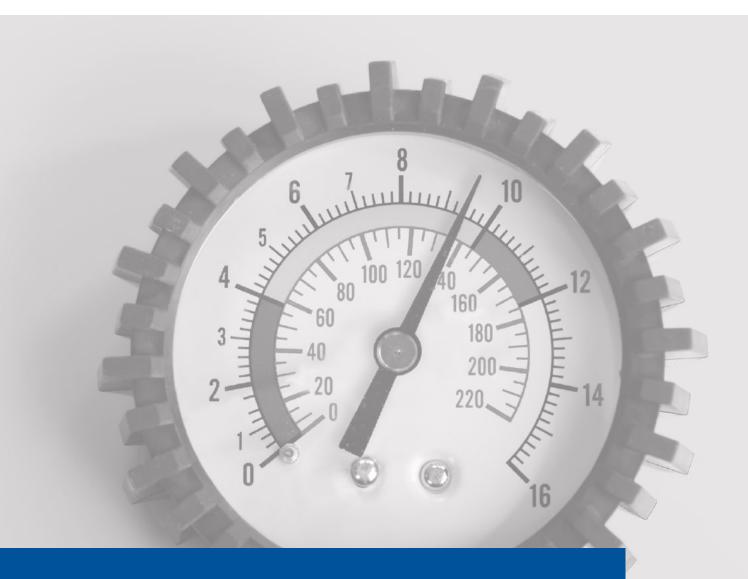


ALLIANZ RISK BAROMETER

IDENTIFYING THE MAJOR BUSINESS RISKS FOR 2021

The most important corporate perils for the next 12 months and beyond, based on the insight of 2,769 risk management experts from 92 countries and territories.





About Allianz Global Corporate & Specialty

Allianz Global Corporate & Specialty (AGCS) is a leading **global corporate insurance carrier** and a key business unit of Allianz Group. We provide **risk consultancy**, **Property-Casualty insurance solutions** and **alternative risk transfer** for a wide spectrum of commercial, corporate and specialty risks across 10 dedicated lines of business.

Our customers are as diverse as business can be, ranging from Fortune Global 500 companies to small businesses, and private individuals. Among them are not only the world's largest consumer brands, tech companies and the global aviation and shipping industry, but also wineries, satellite operators or Hollywood film productions. They all look to AGCS for smart answers to their largest and most complex risks in a dynamic, multinational business environment and trust us to deliver an outstanding **claims experience**.

Worldwide, AGCS operates with its own teams in **31 countries** and through the Allianz Group network and partners in over 200 countries and territories, employing over 4,450 people. As one of the largest Property-Casualty units of Allianz Group, we are backed by strong and stable **financial ratings**. In 2019, AGCS generated a total of €9.1 billion gross premium globally.

www.agcs.allianz.com/about-us/about-agcs.html

METHODOLOGY

The 10th **Allianz Risk Barometer** is the biggest yet, incorporating the views of a record 2,769 respondents from 92 countries and territories. The annual corporate risk survey was conducted among Allianz customers (global businesses), brokers and industry trade organizations. It also surveyed risk consultants, underwriters, senior managers and claims experts in the corporate insurance segment of both Allianz Global Corporate & Specialty (AGCS) and other Allianz entities.

Respondents were questioned through October and November 2020. The survey focused on large- and small- to mid-size enterprises. Respondents were asked to select the industry about which they were particularly knowledgeable and to name up to three risks they believed to be most important.

Most answers were for large-size enterprises (>\$500mn annual revenue) [1,234 respondents 44%]. Mid-size enterprises (\$250mn to \$500mn revenue) contributed 495 respondents (18%), while small-size enterprises (<\$250mn revenue) produced 1,040 respondents (38%). Risk experts from 22 industry sectors were featured.

Ranking changes in the **Allianz Risk Barometer** are determined by positions year-on-year not percentages.

All currencies listed in the report are in US\$ unless stated.

¥ View the full regional, country and industry risk data



2,769 respondents



92 countries and territories



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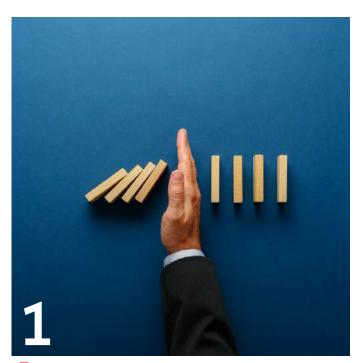
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THE MOST IMPORTANT GLOBAL BUSINESS RISKS FOR 2021

KEY

- Risk higher than in 2020
- Risk lower than in 2020
- (1) 2020 risk ranking and %



2020: 37% (2)

Business interruption (incl. supply chain disruption)







Pandemic outbreak

(e.g. health and workforce issues, restrictions on movement)¹





2020: 39% (1)

Cyber incidents

(e.g. cyber crime, IT failure/outage, data breaches, fines and penalties)







Market developments

(e.g. volatility, intensified competition/new entrants, M&A, market stagnation, market fluctuation)²





19%

Changes in legislation and regulation

(e.g. trade wars and tariffs, economic sanctions, protectionism, Brexit, Euro-zone disintegration)







Natural catastrophes (e.g. storm, flood, earthquake, wildfire)











2020: 11% (10)

Macroeconomic developments

(e.g. monetary policies, austerity programs, commodity price increase, deflation, inflation)³





Climate change/ increasing volatility of weather

13%





(1) 2020: 9% (11)

Political risks and violence

(e.g. political instability, war, terrorism, civil commotion, riots and looting)



Watch our short film about the top 10 risks for 2021 لا

צ View the full Risk Barometer 2021 rankings here

Source: Allianz Global Corporate & Specialty Figures represent the number of risks selected

Figures represent the number of risks selected as a percentage of all survey responses from 2,769 respondents.

All respondents could select up to three risks per industry, which is why the figures do not add up to 100%.

- 1 Pandemic outbreak ranks higher than cyber incidents based on the actual number of responses
- Market developments ranks higher than changes in legislation and regulation based on the actual number of responses
- Macroeconomic developments ranks higher than climate change based on the actual number of responses

ALLIANZ RISK BAROMETER 2021: TOP THREATS AROUND THE WORLD

The graphics show the top three risks in **selected countries** and whether each risk is considered to be more or less important than 12 months ago or is in the same position. **Source:** Allianz Risk Barometer 2021.













