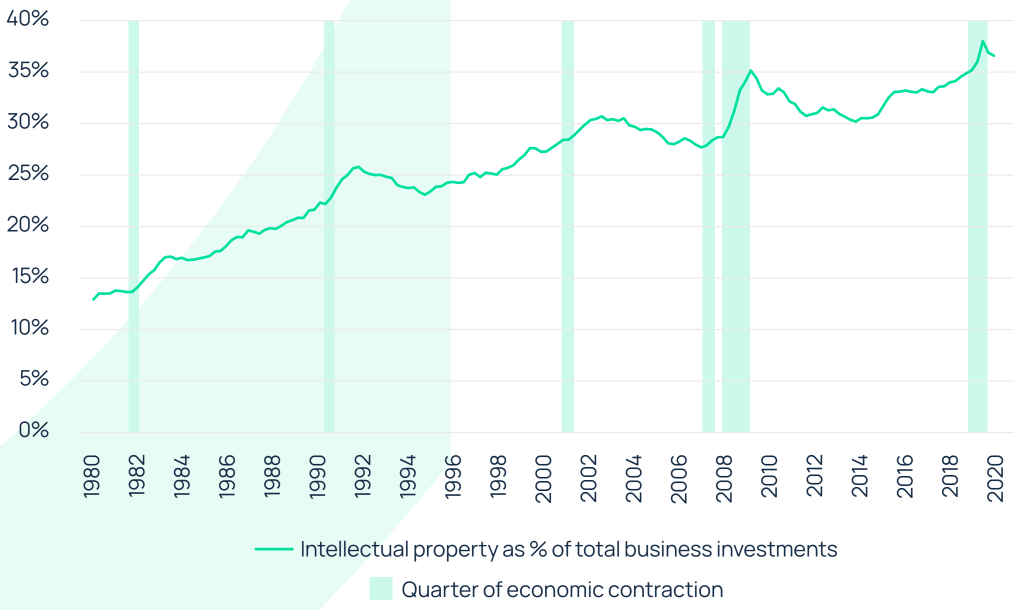
Although reliable and consistent data are limited, a component of intangible investments is captured quarterly by U.S. GDP statistics in the form of IP. Figure 6 shows how business investments in this area have outpaced those in tangible assets across the entire U.S. business sector over the course of the last 20 years, with a notable divergence around the time of the global financial crisis which has only widened in recent years. This is a trend replicated across much of the developed world.

Figure 6: U.S. business investments: tangible vs intangible – 2002 to 2020
(Source: HX Analytics, Bureau of Economic Analysis)



[2] How COVID-19 has pushed companies over the technology tipping point, McKinsey, October 2020.

Figure 7: U.S. intellectual property investments vs total business investments – 1980 to 2020 (Source: HX Analytics, Bureau of Economic Analysis)



Intangible investments' resilience to economic downturns is reinforced in Figure 7, which charts on a quarterly basis the proportion of IP funding relative to total business investments over the last 40 years in the United States. Not only has the share of intangible investments risen substantially during this period (from less than 15% in the early 1980s to in excess of 35% today), but distinct episodes of growth acceleration have occurred during every major recession since 1980.

Landscape of opportunity (and risk)

The prioritisation of intangible assets is all but assured in the post-COVID world. Not only was there unstoppable momentum behind digitalisation before the crisis, but companies must now accommodate some of the permanent changes that lockdown has brought.

Even more importantly, the last year has also demonstrated technology's importance in delivering product and service differentiation across all business sectors. Mindsets have been changed forever, with technology now inextricably linked to growth opportunities, rather than just a source of cost efficiencies.

The shift towards an asset-light economy is transformative, and intangible – and largely uninsured – exposures associated with it are substantive. The direction of travel is clear: nearly all economic value will be derived from intangible assets going forward.

This new economic order brings both challenges and opportunities for the world of (re)insurance. Clearly, the sector needs to adapt and improve in order to keep pace with clients' changing needs. In this volatile and unpredictable world, risks no longer fit conveniently into siloes of pre-existing coverages. Complex risks require thoughtful and bespoke responses, and it is incumbent on brokers and risk carriers alike to apply all the knowledge and expertise available to create solutions for new and increasingly intangible risks.

02

Insuring the invisible

The insurance market has risen to the challenge of adapting to periods of transformative change many times before.

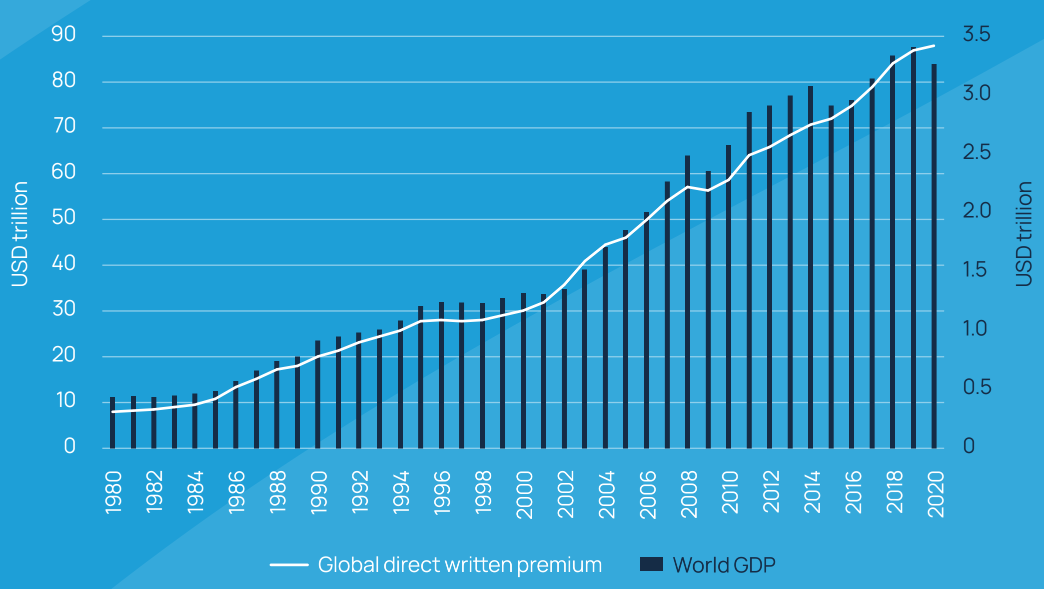
Its primary purpose of indemnifying policyholders' risks is just as important today as it was when it responded to the origin of shipping and international trade, the industrial revolution, the transportation revolution of the early twentieth century, the space age or, more recently, the rise of global terrorism and cyber risks.

