



Emerging Risks Initiative

Major Trends and
Emerging Risk Radar

2026



Executive Summary

We are pleased to present the 2026 update of the Emerging Risk Radar.

Emerging risks are those that may newly develop or that already exist but continue to evolve. They are characterized by a high degree of uncertainty regarding their likelihood and potential impact. These risks may have significant implications for underwriting, investments, and operations within the insurance sector. The extent of their impact may vary across companies, depending on factors such as product offerings, market presence, and the composition of investment portfolios.

The Radar provides a consolidated view of emerging risks and related major trends that could influence the insurance industry over the next five years and beyond. Risks are categorized as small, medium, or high based on their perceived materiality. Both the risk inventory and the assessments of impact and timing are informed by expert judgment from the Emerging Risk Initiative (ERI) working group of the CRO Forum, supported by a member-wide survey.

The major trends have been reassessed and updated. All risks in the risk inventory have been reassessed and updated accordingly. The following changes were made to the new radar compared to 2025:

- 'Technological Power Concentration' and 'Ultra-Processed Food' have been introduced as new risks.
- The risk 'Skills Shortages and Reskilling' has been renamed to 'Workforce Dynamics' to emphasise the broader context of this risk.
- For various risks, the assessed impact and/or time horizon has changed. Notably, the impact has increased to high for 'Global Debt Crisis'. The time horizon has changed to already seen for 'Artificial Intelligence' and 'Supply Chain Complexity'.

We trust this report will serve as a valuable resource and welcome your comments and feedback.

Emerging Risk Radar 2026

Trends



Ageing and Health



Demographic and Social Change



Economic Development



Environment and Climate



Shifting Geopolitical Landscape



Technological Development



Key

Impact assessment:

- High
- Medium
- Low

Time Horizon:

- Already seen:** significant impacts already seen on the insurance sector
- 1-5 Years:** first significant potential impacts within 1-5 years
- 5-10 Years:** first significant potential impacts within 5-10 years

* New risk in 2026

Risk Radar Trend Descriptions



Ageing and Health

Medical advances in prevention, diagnostics and treatments continue, with AI increasingly accelerating innovation, improving diagnostic accuracy and enhancing treatment effectiveness. However, several factors may offset gains in lifespan and reduce time spent in good health. Lifestyle patterns such as sedentary habits, unhealthy diets, sleep disorders and substance abuse increase risk factors such as metabolic syndrome and are contributing to rising rates of chronic diseases. Ageing populations in developed countries are increasingly affected by neurodegenerative diseases. Physical health is also closely linked to mental health, which is deteriorating in many regions, driven by a combination of social, economic and environmental pressures. Environmental issues, including air pollution and substances such as endocrine disruptors and plastics, pose short- and long-term health risks that are not yet fully understood. Climate change-related factors, such as the increasing prevalence of heatwaves, pose a threat, especially to vulnerable populations, such as the elderly and people with pre-existing health conditions. Socio-economic conditions and access to good healthcare are further key elements that shape the future burden of disease, intertwined with the challenges arising from rising demand, increasing costs due to medical innovation, new therapies and chronic care, in combination with tight budgets and underinvestment in infrastructure faced by healthcare systems, with potential deterioration of public healthcare. Global dependencies in pharmaceutical production, particularly on a limited number of countries such as China and India, create vulnerabilities in supply availability, pricing and quality, increasingly influenced by geopolitical developments.



Demographic and Social Change

Several demographic and social trends are reshaping the way that societies function and evolve. Among them are urban population growth and the development of resilient urban infrastructure, affecting how people move, work and socialise. Social cohesion is declining in many countries, with increasing polarisation across generations, socio-economic groups and political views, contributing to rising social tensions and the risk of increasing unrest. Declining social cohesion also poses a risk to the solidarity necessary for affordable insurance. Many countries are facing population decline due to declining birth rates and ageing populations, while some see a rapidly growing middle class. This means a shrinking workforce with potential impacts on economic growth and the future stability of social security systems. The adoption of AI and automation is reshaping labour markets, reducing demand for certain entry-level and routine jobs while creating uncertainty around future employment prospects. The widespread use of digital media and AI-driven platforms is influencing mental health, social interaction patterns and information consumption, with emerging countertrends aimed at limiting exposure, especially for younger generations. The increasing reliance on digital technologies and AI may affect cognitive skills, including critical thinking and basic literacy and numeracy, over the longer term.