BRAZIL











1 Cyber incidents
47% •





1 Pandemic outbreak



2 Business interruption
42% •



2 Business interruption
46% •



2 Pandemic outbreak



2 Business interruption
33%



3 Changes in legislation and regulation
38%

→



3 Pandemic outbreak
29% •



3 Cyber incidents 37% **⊙**



2 Changes in legislation and regulation

33% (*)





GERMANY















3 Pandemic outbreak















THE COVID TRIO





Business interruption (incl. supply chain disruption)



Business interruption ranking history:

2019: 1 2018: 1 2017: 1 2016: 1

Top risk in: Americas

- Austria
- Cameroon
- Canada
- Denmark
- Germany
- Netherlands
- Singapore
- Switzerland
 USA

Given the unprecedented disruption caused by the coronavirus outbreak, it is no surprise that business interruption and pandemic outbreak top the 2021 **Allianz Risk Barometer**. Pandemic is the biggest climber this year (up 15 positions), with cyber incidents ranking a close third. All three risks – and many of the others in this year's top 10 – are interlinked, demonstrating the growing vulnerabilities and uncertainty of our highly globalized and connected world, where actions in one place can spread rapidly to have global effects. Looking forward, the pandemic shows companies need to prepare for a wider range of business interruption triggers and extreme events than previously. Building greater resilience in supply chains and business models will be critical for managing future exposures.

Covid-19 has dominated the risk landscape over the past year, adding to already growing concerns for business interruption and cyber risk exposures among risk professionals, given the increasing reliance on technology and global supply chains. Prior to the pandemic, business interruption had already finished at the top of the **Allianz Risk Barometer** seven times over the past decade. Meanwhile, cyber risk has regularly ranked in the top three corporate perils in recent years, coming first in 2020.

Individual companies, and even entire sectors, have suffered large business interruption events in the past, but the pandemic of 2020 is the first catastrophic event to hit a modern globalized and interconnected economy. The world has changed fundamentally over recent decades and this has led to accumulations of risks and new loss triggers.

The pandemic has demonstrated just how vulnerable the world is to unpredictable and extreme events and has highlighted the downside of global production and supply chains. When container shipping was effectively grounded in Spring 2020, with fleets taking numerous ships out of service in response to capacity shortfalls, global supply chains came under pressure. Subsequently, components failed to arrive and production came to a standstill in many industries, especially in the automotive sector.

A study by Euler Hermes¹ found that almost all (94%) companies surveyed reported a Covid-19-induced disruption to their supply chains, while more than a quarter (26%) of US companies reported "severe disruption" as a result of the pandemic. This means awareness of business interruption risk is now at the very top





Pandemic outbreak

(e.g. health and workforce issues, restrictions on movement)







Cyber incidents

(e.g. cyber crime, IT failure/outage, data breaches, fines and penalties)



organizational level. It has become a discussion not just for risk professionals but for company boards and shows the need for businesses to build more resilient supply chains, as well as to find new ways to address uninsurable risks. Covid-19 is a reminder that not all perils are insurable, and that risk management and business continuity planning play a critical role in helping businesses survive extreme events.

The outbreak has also shown that business interruption is highly correlated with many of the risks of most concern to businesses today as identified in the **Allianz Risk Barometer**, such as natural catastrophes and climate change, political risks and civil unrest, and even rapid changes in markets, in addition to cyber.

"Business interruption is the consequence – it is the impact on the balance sheet – caused by perils," says **Philip Beblo, Global Practice Group Leader Utilities & Services, IT Communication at AGCS.** "Given the widespread disruption caused by Covid-19, it is no surprise that it is ranked as the highest peril, while cyber was already one of the most concerning potential causes of business interruption."

One of the big lessons learned from the pandemic is that extreme business interruption events are not just theoretical, but a real possibility. While a "known-risk", the coronavirus pandemic was a surprise event of global

magnitude, with many unexpected consequences. For example, a new strain of Covid-19 even led to the sudden closure of UK ports and borders in late December 2020, coinciding with existing port congestion during the Christmas period and the end of the Brexit transition period. Other potential triggers for large-scale business interruption events in future could include environmental or natural disasters, further disease outbreaks, a large-scale cyberattack or blackout, or even a solar storm.

The consequences of the pandemic are also likely to heighten business interruption risks in other areas in coming years. Even as the immediate health risks of the pandemic ebb with vaccinations, the accelerated push to digitalization will likely bring new risks, while the economic, societal and political repercussions of the pandemic could also bring sources of disruption for years to come.

"Businesses have seen the consequences of the pandemic – the loss of revenue and disruption to production and supply chains – which has resulted in heightened awareness of the potential for losses from both traditional physical sources of business interruption and non-physical damage triggers. The pandemic has shown that business interruption risk is not isolated to a geography or sector, and that it can be overarching and span different geographies, markets and customers," says Beblo.

Pandemic outbreak ranking history:

2019: 16 2018: 17

2018: 17 2017: 19

2016: 19

Top risk in: Africa & Middle East

- Australia
- AustratiaBulgaria
- China
- Colombia
- Croatia
- Greece
- Hong KongHungary
- Kenya
- Morocco
- NigeriaPoland
- Portugal
- Romania
- Russia
- # UK

COVID-19 HEIGHTENS BUSINESS INTERRUPTION AND CYBER FEARS

The rollout of coronavirus vaccines provides some hope that the worst effects of the pandemic will subside in 2021, although measures to contain the virus are expected to remain in place for some time yet. However, the economic, political and societal consequences of the pandemic are likely to be a source of heightened business interruption risk in the years ahead.

When asked which change caused by the pandemic will most impact businesses, **Allianz Risk Barometer** respondents cited the acceleration towards greater digitalization, followed by more remote working, growth in the number of insolvencies, restrictions on travel/less business travel and increasing cyber risk. All

these consequences will influence business interruption risks in the coming months and years.

The knock-on effects of the pandemic can also be seen further down the rankings in this year's Risk Barometer. A number of the climbers in 2021 – such as **market developments**, **macroeconomic developments** and **political risks and violence** – are in large part a consequence of the coronavirus outbreak. For example, the pandemic was accompanied by civil unrest in the US related to the **Black Lives Matter** movement, while anti-government protest movements simmer in parts of Latin America, Middle East and Asia, driven by inequality and a lack of democracy.