THE INSURANCE INDUSTRY HAS LARGELY SUPPORTED CLIENTS IN ADJUSTING TO CHANGE AND, ULTIMATELY, STIMULATING GROWTH AND INNOVATION

Value of insurance

For all the criticisms levelled at the industry, one of the more justified (and detrimental) has been its inability to communicate effectively the huge value insurance brings to economies and societies. The close correlation between economic progress and insurance development (as shown by Figure 8) paints a picture of an industry that has largely supported clients in adjusting to change and, ultimately, stimulating growth and innovation.

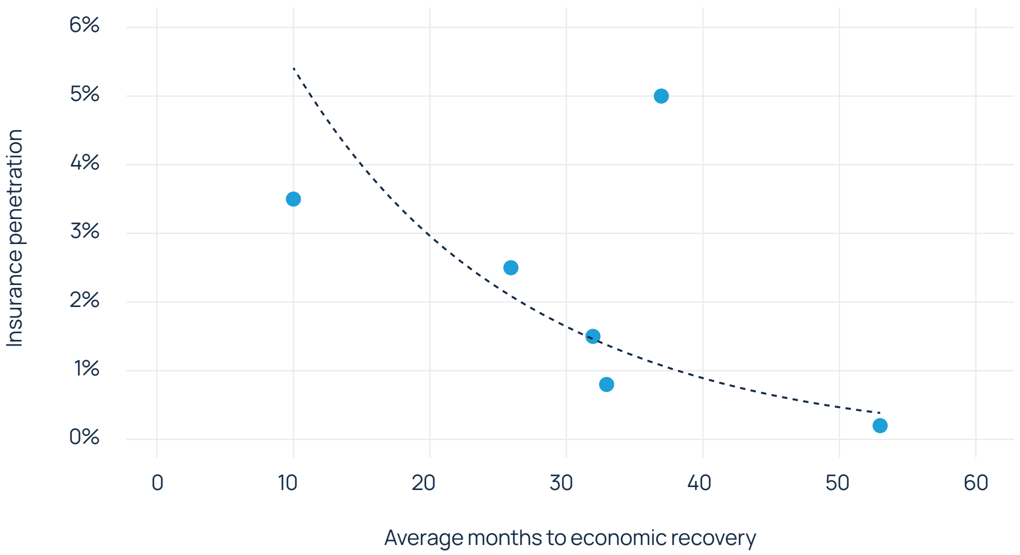
Figure 8: World GDP vs global direct written premium – 1980 to 2020
(Source: HX Analytics, IMF, Swiss Re)



The socioeconomic benefits of (re)insurance are wide-ranging: putting aside carriers' position as large, long-term investors in infrastructure projects and businesses, insurance is also a facilitator of risk taking and invention. Put simply, insurance is the engine oil (or battery in the Tesla) of economic activity.

The indemnification element also remains crucial to shoring up resilience and expediting recovery when the unexpected happens. Figure 9 shows how higher rates of insurance penetration in mostly developed countries have accelerated the speed of economic recovery by several months or even years following recent major natural catastrophes. Lower rates of insurance penetration, usually in developing countries, equate to longer periods of economic pain and prolonged hardship.

Figure 9: Insurance penetration vs post-disaster economic recovery
(Source: AXA XL, Cambridge Centre for Risk Studies Analysis)



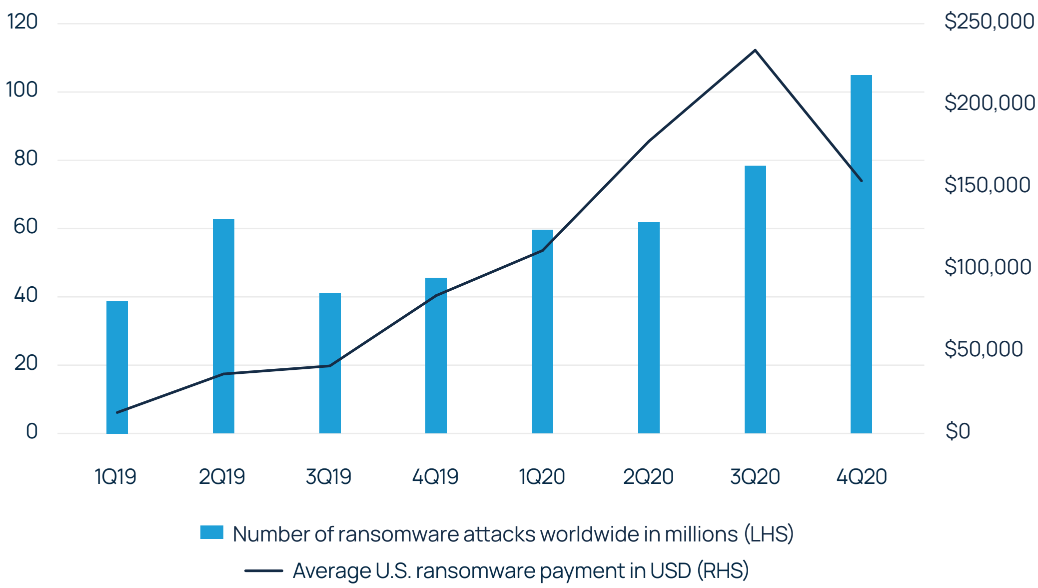
No sector can rival the insurance market's history and expertise of understanding, measuring and mitigating risk. At this time of economic transition and broad volatility, clients are looking to their insurance partners to provide solutions designed to meet today's intangible challenges.