Migration of people both within and between countries and continents, remains a key aspect, fuelled by a range of environmental, economic and geopolitical factors. Although migration could translate into pressure on welfare systems and infrastructure and cause political unrest, it is also crucial in the context of skills gaps that are created by the changing needs of ageing societies.

These complex and interconnected phenomena have a range of consequences, including the potential for widening inequality, societal and geopolitical conflicts and increasing environmental pressure.

Risk Radar Trend Descriptions



Economic Development

The global economy is transitioning from a prolonged low-interest-rate environment to a regime of higher interest rates, elevated debt and weaker growth. Geopolitical uncertainty, with an impact on inflation and interest rates, historically high stock prices and the deteriorating outlook for government debt are key concerns. Financial market volatility has increased. Greater concentration of capital markets, the potential overvaluation of assets and highly leveraged financial institutions are key financial system vulnerabilities. Optimistic sentiment appears misaligned with modest earnings and low growth expectations, with options markets indicating limited hedging against stock price corrections. Asset overvaluation concerns apply broadly, particularly to AI. It is also uncertain whether AI can generate the necessary productivity growth and over what time horizon this might materialise.

Global government debt is increasing, driven by structural deficits, interest burdens, an ageing population and rising defence spending. Further debt accumulation and refinancing challenges, combined with a slowdown in economic growth, continue to raise concerns about the sustainability of public finances worldwide. The likelihood of sufficient fiscal discipline seems limited and economic growth is constrained, among other things, by demographic trends.

Due to increasing global regulation surrounding cryptocurrencies and digital assets, such as the now-implemented Markets in Crypto-Assets (MiCA) legislation in the European Union (EU) and the GENIUS and CLARITY Acts in the US, crypto is transforming from speculative to regulated and institutionalised. Due to the increasing interdependence of crypto and other investments, concerns are growing among regulators that a crash in the highly volatile crypto sector could spread to traditional financial institutions and markets.

Furthermore, it is foreseeable that, over the longer term, the impacts of climate change will be another major factor, exacerbating negative consequences such as economic volatility, increasing government spending on adaptation and uncertainty for global economic development and long-term growth.



Environment and Climate

Environmental issues remain central, driven by climate change, resource scarcity, biodiversity loss and pollution. Scientific understanding continues to evolve, reinforcing concerns about the long-term impacts of rising greenhouse gas emissions. Climate risks are increasingly materialising through more frequent and severe extreme weather events and rising sea levels. Globally, there is a trend of retreating from Environmental, Social and Governance (ESG) commitments, which could slow down the transition to a low-carbon economy and impact CO2 reduction targets by 2050. Geopolitical factors are contributing to this shift. According to United Nations analysis, current global transition plans are insufficient to limit warming to 1.5 degrees Celsius, with the world on track for around 2.6 degrees as emissions fall too slowly to meet the 2050 target. Further climate policy action is likely to be needed to address this trend. As a result, adaptation to climate change is becoming increasingly important, especially in preparing for extreme events such as heatwaves. This creates challenges in pricing for (re)insurers, but also for their role in insuring new or improved technologies supporting the transition.

Pressure on the planet from a growing human population continues and is causing resource scarcity, driven by unsustainable practices in mineral extraction and food and energy production. Anthropogenic activities are also polluting the land, rivers and sea with non-biodegradable waste such as microplastics and per- and polyfluoroalkyl substances (PFAS) and the air with particulate and gaseous pollutants. All forms of pollution are becoming omnipresent, with harmful consequences for life on Earth, including a decline in biodiversity, with the potential to disrupt entire ecosystems. These pressures are increasingly materialising in litigation and activism, with rising climate-related lawsuits, especially in the United States (US) and growing scrutiny of insurers.

Risk Radar Trend Descriptions



Shifting Geopolitical Landscape

The global geopolitical order is undergoing a profound shift. The re-emergence of kinetic warfare, alongside intensifying economic and technological competition, signals a more contested and unstable environment. The period of Western-led liberalisation and global economic integration is giving way to a more fragmented, security-focused world, marked by declining trust in international institutions and agreements.