"Disruption associated with political, economic and social trends, like strikes, protests and civil unrest, is often underestimated. The economic consequences of the pandemic could fuel further political and social unrest in 2021 and beyond, with potential implications for supply chains and business interruption," says Beblo.

Rising insolvency rates could also affect supply chains. According to Euler Hermes², the rebound in insolvencies will start in the second half of

2 Euler Hermes, Calm Before The Storm: Covid-19 And The Business Insolvency Time Bomb, July 16, 2020



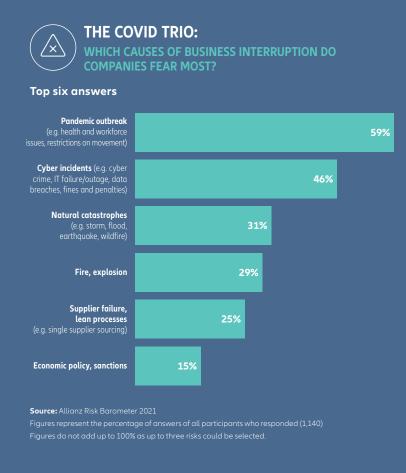
2021, along with the gradual phasing out of support measures for companies. The trade credit insurer's global insolvency index is expected to surge by +25% y/y globally in 2021 and by +29% in the Eurozone. In 2022, insolvencies should increase by +12% worldwide and +17% in the Eurozone.

"The direct effects of the pandemic could recede in 2021 but the consequences of Covid-19 will be with us for some time after," says Beblo. "The economic effects of coronavirus could affect demand while suppliers could file for bankruptcy. Cyber risks will also be a more significant source of business interruption risk going forward, as the pandemic has hastened digitalization and remote working."

"Displaced workforces create new opportunities for increasingly well-organized and funded cyber criminals to exploit and gain access to networks and sensitive information," says **Georgi Pachov, Head of Portfolio Steering and Pricing at AGCS.** "At the same time the potential impact from human error or technical failure incidents, already one of the most

Pricing at AGCS. "At the same time the potential impact from human error or technical failure incidents – already one of the most frequent drivers of cyber insurance claims – may also be heightened."





THE COVID TRIO: WHAT CHANGES DO YOU EXPECT

Top six answers

PANDEMIC THAT WILL MOST IMPACT YOUR COMPANY?

Acceleration towards greater digitalization More remote working 558



Source: Allianz Risk Barometer 2021

Figures represent the percentage of answers of all participants who responded (2,769) Figures do not add up to 100% as up to three risks could be selected.



CYBER, A "BLACK SWAN" IN THE MAKING?

Pre-Covid, both society and business were already growing more dependent and reliant on technology and intangible assets and this trend is likely to accelerate as companies change business models and ways of working.

Covid-19 will likely spark a period of innovation and market disruption, accelerating the adoption of technology, leading to regulatory changes, as well as hastening the demise of incumbents or traditional sectors, and giving rise to new competitors. A survey by McKinsey³ found that companies may have accelerated the digitalization of supply chains and operations by three to four years, while the importance of digital products has accelerated by seven years.

Society's growing reliance on technology and the threat posed by cyber is a particular area of concern. Technology is a double-edged sword for business interruption. While it can be a useful tool for business continuity, for example by switching to remote working and process monitoring or online sales and servicing, it also brings new risks.

The digitalization of supply chains could potentially reduce the frequency of business interruption events, but it may also lead to more severe disruption when the underlying technology goes wrong. "Digitalization increases transparency in the supply chain, which means organizations can react faster and better," says Pachov. "However, a cyber-attack or a technical failure causing a major outage could lead to a severe business interruption event."

The pandemic may have opened a "Pandora's Box" of cyber business interruption risks, according to Pachov. "The pandemic has demonstrated the need to 'expect the unexpected' and watch out for the pitfalls of digitalization. We may be about to open a box of 'Black Swan' events, with unexpected consequences from the pandemic, such as future cloud outages."

"Everybody is rushing to embrace technology and embark on digital transformation, which could put technology companies under immense pressure to meet growing demand for cloud and other IT services. Tech companies will be working close to capacity and there will come a point when technology and servicing will become stretched or reach their limitations. If digitalization is not done properly [with due consideration for the risk/building resilience] then a future 'Black Swan' scenario involving the failure of a major cloud provider could become a reality," says Beblo.

TRADITIONAL BUSINESS INTERRUPTION RISKS STILL NEED TO BE MANAGED

The pandemic has added to already growing awareness of business interruption exposures triggered by non-physical damage, such as cyber, blackouts, political risk, or disruption caused by a third-party supplier.

However, natural catastrophes, extreme weather and fire remain the main causes of business interruption for many industries, and are the biggest threat for manufacturing and industrial plant and equipment.

"Despite the ongoing trend for digitalization, traditional physical risks of fire and extreme weather will not disappear. Risk management has improved but fire remains an ever-present risk and a major cause of business interruption. Losses can be very large and we continue to see a trend for severity of business interruption losses over time," says Beblo.

The cost of large business interruption claims following fire and extreme weather has been increasing with the trend towards higher values and more concentrated supply chains. Traditional business interruption exposures are also rising with climate change, as more volatile and severe weather brings the increased risk of storms, floods and wildfires.

"Just because emerging risks like cyber are coming onto the stage, it does not mean that traditional business interruption triggers are any less dangerous," says Beblo. "They will be just as relevant going forward, and in the case of climate change will become even more of a threat to businesses in the future. The climate is changing and we will increasingly see risks such as more intense hailstorms, floods, tornadoes and hurricanes in areas that are not always associated with such extreme events."





BUILD MORE CHAINS

One positive change to emerge from the pandemic is a growing recognition of the need to manage globalization better and build more resilient supply chains.

According to **Allianz Risk Barometer** respondents, improving business continuity management is the main action companies are taking in order to de-risk their supply chains and make them more resilient in the face of pandemic risk. This is followed by developing alternative/multiple suppliers, investing in digital supply chains, intensifying supplier selection, auditing and risk assessment and inventory/ safety stock management.

The coronavirus has added to existing pressures manufacturing as modern manufacturing methods, reduced stock levels and increased reliance on fewer suppliers have driven up the natural catastrophes.