From theory to reality

Important lessons have been learnt in the last 12 months. First and foremost, COVID-19 has brought the 'intangibility' of risk into focus. The pandemic, along with the rise in the frequency and severity of cyber claims – proliferating ransomware attacks being one eye-catching development (see Figure 10) but also other cyber incidents of huge loss aggregation potential, such as the SolarWinds, Sita and Microsoft Exchange breaches – are highlighting the need to reimagine the scope of insurability, as companies' exposure to new risks manifests.

> The nature and scale of these events have moved non-physical loss scenarios from the theoretical to the real world and, in doing so, caused a marked shift in risk perceptions.

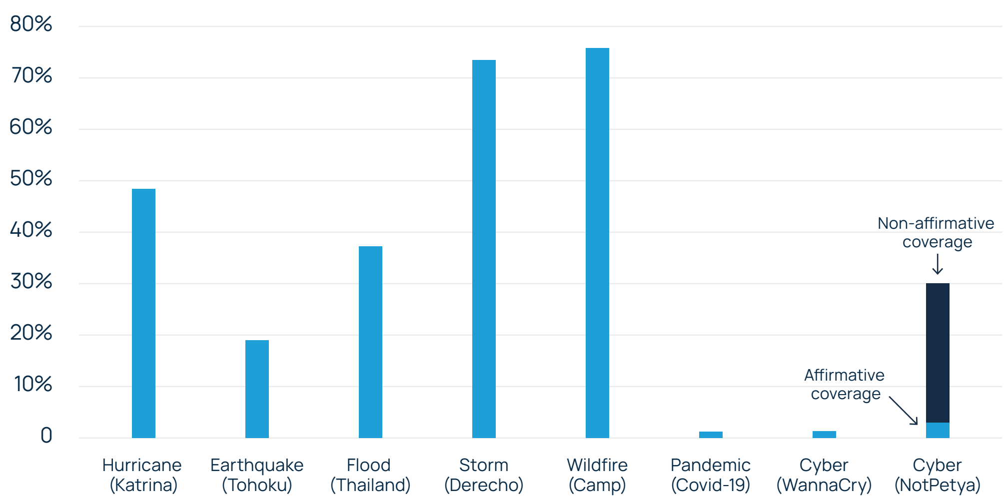
Figure 10: Frequency and severity of cyber ransomware incidents – 1Q19 to 4Q20
(Source: HX Analytics, SonicWall, Coveware)



The economic costs of COVID-19 are considerable, running into the trillions of dollars. The United Nations expects the global economy to lose nearly USD 8.5 trillion in output by the middle of 2022. Even at the top end of current insured loss estimates, (re)insurance will cover only a tiny fraction (approximately 1%) of this huge economic cost. Following year-end earnings announcements, (re)insurance carriers had announced approximately USD 35 billion of COVID-19 losses.

Protection gaps are of course not a new phenomenon, even in advanced economies, but their magnitude is often disproportionately large for perils with loss components of a non-physical nature (see Figure 11).

Figure 11: Proportion of major physical and non-physical losses covered by insurance – 2005 to 2020[3] (Source: HX Analytics, Munich Re, United Nations, PCS)



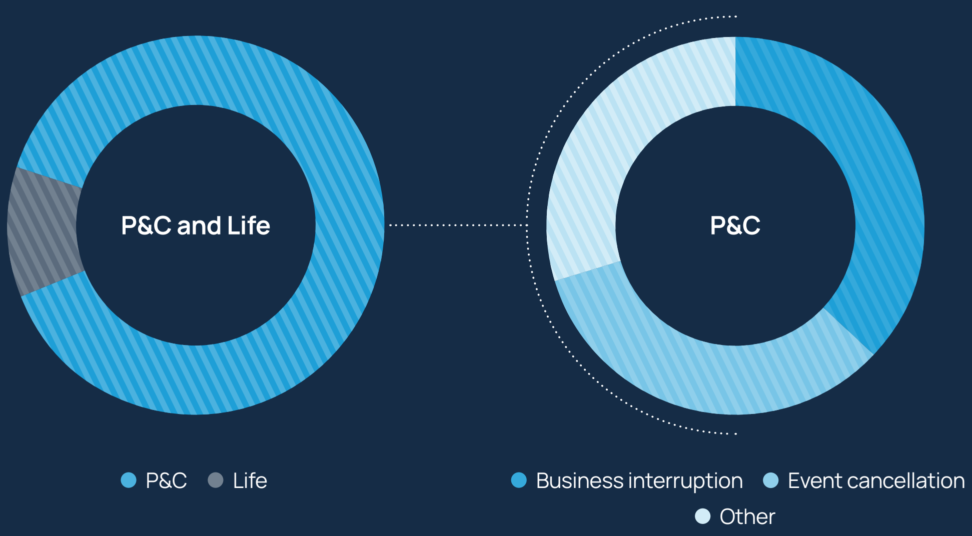
[3] Natural catastrophe events listed in Figure 11 – Hurricane Katrina (2005), Tohoku earthquake (2011), Thailand floods (2011), derecho thunderstorm (2020) and Camp wildfire (2018) – represent the most expensive losses for each respective peril. Recent examples of global events with non-physical loss dimensions include the WannaCry and NotPetya cyber attacks (both 2017) and COVID-19 (2020).

The COVID BI conundrum

COVID-19 is an unexpected and unpriced loss for the (re)insurance market. It stands out for its uncontained nature (geographical and duration) and its misunderstood consequences: the decision by governments to prioritise public health over economic activity meant the bulk of insured losses were pushed away from the life market and into the P&C market.

This unmodelled – and unmodellable – development has created complex coverage disputes around business interruption, where litigation is still at a relatively early stage. Longer-tail liability consequences could still emerge, paving the way for an unpredictable claims settlement process. Years are likely to pass before claims develop fully.