"In reaction to the pandemic we are seeing clients make changes to their supply chains, including nearshoring (bringing production to a nearby country) and some reshoring and changing the locations of supplies, particularly for US companies. Companies are increasingly thinking about the consequences of events like natural catastrophes and civil unrest, and how quickly they will be able to find alternative suppliers," says Beblo.

BUSINESSES TO RESILIENT SUPPLY

According to a <u>survey of European risk</u> managers⁴, 46% expect to make changes to supply chains following the pandemic, of which 70% intend to find alternative suppliers. The Euler Hermes Global Supply Chain Survey found that a similar number (62%) of US and European companies are considering looking for new suppliers, while 30% are in favor of near-shoring. In fact, 20% of companies surveyed consider finding new suppliers at home.

17%

17%

THE COVID TRIO:

OF PANDEMIC RISK?

manaaement

suppliers

Developing alternative/multiple

Investing in digital supply chains

Intensifying supplier

auditing and risk

Inventory/safety

Regional diversification of

suppliers

Source: Allianz Risk Barometer 2021

stock management

62%

45%

"Clients are looking to de-risk their supply chains to achieve operational resilience. Covid-19 showed just how vulnerable global supply chains have become and highlights how the most agile companies and those that were quickest to react to the pandemic were those that had an adaptive and embedded risk management approach," says Beblo.

Increased resilience of supply chains is to be welcomed. It will not only help with insurability of supply chain exposures, but it will also help clients react faster to market trends. "It's not just about limiting insurance claims, more resilient supply chains should translate to more successful companies," says Pachov.

to rethink supply chains, which in recent decades have become increasingly global and complex. Insurers have experienced a significant increase in the severity of business interruption claims in industries like automotive, electronics and costs associated with fires and

What is a digital supply chain? The result of the application of

electronic technologies to every aspect of the endto-end supply chain.

RESILIENCE AND BUSINESS CONTINUITY PLANNING CRITICAL FOR MANAGING FUTURE EXPOSURES

Business continuity planning has come into sharp focus during the pandemic. Many companies found their plans were quickly overwhelmed by the fast pace of the pandemic and changes in public health measures. However, many were also quick to set up "warrooms" or dedicated Covid-19 response committees that brought together key corporate functions and senior management.

Business continuity planning needs to become more holistic and dynamic, according to Thomas Varney Regional Manager of Risk Consulting, North America, at AGCS. "Plans need to be constantly updated and tested, including having alternative suppliers available for raw and intermediate materials. They need to be cross-functional and integrated into an organization's risk management and strategic processes."

As companies prepare for future extreme business interruption events, they will need to consider a broader range of scenarios than they do at present. Identifying and understanding potential "Black Swan" events will be challenging, but the key to survival will be the ability for businesses to respond quickly.

"The best way for businesses to approach these types of situations is through business continuity scenario planning that challenges working environments and the ability of supply chains under various scenarios," says Varney. "The ability to understand and proactively handle potential business impact scenarios is better resolved when the crisis is not upon a business."

"Companies need to think ahead and consider how their business, market, customers and suppliers might change in a given scenario," adds Pachov.



Meeting the challenge of business interruption risk will require risk professionals to find ways of quantifying exposures, including areas like non-physical damage business interruption and emerging risks.

"Businesses need to focus more on the quantification of business interruption triggers and their potential impact, and not just rely on high level risk management strategies or 'blue sky' thinking. They need to develop the tools and systems needed to understand business interruption triggers and measure the impact," says Pachov.

"The pandemic has shown there is still a lot of work to be done on business continuity and business resilience," adds Beblo. "In order to manage the risks and develop solutions, they will need to collect data, utilize analytics, and then consider what is insurable. Risk management today is very good at insurable risks, but could do better when it comes to the non-insurable risks, like intangible assets, supply chains and reputation.

"Resilience will be critical to surviving future business interruption events. It needs to be embedded in the organization's culture and helps to make the remaining business interruption insurable. Resilience is also good for insurance. The insurance industry cannot take away all challenges but we can work in partnership with clients. We are able to underwrite some of the biggest drivers of business interruption – such as natural catastrophes and fire, as well as some cyber – and offer risk engineering services and alternative risk transfer solutions to support our clients in these challenging times."



¥ Find out more about how Covid-19 is changing claims trends and risk exposures for companies and their insurers.









Ranking history

2019: 2 2018: 2 2017: 3 2016: 3

Top risk in: Asia Pacific Europe

- Belgium
- Brazil
- Denmark
- FranceHungary
- India
- 1 Italy
- JapanSouth Africa
- South Korea
- Spain
- Sweden

FOCUS ON CYBER INCIDENTS

Cyber incidents may have slipped to third position but concern remains high with more respondents picking it as a top peril than in 2020. Cyber crime now costs the global economy over \$1trn¹ – more than one per cent of global GDP – up 50% from two years ago. Meanwhile, the threat of business interruption, whether from ransomware attacks, technical failure or via the supply chain, more severe consequences from data breaches and risks emerging from the acceleration of digitalization post-Covid-19 loom large.

DATA BREACHES AND RANSOMWARE BIGGEST THREATS

According to Allianz Risk Barometer respondents, data breaches rank as the cyber exposure companies are most concerned about over the next year, followed by IT vulnerability due to increased remote working and ransomware attacks, which have been increasing in both number and severity. Data breaches already rank as the top cause of cyber incidents for businesses, followed by external events such as ransomware attacks, while employee errors ranks third, reflecting the fact that mistakes and technical problems are the most frequent generator of cyber insurance claims by number, according to AGCS analysis.

"Data breaches remain the biggest concern for most companies, particularly those that deal with large amounts of personal data, such as retailers, healthcare providers and banks," says Catharina Richter, Global Head of the Allianz

Cyber Center of Competence, which is embedded into AGCS. "However, ransomware attacks are an ongoing threat for an increasing number of industries, such as manufacturing and service sectors, and can be a cause of significant business interruption. Ransomware incidents and privacy cases will remain prevalent issues for companies in 2021. Attackers continue to innovate while regulatory enforcement and fines for data breaches continue their upwards trend. New cyber loss scenarios are constantly emerging."

DATA AND PRIVACY COSTS RISE

The consequences of data breaches are increasing, with higher fines and regulatory costs, and growing third party liability. Under the General Data Protection Regulations (GDPR) the number of fines have been growing in Europe – almost 200 were issued by authorities between March 2019 and May 2020 – while jurisdictions around the world have been introducing stricter data laws, most recently California, Canada and Brazil. Increasingly, breaches and regulatory actions are followed by litigation, with a number of group actions now pending in the UK as well as the US.

"Following on from the GDPR in Europe, we are seeing more stringent data protection and privacy regulation around the world, as well as much tougher enforcement. Fines have increased substantially under the GDPR, but there are also reputational and liability consequences of a data breach that substantially add to the costs," says Marek Stanislawski, Global Cyber

RANSOMWARE ATTACKS MORE FREQUENT, LARGER AND DAMAGING

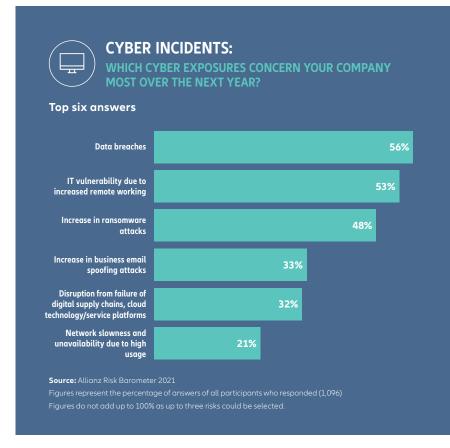
Underwriting Lead at AGCS...

Prevalent forms of ransomware – including **Sodinokibi**, **Maze**, **Ragnarok** and **Ryuk** – have caused major disruption for manufacturers, public sector entities and healthcare providers, shipping companies, utilities, technology and professional services firms recently.

Almost half a million ransomware incidents were reported globally in 2019 and this trend is set to continue. For criminals, it is a very attractive mode of attack – low cost, low risk and very profitable.

Such attacks are also becoming more ambitious. Where hackers once hit small- to mid-size companies, they are now also targeting large companies, where the rewards are highest. A noticeable recent trend has been the added dimension of privacy and hackers' willingness to exploit brand and reputation. Having encrypted critical or personal identifiable data, cyber criminals threaten to release the data or publicize the breach if demands are not met. Ransomware demands, increased by almost a third between the second and third quarters of 2020, according to incident response firm Coveware, while almost 50% of cases included the threat to release stolen data².

While ransom demands attract the most public attention, the biggest cost driver for



ransomware incidents is business interruption and the cost of restoring data and systems.

The total cost of ransomware demands in 2019 was \$25bn, but this increased to \$170bn when the cost of downtime was included, according to Emsisoft³. On average, a ransom incident can result in 16 days downtime.

"If systems are down for a week or two, losses can be significant," says **Jens Krickhahn, a Regional Cyber Practice Leader at AGCS**. "We recently heard of a claim for a ransomware attack against a company where the cost of restoring systems was under €10mn, but the BI loss was €50mn (\$60mn)."

MITIGATING LOSSES

In response to the growing threat, AGCS has stepped up its underwriting focus when needed, for example on ransomware exposures, differentiating between firms that have strong controls and processes in place to mitigate the risk. Regular patching and awareness training can help deter attacks, while maintaining secure backups can significantly reduce losses. A dedicated business continuity plan outlining what a company needs to do in event of an attack to minimize disruption can also help.

² Coveware Quarterly Ransomware Report, Ransomware Demands Continue To Rise As Data Exfiltration Becomes Common And Maze Subdues, November 4, 2020



"Only a few companies end up paying ransom demands, usually those that are least prepared. Organizations that have good patch management and backup processes are able to rebuild systems and get back to business quickly without having to pay ransoms," says Krickhahn.

Training is particularly important. "People are the last wall of protection. If employees are able to identify phishing mails they can avoid huge claims," says Krickhahn. "IT security, technical processes and people go hand in hand when combatting the growing problem of ransomware."

BUSINESS INTERRUPTION AND "BLACK SWANS"

Awareness of cyber business interruption has been increasing with the number of major outages and ransomware attacks in recent years. In this year's **Allianz Risk Barometer**, cyber ranks as the second most feared cause of business interruption behind pandemic outbreak.

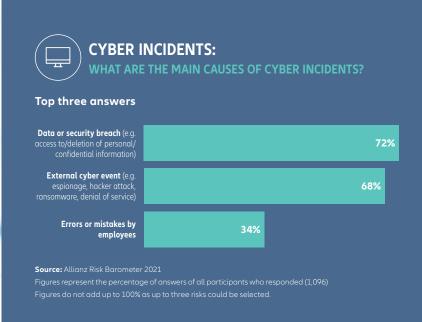
"Companies are increasingly realizing that business interruption and business continuity are critical to digitalization. A major cyber-attack, outage, technical glitch or human error could result in a significant business interruption loss, while a cyber incident impacting a supplier could cascade through the supply chain, resulting in business interruption for manufacturers," says Krickhahn.

AGCS analysis of over 1,700 cyber-related insurance claims over the past five years shows that business interruption is the main cost driver behind losses, accounting for around 60% of the value of these claims.

"In Europe, we now see more cyber insurance claims with a business interruption impact than we do for [data breaches] third party liability. This is a trend that is likely to continue for the foreseeable future," says Krickhahn.

At its most extreme, cyber may also present a systemic or catastrophic risk. A major blackout or cloud outage could have a massive impact, simultaneously affecting companies around the world. "Future 'Black Swan' events cannot be ruled out. It will be important to identify and prepare for such scenarios quickly before they become true events," says Krickhahn.





DIGITALIZATION AND "DEEPFAKES"

The coronavirus pandemic is likely to add to existing cyber concerns, given the increasing reliance on technology and online sales,. Even the arrival of the vaccine has brought another element of risk with recent attacks against approval authority, the European Medicines Agency, as well as labs handling Covid-19 tests.

Acceleration towards greater digitalization was the change caused by the pandemic that **Allianz Risk Barometer** respondents believe will most impact their company, followed by more remote working.

"A lot of change is being forced upon companies and the pace of adoption will only increase with the pandemic. Cyber security and business continuity may struggle to keep up," says Krickhahn.

The shift to remote working during the early stages of the lockdown was accompanied by a reduction in cyber security – some firms turned off multi-factor authentication – while employees working from home are more susceptible to phishing attacks. At the peak of

the first wave of lockdowns in April 2020, the FBI reported a 300% increase in cyber incidents alone.