Figure 12: Reported IBNR COVID-19 losses at YE2020 by segment and line of business[4]
(Source: HX Analytics, HSBC, company reports)

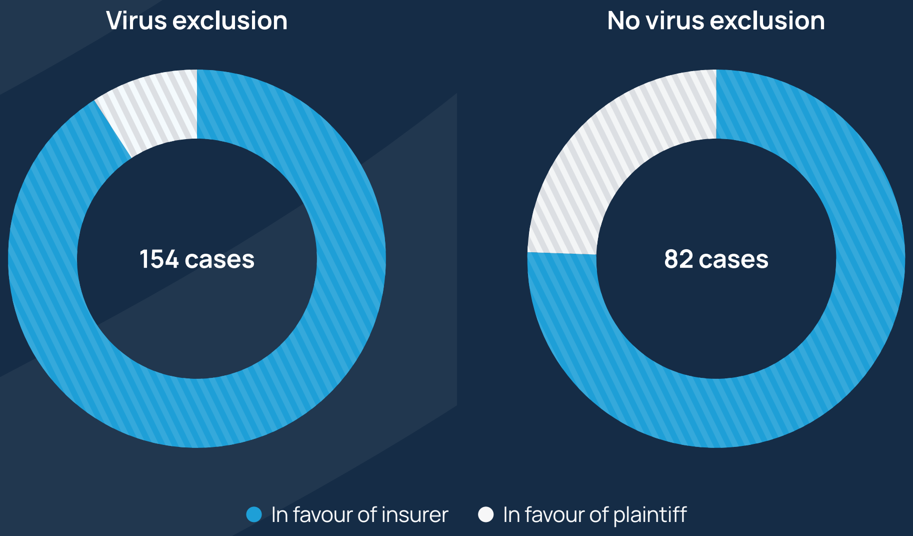


Debate and litigation about standard BI cover (i.e. that physical damage to property is required to trigger protection, even in the absence of exclusions) have highlighted the limitations of existing coverage for such systemic and intangible risks. Ultimately, buyers' needs have not been met during the pandemic.

This stems largely from an expectation (or perception) gap around the scope of coverage: the vast majority of all-risks commercial policies worldwide exclude cover for infectious diseases, and it is only right that contract terms are upheld in these circumstances. But it is equally important that lessons are learnt by risk carriers and brokers alike to strive for transparency by better communicating inclusions and exclusions to policyholders, and, ultimately, managing expectations around what is insurable, and the insurability of systemic risks more broadly.

[4] Average line of business breakdown across global, well diversified (re)insurers, where disclosed. Splits vary significantly by carrier depending on individual books of business.

Figure 13: COVID-19 U.S. judicial business interruption rulings
(Source: HX Analytics, UPenn Law)



The reputation of the insurance market has arguably been damaged more significantly by cases where contract wordings were at best ambiguous. In these circumstances, carriers too readily rejected claims with scant regard of the consequences, some predictable (customer wrath, adversarial headlines, spate of lawsuits, optics at a time of widespread hardship) and others not (successful litigation brought at the behest of regulators in certain jurisdictions that will have far-reaching implications for future cover).

The insurance industry can and must do better: retrospectively arguing that (loose) wordings were not intended for a loss scenario that has come to pass is not the way to win the hearts and minds of customers, particularly when they themselves are facing potentially existential financial pressures.

This cannot be the playbook for future losses. Wording clarity and contract certainty will be crucial going forward, as risks become increasingly intangible in disposition.

There are no easy answers: COVID has demonstrated that certain events are capable of causing BI losses at a global scale without any obvious physical consequences. Loss of revenue and disruption to production, operations and supply chains worldwide equate to significant economic damages across multiple countries and continents, which challenges the whole provision of risk transfer.

(Re)insurance alone – with its capital base of approximately USD 4 trillion – therefore cannot be the solitary answer. Carriers are only able to manage a finite amount of risk, and certain systemic events such as COVID-19 are simply beyond their financial capabilities. Given the exposures at play, some form of government involvement will be needed (as is already the case for other systemic perils), but the (re)insurance market should play a central – and risk-bearing – role in helping to drive the agenda and build resilience to future shocks at the margin, not just anticipated losses. Failure to do so would be an abdication of responsibility.

Intangible present and future

One of the more pronounced legacies of COVID-19 for risk managers and underwriters has been heightened risk awareness (and aversion), as well as increased exposure to intangible risks.

> The pandemic has revealed pre-existing vulnerabilities to an interdependent and interconnected world on the one hand but a greater reliance on digital technologies on the other.

Both of these themes are reflected in the top risks identified by Airmic's annual survey of risk managers in the last two years (see Figure 14). Risks emanating from what appear to be distinct perils like pandemics, cyber, business interruption, loss of reputation (or data) and supply chain / operational failures can actually be connected and can strike simultaneously, threatening significant disruption and financial harm to organisations.

Figure 14: Top risks and impacts for risk managers worldwide – 2020 vs 2019 (Source: Airmic)

2020 ranking		2019 ranking	
1	Business interruption post-cyber event	1	Loss of reputation and / or brand value
2	Loss of reputation and / or brand value	2	Business interruption post-cyber event
3	Failure of operational resilience	3	Political uncertainty
4	Disease and pandemics	4	Changes in regulation
5	Loss or theft of data	=5	Talent attraction / retention
6	Supply chain failure	=5	Loss or theft of data

Wider digitalisation and mass remote working environments have already seen cyber exposures escalate to unprecedented levels and brought associated risks such as information loss, IP security and reputational damage into sharp focus. As explained earlier, these structural changes are likely to accelerate further in the digital, post-COVID world where the lion's share of value will emanate from intangible assets.

Risk management

Now that intangibles are a major source of competitive advantage, and because their value is not easily measured, organisations need to create robust risk management frameworks similar to those that have long existed for tangible assets.

The nature of the risks associated with intangibles require new approaches, but should still be guided by basic risk management principles:

- **Executive leadership and prioritisation**
- **Strong participation from all relevant stakeholders**
- **Asset identification**
- **Economic value quantification**
- **Risk exposure evaluation**
- **Risk transfer**

By working towards this framework, companies can start to assess the value and / or manage the risks around intangibles and look to transfer elements of residual risk to the insurance market.