Many months later, companies should now have the right processes and protections in place to enable safer remote working. However, there is a risk that companies will reduce IT budgets and security spend if the pandemic subsides and people return to offices, meaning vulnerabilities could re-emerge. Businesses need to prepare for the next event and not let their guard down, says Krickhahn.

Cyber risk was once seen only as an issue for computers and software, but with the acceleration of digitalization it is increasingly expanding to include everything from cars to factories to smart devices in our homes.

"Emerging areas like artificial intelligence (AI) – such as "deepfakes", where realistic media content such as photos, audio and video is modified or falsified by AI – the digitalization of supply chains, automation and the 'Internet of Things', as well as new ways of working, could all provide opportunities for hackers and open up new vulnerabilities," says Krickhahn.



Find out more about cyber risk trends





Market developments

(e.g. volatility, intensified competition/new entrants, M&A, market stagnation, market fluctuation)





Changes in legislation and regulation

(e.g. trade wars and tariffs, economic sanctions, protectionism, Brexit, Euro-zone disintegration)

As the world continues in the throes of an economic downturn amid a disruptive coronavirus pandemic, market developments climbs one position year-on-year in the **Allianz Risk Barometer**, reflecting the risk of rising insolvency rates following the pandemic. Growth in the number of insolvencies (38%) is the third most impactful change companies expect to see from the pandemic after acceleration towards greater digitalization (55%) and more remote working (50%) (see page 11).

There were six "mega" bankruptcy filings involving businesses with at least \$1bn in reported assets during the first quarter of 2020, 31 in the second, and 15 in the third, for a total of 52, compared with a 2005 to 2019 quarterly average of five, according to Cornerstone Research¹. The impact of a gradual phasing out of temporary policy measures designed to support companies is one of the key concerns for 2021.

According to Euler Hermes², the rebound in insolvencies will start in the second half of 2021 along with the gradual phasing out of support measures for companies. The trade credit insurer's global insolvency index is expected to surge by +25% y/y globally in 2021 and by +29% in the Eurozone. In 2022, insolvencies should increase by +12% worldwide and +17% in the Eurozone.

Further, the pandemic will likely spark a period of innovation and market disruption, accelerating the adoption of technology, hastening the demise of incumbents and traditional sectors, giving rise to opportunities for new competitors.

"Covid-19 may have caused some delays of the regulation train but it did not stop or even derail it, quite the opposite: 2021 promises to become a very busy year in terms of new legislation and regulation," says **Ludovic Subran, Chief Economist at Allianz**.

Two areas stand out for their significant business impact: data and sustainability. Access and use of data determine the competitive landscape in the 21st century and new rules aim at creating a more level playing field. This includes, for example, a new framework for artificial intelligence and cyber security, as well as new standards and rules for digital finance and digital services and platforms.

Meanwhile, in order for a successful transition to a zero-carbon economy to happen integrating sustainability considerations into all business activities is key. To achieve this goal, a certain level of regulation is necessary. In particular, improving the availability, comparability and reliability of reported non-financial data – including climate-related key performance indicators based on greenhouse gas emissions – would help to steer sustainable investments successfully and to facilitate the green transformation.

"True, new sustainability disclosure requirements entail additional costs," says Subran. "But the rewards are huge, for the companies which better understand their long-term environmental, social and governance (ESG) risks and for the societies at large which can define a clearer path to carbon-neutrality."

- 1 Cornerstone Research, Trends In Large Corporate Bankruptcy And Financial Distress 2005 Q3 2020
- ${\bf 2}\quad \hbox{Euler Hermes, Calm Before The Storm: Covid 19 And The Business Insolvency Time Bomb, July 16, 2020}$





more than one million acres.





Natural catastrophes

(e.g. storm, flood, earthquake, wildfire)



However, 2020 was also the third consecutive year without a single major nat cat event causing significant (economic/insured) damages, such as Hurricane Harvey in 2017. Despite the record-breaking hurricane season, most US landfalls did not hit densely populated areas in 2020, resulting in relatively low insured losses of \$20bn+.

its first "gigafire", the August Complex Fire which burned

That said, aggregated losses from multiple small- to medium-sized events still led to widespread devastation and considerable overall insured losses. Natural catastrophes caused around \$80bn of global insured losses in 2020, up more than 40% from 2019¹, mostly from secondary peril events such as severe convective storms (thunderstorms with tornadoes, floods and hail) and wildfires, primarily in North America.

"The frequency of major loss-causing non-weather-related nat cat events, such as earthquakes or tsunamis, has decreased in recent years," says **Carina Pfeuffer, Catastrophe Risk Analyst at AGCS**. "Consequently, the negative perception of these cat risks, as indicated by the level of importance in the **Allianz Risk Barometer**, has also declined. Simultaneously, in 2020, unlike any year before, with Covid-19 decelerating business around the globe, other risks such as 'pandemic outbreak' and 'market developments' have become more visible."

Nevertheless, nat cat risks remain in the top three business risks in many regions, particularly across Asia – including South Korea, Hong Kong and Japan – which is frequently affected by meteorological, geophysical, climatological and hydrological events. Further secondary perils, such as severe floods in provinces along the Yangtze River in China from May, resulted in one of the biggest insured losses in Asia during 2020 (\$2bn)².





Fire, explosion*

2020: 20% (6)

While the Covid-19 pandemic has introduced a newcomer to the most important business risks in the **Allianz Risk Barometer**, pushing fire and explosion perils slightly down the rankings compared to previous years, they still rank among the top 10. And with good reason.

Large-scale events such as the devastating explosion in the port of Beirut, Lebanon in August 2020, which has resulted in total damages of up to \$15bn, according to industry estimates, and around \$1.5bn in insured losses to date, or the catastrophic explosion in the port of Tianjin in China five years ago, which caused insured losses estimated between \$2.5bn and \$3.5bn, remind both industry and the general public of the terrible impact industrial fires and explosions can have.

In many cases it's not even the material damage of such an incident – although this is often costly – that results in the biggest losses. A major fire or explosion can prevent companies from servicing their customers or resuming operations for some time and such incidents are the most frequent drivers of business interruption claims in particular. In fact, fires and explosions were the number one cause of losses for businesses worldwide over a five-year period up until the end of 2018, according to Allianz analysis, causing in excess of €14bn (\$15.7bn) worth of insured damage from more than 9,500 claims.

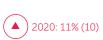
While risk assessment continues to evolve in respect of fire and explosion, it is unlikely that such risks can ever be completely eliminated. Prudent fire mitigation practices – regularly assessed and updated – including preventative measures, fire extinguishing methods and contingency planning therefore remain essential for all businesses to lower the risk of loss from an incident.

*not including wildfires

¹ Munich Re, Record Hurricane Seasons And Major Wildfires – The Natural Disaster Figures For 2020, January 7, 2021







Macroeconomic developments

(e.g. monetary policies, austerity programs, commodity price increase, deflation, inflation)

Interest rates will remain low for a very long time in the US and for an even longer period in Europe. According to Allianz Research estimates, the US Federal Reserve System is likely to envisage a first rate hike from Q3 2023 only. Although other central banks tend to follow suit most of the time, the European Central Bank (ECB) will have a hard time doing so because the perspective of the Fed's monetary policy normalization is likely to awaken the beast of sovereign debt risk in Europe. This might incite the ECB to extend its unconventional monetary program beyond the Fed's own program to contain Euro-zone sovereign spreads.

"For markets, low interest rates are a sweet poison," says **Ludovic Subran, Chief Economist at Allianz**. "They strip markets and banks of their ability to price and allocate resources appropriately and encourage excessive risktaking by both debtors and investors."

Equity markets are in bubble territory as earnings expectations have decoupled from fundamentals and credit spreads remain compressed despite record high levels of non-financial corporate debt. Sovereign spreads, too, remain muted despite the same situation in respect to record high public debt.

For the short-term economic outlook, confidence prevails. In 2021, global GDP should strongly rebound by +4.4% compared to the expected contraction of -4.5% in 2020. Besides huge ongoing monetary and fiscal impulses, the main growth driver in 2021 will be a positive "confidence shock", triggered by the vaccination campaign, boosting consumption, investment and trade. In this growth scenario, the upside and downside risks are substantial. A fast and successful vaccination campaign could lift spirits even more, adding 2 percentage points to GDP growth.

The driver would be consumption powered by the unleashing of excess savings of households. In the Eurozone alone, around €500bn (\$597bn) is estimated to be sitting on the sidelines, waiting to be spent. A botched vaccine campaign, however, would work in the opposite direction.

The mid- to long-term outlook is more pessimistic. In particular, the gigantic global debt burden of \$277trn or 130% in 2020 will weigh on economic growth potential for the time being.





V) 2020: 17% (7)

Climate change/ increasing volatility of weather

Climate change falls two positions in this year's **Allianz Risk Barometer** as the risk concerns of respondents are superseded by the Covid-19 pandemic. The virus represented an immediate threat in 2020 – for both individual safety and businesses, so, it is unsurprising **pandemic outbreak** has rocketed up the rankings at the expense of other perils. And it will likely remain a priority risk through 2021 until vaccination comes into effect and businesses can return to a post-pandemic new normal.

What the pandemic and climate change have in common is that they are both global systemic risks. However, compared to Covid-19, climate change is a catastrophe in slow motion with many causes and effects. While the virus may have inadvertently led to a minor reduction in emissions in 2020 due to less traffic, travel and industrial activity, the need to combat and prevent climate change and global warming remains as high as ever, as a series of recent unwelcome milestones underline.

The past six years have been the hottest since records began, with 2020 being both the hottest in Europe and the joint hottest year ever recorded, according to Europe's Copernicus Climate Service¹. In addition there were record-breaking hurricane and wildfire seasons in North America and Australia respectively, while California saw its first "gigafire" (see page 21). At the same time, severe thunderstorms and storms in Europe and North America, often with hail or tornadoes, are becoming more frequent, with damages increasing, even after adjusting for value growth.

"2020 was the year of the pandemic; in 2021, climate change needs to be back on the board agenda as a priority," says Michael Bruch, Global Head of Liability Risk Consulting/ESG at AGCS. "Climate change will require many businesses to adjust their strategies and business models in order to move to a low-carbon world. Risk managers need to be at the forefront of that change to assess the transition risks and opportunities related to market and technology shifts, reputational issues, policy and legal changes or physical risks. They have to help identify possible scenarios or evaluate the business and financial impact driving the overall low-carbon transformation of a company, together with other stakeholders."

RECOVERY, RISKS AND RESILIENCE

It is essential that the extensive policy measures for economic recovery and stimulus packages following Covid-19 meet both the recovery of the economy and the goals of the **Paris Climate Protection Agreement** – the target of which is to keep the increase in global average temperatures to well below 2°C above pre-industrial levels, and to try to limit the rise to 1.5°C.

It was not that long ago that climate-related strategies or goals were regarded as afterthoughts for many businesses. In future, it will likely be impossible for companies to be successful without them. Institutions such as the International Monetary Fund and the European Central Bank (ECB) see climate change as a significant financial risk that could even endanger the stability of the financial market, with "business as usual" scenarios leading to sudden and drastic corrections to "overvalued" fossil fuel assets.

Then there are a host of other drivers that are increasing the pressure on companies to be more climate-conscious: Ever more engaged employees keen to know their employer is doing the right thing environmentally; institutional investors such as pension funds and asset managers pushing for concrete measures to protect the climate, like CO2 reduction targets or an exit from the coal industry; shareholder groups ensuring climate issues are front and center at general meetings; and potential backers seeking more granular information on climate-related strategies than ever before.

According to **Allianz Risk Barometer** respondents, the physical loss impact is the most significant exposure climate change creates for companies, followed by its impact on supply chains, customers and communities. Beyond the physical loss impact of damage from natural catastrophes or extreme weather events to business assets and property, there is also growing concern about how increases in global temperatures or greater flood risks in key locations could significantly affect future operations, facilities, workforces and communities and how to plan for such scenarios.

Rising regulatory and legal risk is also a concern, particularly for high carbon-emitting sectors, but also

elsewhere. Policy changes, new taxing schemes, reporting requirements and sustainability metrics are forthcoming. For example, the European Green Deal aims to make Europe the first climate-neutral continent by 2050 and comprises a Renewed Sustainable Finance Strategy. In the UK, there are plans to make climate-related financial risk disclosures mandatory for a whole swath of corporate Britain by 2025. Therefore, companies have to prepare and be able to adapt quickly.

At the same time, climate change activism is becoming both more sophisticated and professional. For example, non-profit law firm, ClientEarth, has gained a reputation for using legislation to hold companies accountable. In September 2020, it secured a major victory by forcing the closure of a giant coal plant in central Poland².