Approaches that incorporate a blend of risk mitigation, risk prevention and risk transfer will help build resilience in what is a highly unpredictable risk landscape, and serve companies well in securing competitive advantage and long-term success.

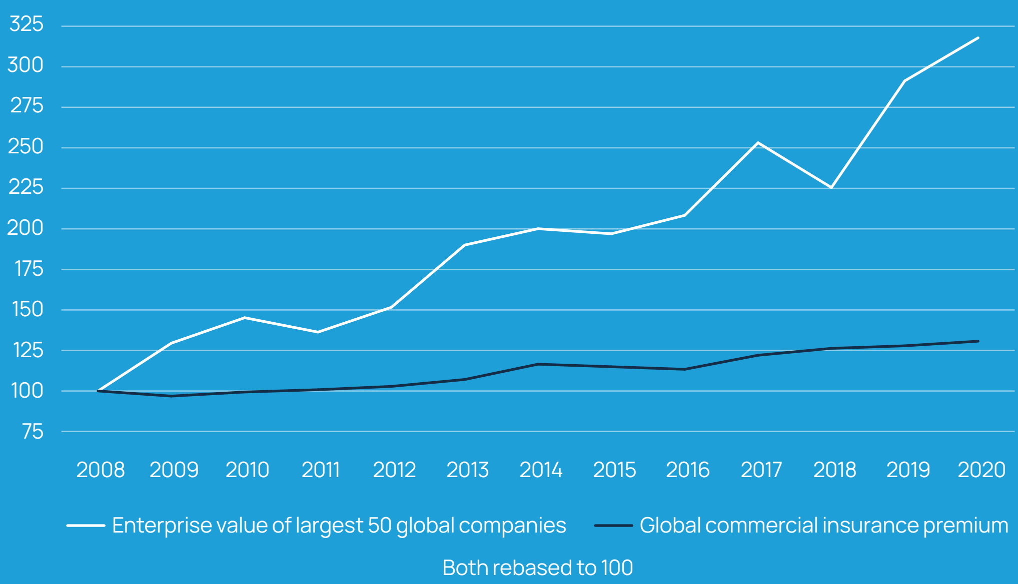
Commercial insurance penetration

The risk transfer sector today finds itself at an important juncture: widening protection gaps come at a time of heightened risk aversion and the highest insurance rate increases since the turn of the century. Whilst the pricing environment may be supportive for carriers in the near-term, a series of mega-trends – technological, environmental, macroeconomic and societal – are redefining risk characteristics like never before. Complacency cannot be allowed to set in where underwriters accept rate on renewals but shy away from new risks and new business.

> Irrespective of what happens to pricing over the coming years, the (re)insurance market must seize the opportunity and focus on doing what it has done so well several times over: offering flexible cover for the changing needs of clients and fulfilling the important societal role of protecting against new risks.

Businesses are constantly evaluating whether to retain or transfer risk, and there are signs that corporations are holding more risk on their balance sheets today than they were 10 or 20 years ago. Due in no small part to the growth of intangible assets, Figure 15 exposes a chasm that has grown over the last 12 years between large corporations' valuations and global commercial insurance premium growth.

Figure 15: Enterprise value of top 50 global companies vs global commercial insurance premiums (Source: HX Analytics, Swiss Re, Bloomberg)



There are of course a myriad of reasons for the surge in enterprise values during this time, and not all of this is insurable (or real). But it is indicative of a concerning reduction in the proportion of corporate risk being covered by insurance in the last decade or so: in the previous 12-year period (1995 to 2007), the underlying trends for global insurance premiums and the enterprise value of the top 50 companies globally were far more closely aligned.

From challenge to opportunity

This is certainly not the desired outcome for organisations: risk retention is an expensive business, especially in such an unpredictable risk environment when earnings volatility can be detrimental to valuations and costs of capital. It would take a brave CEO to predict what will happen in the next year, let alone the next 10 years: the need for accessible and applicable insurance products has never been greater.

The potential decline in commercial insurance penetration therefore needs to be arrested for three key, inextricable reasons: 1) first and foremost, to satisfy the risk transfer demands and needs of clients, 2) to leverage (profitable) premium growth from new risk pools and 3) to secure long-term relevance.

Failure on these three fronts would put the sector in danger of standing still or, even worse, losing relevance altogether.

> Organisations are already exploring ways to rework the traditional risk transfer value-chain. Late last year, Alphabet, the parent company for Google, directly accessed the catastrophe bond market for the first time, as it secured a capital markets-backed solution for supplementary earthquake insurance coverage for assets mostly located in California. Another (smaller) transaction followed quickly the following month.

A new approach is needed. The range of impacts associated with the proliferation of intangible risks are a real test for an underwriting model that has traditionally segmented mostly tangible assets into buckets of pre-existing coverages.

This siloed approach has long been called into question by clients, but whilst it may have been workable in an era when perils were more predictable and geographically contained, it will not be sufficient for complex and intangible risks that straddle different lines of business and jurisdictions. History is no longer a guide to the future.