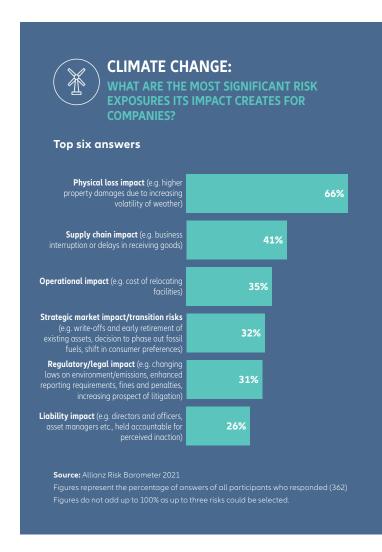
Threat of litigation is also evolving. Climate change cases targeting "carbon majors" have already been brought in more than 30 countries, with the majority in the US. But climate attribution science opens up the prospect of legal action connecting individual events to climate change and holding companies responsible. Notably, a farmer has brought an action against German energy company RWE for its contribution to emissions, and potential damage to his property in Huaraz, Peru.

A crackdown on **"greenwashing"** – where companies provide misleading information so as to present a more environmentally-responsible public image – by regulators could also be on the cards in future with the Task Force on Climate-Related Financial Disclosures, the Securities and Exchange Commission (SEC) in the US and European supervisors looking into the issue.

As a result, climate change should not be classified just as a reputational risk, but also as a legal/governance risk. Companies' boards of directors have a vital duty to ensure solid corporate climate responsibility with reporting and due diligence.

Investment in preparedness, mitigation and resilience is crucial. Company-specific climate risks and opportunities must first be identified, for example by using scenario-based analyses and tools and technology such as catastrophe models and hazard maps. These can help to develop a climate strategy that can be implemented with appropriate measures such as changes in business model or portfolio mixes or investments in capabilities and technologies, if required. Such changes could also constitute opportunities from a business perspective, as the energy transition brings new products and sales markets.











Political risks and violence

(e.g. political instability, war, terrorism, civil commotion, riots and looting)

Political risks and violence returns to the top 10 of the **Allianz Risk Barometer** for the first time since 2018, reflecting the fact that civil unrest incidents such as protests and riots now challenge terrorism as the main political risk exposure for companies. The number, scale and duration of many recent events has been exceptional, such as the **"yellow vest"** protests in France (insured losses around \$90mn), as well as unrest in locations like Hong Kong (\$77mn), Chile (about \$2bn) and Ecuador (\$821mn).

Meanwhile, in the US, a tense second half of 2020 saw racially charged riots in the wake of the death of George Floyd and the rise of the **Black Lives Matter** movement, as well as further unrest around the US presidential election, including a mob storming the US Capitol. This has resulted in the US seeing its standing on the Verisk Maplecroft Civil Unrest Index sharply deteriorate – from the 91st riskiest jurisdiction in Q2 2020 to the 34th by Q4 2020¹.

In addition, anti-lockdown demonstrations turned violent in several Western countries and while these incidents did not create a sizeable magnitude of insured losses, they have clearly brought the political violence topic back into focus for risk managers. Businesses do not have to be direct victims of civil unrest or terrorism to suffer financial losses. Revenues can suffer whether or not physical damage happens if the surrounding area is cordoned off for a prolonged time or while infrastructure is repaired to allow re-entry of customers, vendors and suppliers. Companies can also be hit by a physical loss of attraction to a property nearby. If there is a closure of a location where large numbers of people come together, a reduced number of visitors will result.

The outlook doesn't get any rosier. As the socioeconomic fallout from Covid-19 mounts, the ranks of global protesters is expected to swell – 75 countries will likely experience an increase in protests by late 2022, according to Verisk Maplecroft. Of these, more than 30 – predominantly in Europe and the Americas – will likely see significant activity.

"The current state of the world – Covid-19, the economic downturn, a general rise towards nationalism, authoritarianism and separatism, declining multi-lateral problem-solving approaches, erosion of democratic core

values, the emergence of 'post-factual' world views and intensifying distrust between China and the West – represent a perfect storm," says **Bjoern Reusswig, Head of Global Political Violence and Hostile Environment Solutions at AGCS**

"This is exacerbated by the fact that the world has never been so interconnected by goods, services and the ability for more people to travel globally. A cursory look at the "doomsday clock", which has been maintained since 1947 by the Bulletin of Atomic Scientists and symbolically represents the likelihood of a man-made global catastrophe, shows it has never been closer to midnight than in 2020 – it is currently 11:58:20²."

Civil unrest/commotion and separatism/nationalism issues will remain among the main political violence topics going forward. The pandemic has led to some countries taking tougher stances on refugees/asylum seekers and cutting back on development, creating worse conditions for emerging countries. At the same time, debt and currency crises will continue in developing economies. Such conditions only further fuel incidences of separatism/nationalism, religious extremism and xenophobia.

It is little surprise then that interest in the specialist political violence and terrorism (PVT) insurance market is growing. Overall, capacity increased to over \$3.2bn notional capacity per transaction for contract frustration (non-performance by government obligors) and \$3.3bn for political risks in 2020 according to Willis Towers Watson³. While the specialized PVT market took some hits during 2020, the majority of insured losses were absorbed by the property all-risk (PAR) market – creating a new dimension of awareness in these markets. The global economic downturn has had a more significant impact on the PVT market. Ironically, although awareness of politically motivated threats is increasing, due to budget restraints, many companies have reduced their purchase of PVT products, or stopped altogether, which may be shortsighted.

"Insurers and brokers need to explain the inherent benefits of their products to customers, especially on the differences between PAR and PVT," says Reusswig. "In the wake of the US riots, the trend of the PAR market taking a tougher stance on strike, riot and civil commotion exposure will likely accelerate and capacities will likely move from PAR to the specialist political violence insurance markets."



¥ Find out more about how businesses can protect against civil unrest

- 1 Verisk Perspectives, A Dangerous New Era Of Civil Unrest Is Dawning In The United States And Around The World, December 10, 2020
- 2 Bulletin Of The Atomic Scientists, Closer Than Ever: It Is 100 Seconds To Midnight, January 23, 2020
- 3 Willis Towers Watson, Insurance Marketplace Realities 2021 Political Risk, November 18, 2020

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