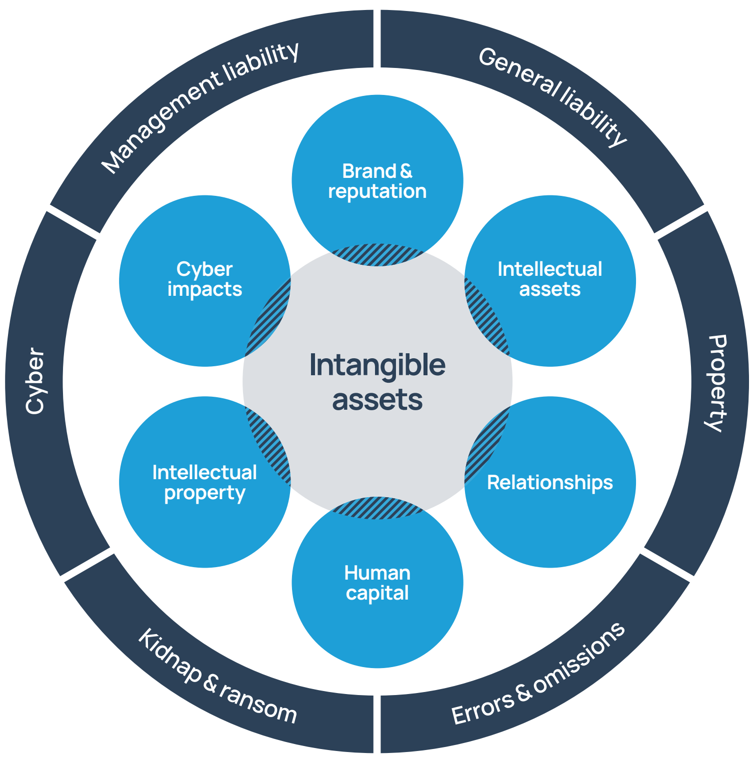
> History is no longer a guide to the future.

Evolution not revolution

A more outward perspective therefore needs to be applied in answering the call for solutions to intangible risks. Clients should this time be at the centre of conversations: what is it that they want and how should the market deliver? Brokers have a crucial role to play in representing businesses' needs and interests, and ensuring that the market supplies client centric solutions that provide the desired coverage.

There is work to do. Even today, too much insurance 'product innovation' is inward looking and focused on protecting against traditional perils within existing, siloed market structures. In order to bring clarity to businesses, the optimal outcome would be for insurers to offer comprehensive protection against a range of impacts that emanate from the proliferation of intangible assets, some of which are captured in Figure 16.

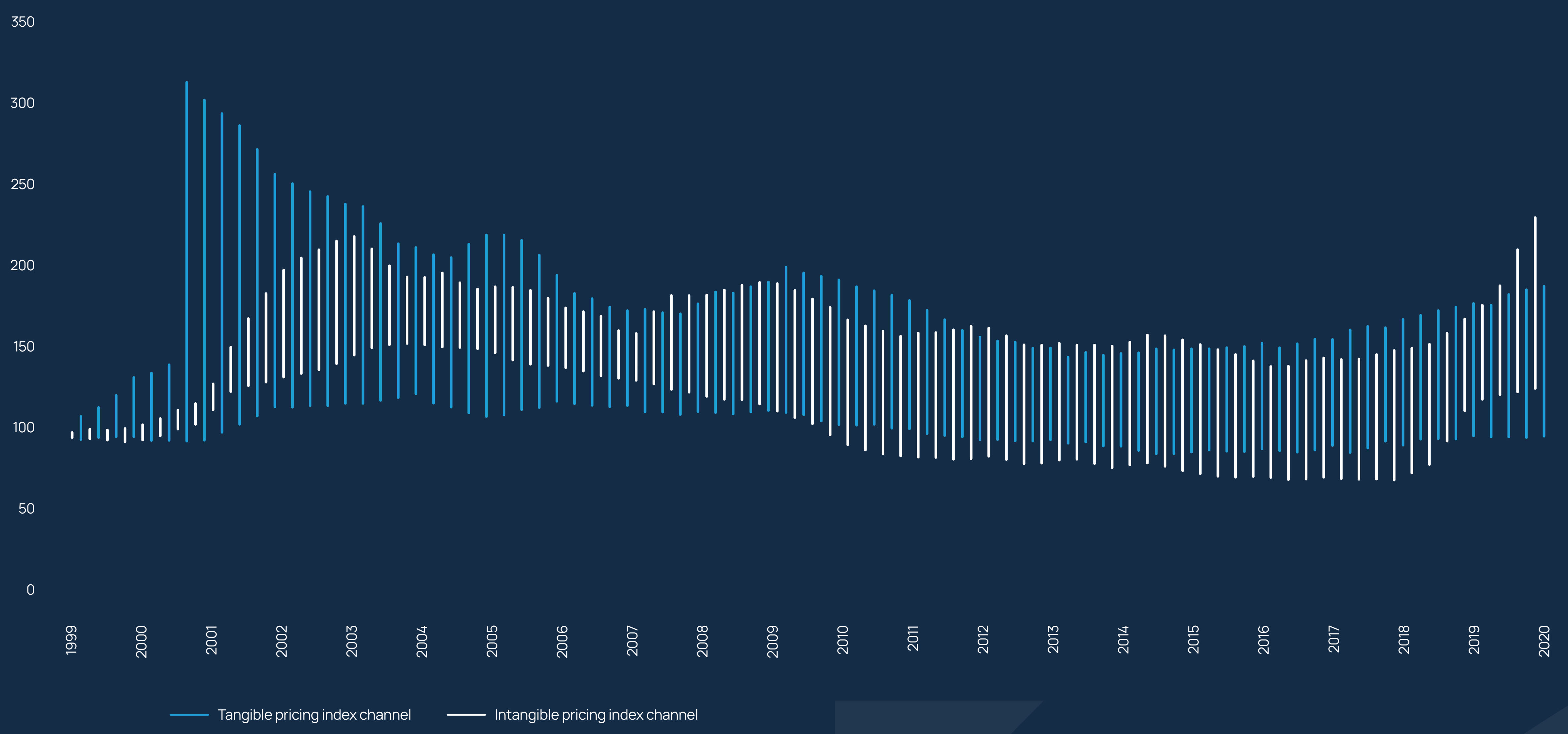
Figure 16: Intangible impacts and existing insurance coverage
(Source: HX Analytics)



No holistic solutions are currently available in the marketplace, but protection gaps could be plugged, in the short-term at least, by deploying strategically a suite of existing coverages to start to build resilience to intangible risks. The longer-term goal nevertheless should be to offer businesses the option of a 'one-shot' policy which provides comprehensive coverage for all-risks, both tangible and intangible.

In doing so, not only will the insurance market go a long way to reminding policyholders of its considerable value and ability to respond to fundamental socioeconomic change, but it will also provide all stakeholders with a new, vast and potentially lucrative pool of risk. Figure 17 shows how pricing trends over the last 20 years have developed for classes with more tangible and intangible biases, with a notable uptick in recent years for the latter compared to more traditional business.

Figure 17: Insurance pricing trends for lines of business with (in)tangible dispositions[5]
(Source: HX Nova Portal)



[5] Intangible pricing channel includes cyber, D&O, PI and other selected risks whilst tangibles includes property, aviation hull, marine hull, energy and other physical risks.

Howden – finding solutions

In Howden's *Hard Times* report released at the turn of this year, we talked about how the coalescence of mega-trends in the last few years has created one of the hardest insurance markets in recent memory. We also pointed out that conditions are not universally dislocated, and that differentiated risk management strategies and advice can still unlock access to capacity.

This remains the case three months on, but it does require the very best of intermediary expertise and leadership. Howden is renowned for developing creative client solutions for difficult to place risks. Whilst comprehensive cover for intangibles is not yet available, it is essential that the market works collaboratively to ensure existing coverages can be deployed to manage and mitigate intangible risks. The longer-term goal must be to facilitate holistic solutions that protect all insurable assets.

By leveraging expertise across the group, Howden is positioned uniquely to lead these efforts, and is already working with clients and markets to close protection gaps and ensure intangible exposures are being adequately managed.

Our capabilities in this area and track record of delivering pioneering solutions for risks that cross boundaries and business classes is unparalleled. Howden exists to deliver for our clients, and by spearheading the intangibles charge, we are proud to live up to our reputation as the challenger broker.

03

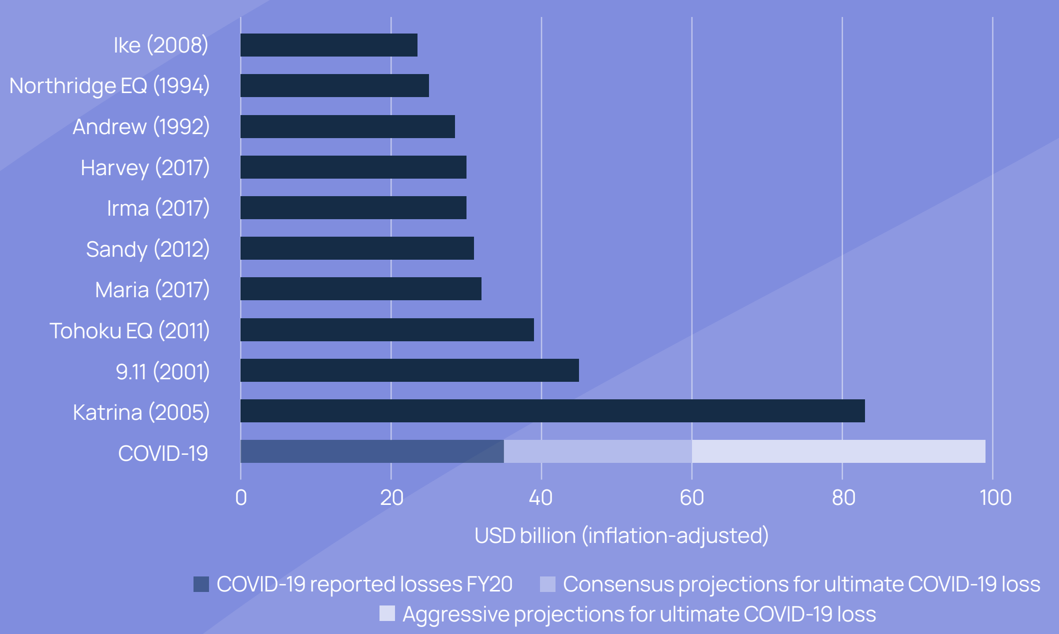
A systemic rethink

Diversification, whether geographical or by line of business, is the foundation of (re)insurance. As COVID-19 has demonstrated, risks that straddle multiple classes of business and do not respect the boundaries of geography and time pose systemic challenges to the sector.

Figure 18 shows how different loss scenarios for COVID compare to historical insured catastrophe events. The first (dark blue) shaded block shows reported COVID (re)insurance claims at year-end 2020, making it a sizeable 'major' event that has now surpassed all but one historical U.S. hurricane loss. The second block, which is a loose market consensus range for fully developed COVID loss projections, shows that the pandemic could rival or surpass the cost of the 9.11 terrorist attacks, should it come to pass. The third range captures some of the more aggressive estimates released, where rhetoric has honed in on the largest event ever, or even a USD 100 billion underwriting loss.

RISKS THAT STRADDLE MULTIPLE CLASSES OF BUSINESS AND DO NOT RESPECT **THE BOUNDARIES OF GEOGRAPHY AND TIME POSE SYSTEMIC CHALLENGES TO THE SECTOR.**

Figure 18: COVID-19 loss projections vs top 10 insured catastrophe losses
(Source: HX Nova Portal)



Risk accumulations

As stated earlier, the magnitude of this substantial insured loss, even at the higher end of expectations, equates to less than 1% of projected total economic costs. The sheer scale of the pandemic, coupled with the fact that the bulk of losses borne by (re)insurance have so far emanated from an unmodellable source (i.e. government mandated economic shutdowns), puts it beyond the scope and capabilities of the sector. Or, in other words, global pandemics that result in forced business closures across multiple jurisdictions are simply too vast to be covered by (re)insurance alone.

Carriers' immediate response has been to introduce exclusionary language for communicable disease into commercial policies. Heightened risk awareness around non-physical and borderless threats has also seen silent cyber risk come under considerable scrutiny from regulators as well as carriers, which is likewise leading to the imposition of exclusions. Cyber catastrophes that target critical infrastructures or cloud providers could see business interruption costs mount in a similarly systemic way.

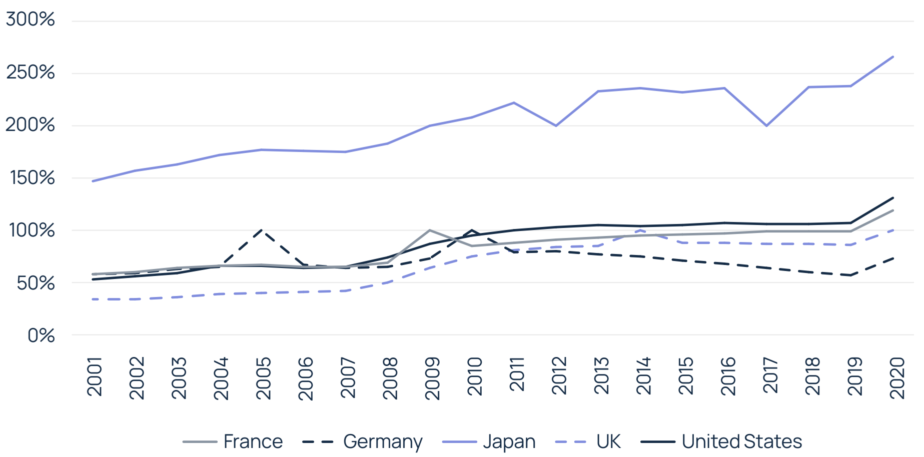
Public-private partnerships

Similar behaviour in the aftermath of the 9.11 terrorist attacks led to the creation of a number of state-backed terrorism pools to mitigate the withdrawal of private (re)insurance capacity. This has proved to be a highly successful and effective model: not only have state guarantees seldom been called upon in the 20 subsequent years, but, encouraged by the security of government backing in the event of a major loss, private capital quickly returned to the terror market and is today the source of abundant capacity and product innovation.

There is unsurprisingly widespread support today for the introduction of similar government-backed (or funded) schemes to tackle global pandemics and other systemic risks. These are different times, however, as economic conditions have deteriorated significantly and government debt in most advanced economies has soared to new heights after recording exceptional increases in 2020 (see Figure 19).

The prospect of adding more risk to already strained public balance sheets has seen most lawmakers move cautiously so far. Some, including the British government, are now reviewing long running commitments made to terrorism pools, in order to either reduce their liabilities or even monetise them.

Figure 19: Gross government debt as a share of GDP in advanced economies – 2001 to 2020
(Source: HX Analytics, International Monetary Fund)



Removing the tail

A more targeted approach to government backing is inevitable in this high debt environment. Some form of state participation and risk pooling is nevertheless crucial in finding sustainable solutions: systemic risks challenge the provision of (re)insurance, and require all stakeholders – including corporations, underwriters, intermediaries and governments – to work together to create better solutions for future events.

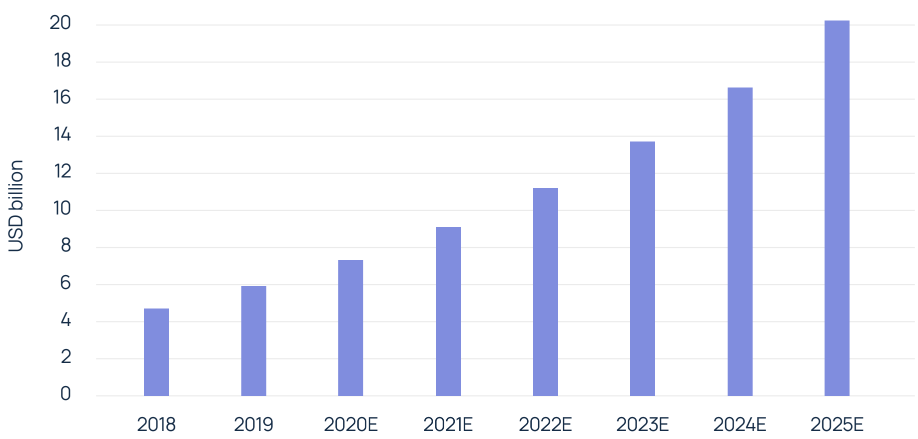
The insurability of low probability, high impact perils is likely to be one of the key challenges of the next decade, and it is important sufficient time is taken to create mechanisms that are sustainable and provide businesses with the coverage clarity that they crave.

This offers the risk transfer sector an opportunity to step up and drive the agenda around pandemics, cyber and other intangible systemic risks. Given the expertise and technical capabilities within the world of (re)insurance, not to mention the infrastructure to distribute policies and pay claims, no industry is better placed to coordinate and lead the response.

> Howden believes that carriers should take a central – and risk bearing – role in the public-private partnerships that emerge from these discussions.

Weightings between government and private market participations should vary according to the levels of risk: whereas global pandemics are likely to require more substantial state support, cyber has a flourishing standalone market (see Figure 20), backed by sophisticated modelling tools, that already provides the coverage required for risks around data and internet-based technologies, thereby only requiring backing for extreme, business interruption-led loss scenarios.

Figure 20: Gross written premium for global cyber insurance market – 2018 to 2025
(Source: Munich Re)



Risk and reward

Similarly to the terrorism model that came before, future mechanisms for systemic perils will, over time, facilitate a better understanding of the risks and aggregations involved, and incentivise risk mitigation. This, in turn, is likely to result in innovative (re)insurance and insurance-linked securities structures that attract more capital and, ultimately, underwrite more risks.

The global risk landscape is changing like never before, which only serves to underscore the importance of risk transfer. Carriers and brokers alike must now apply their capital (financial and intellectual) to meet rapidly changing client needs. Whilst conditions are unquestionably difficult, insurance is still a well-functioning market, and it is incumbent on all stakeholders to respond to long-term trends by creating solutions for new and increasingly intangible risks.

Howden exists to provide differentiated advice to clients. By bringing important sector trends to the fore, Howden will inform the discussion, enabling us to facilitate the most innovative solutions. We look forward to working closely with insurance and reinsurance companies to do just that, and supporting clients in managing change and securing the best coverage available in the marketplace.

THE GLOBAL RISK LANDSCAPE IS CHANGING LIKE NEVER BEFORE, WHICH ONLY **SERVES TO UNDERSCORE THE IMPORTANCE OF RISK TRANSFER.**

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