Transatlantic relations remain important but are increasingly strained by diverging economic priorities, industrial policies and the approach to China. At the same time, the EU's political cohesion and global influence are under pressure, limiting its ability to act decisively as a unified geopolitical actor. Trade is becoming increasingly regionalised and politicised, with countries prioritising resilience over efficiency through strategies such as friend-shoring and near-shoring. Industrial policy, tariffs, export controls and investment screening are being expanded to protect critical sectors such as semiconductors, energy and defence. Financial systems are also being weaponised, with sanctions, currency restrictions and market access used as instruments of statecraft. Control over strategic 'chokepoints' is a defining feature of great power competition. These include critical supply chains, key infrastructure nodes and technological standards. The ability to disrupt or dominate these points is increasing both geopolitical leverage and systemic vulnerability.

Strategic rivalry between the US and China remains deeply entrenched, despite near-term easing in tensions, reshaping alliances across trade, technology and security. Meanwhile, Russia's prolonged war in Ukraine has entrenched divisions between the West and authoritarian regimes, reinforcing a more multipolar order. Europe remains exposed to a volatile periphery, including instability in the Middle East and North Africa. In East Asia, tensions around Taiwan and the South China Sea persist, while global military spending is rising and arms control frameworks are eroding. These dynamics collectively signal a more unstable and unpredictable geopolitical landscape.



Technological Development

Modern technologies such as AI, automation and robotics are driving economic growth by improving quality and cost efficiency. AI is evolving towards agentic and increasingly autonomous decision-making, transforming industries while raising ethical, legal and employment concerns. Autonomous machines, including drones, robots and self-driving vehicles, offer benefits but also pose cybersecurity, legal and ethical risks. As digitalisation deepens, cyber threats grow, fuelled by AI-enabled attacks, cyber fraud, supply chain vulnerabilities and geopolitical tensions. Technological advances such as quantum computing will pose new challenges to existing encryption and security protocols and innovations in drones, satellites, AI-enabled defence systems and space-based systems will play an increasingly vital role in defence.

The continued concentration of technological capabilities in selected countries and a few global companies poses various risks for access to these technologies and represents an obstacle to levelling the playing field, while dependency on semiconductors, cloud providers, data centres and critical digital infrastructure increases strategic vulnerability. While weaknesses in critical infrastructure and increasing complexity can raise the risk of cascading failures, technology can also help organisations become more resilient through predictive analytics, digital twins, automation and improved cyber defence. Ensuring equitable digital access, protecting data, strengthening AI governance and fostering public-private collaboration are essential to increase acceptance of new technologies and their integration into daily life.

To stay competitive, organisations must embrace modern technologies, invest in reskilling and build resilient, adaptive systems. If this is not done in a forward-looking and responsible manner, it can lead to economic losses, legal exposure, operational disruption and serious social conflicts.

Risk Radar Descriptions

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Antimicrobial Resistance		Drug resistance occurs when microorganisms such as bacteria, viruses, protozoa, fungi and parasites mutate in a way that renders the medications currently available against them ineffective. This is an inevitable part of the natural co-evolution of pathogen and host and can prolong related infections, require more harmful alternative treatments, or even be fatal. Antibiotics, in particular, are needed for both the prevention (e.g. during chemotherapy, hip replacement surgery) and treatment of bacterial infections. Antimicrobials are also used in animal husbandry and food production and resistance can endanger food security. The supply of antimicrobial drugs is highly dependent on global supply chains and thus vulnerable to geopolitical risks. Climate change, migration, environmental pollution, poorly funded health systems and lack of stewardship can aggravate antimicrobial resistance. Main impacts may include: • Increased healthcare costs directly related to infections needing longer and more complex treatment • Indirect costs through higher rates of medical and disability claims when preventive antimicrobial treatments fail • Higher mortality and morbidity claims • Liability claims (allegations of inadequate infection control practices, over-prescription of antibiotics, unsound manufacturing practices) • Business interruption in healthcare, farming, agriculture, or food production		

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Artificial Intelligence		AI is advancing towards more autonomous, agentic systems and is already reshaping workforce dynamics while increasing exposure to cyber and data privacy risks, requiring stronger monitoring and governance. Interactions between AI systems introduce complex and potentially unpredictable behaviours, raising concerns around unintended outcomes and liability. AI acts both as an independent risk and as an amplifier of existing challenges by intensifying legal, operational, model and conduct risks, while limited explainability raises issues of transparency, fairness and accountability. Key risk drivers include a potential AI asset bubble, competitive adoption pressures across various business sectors, reliance on a limited number of providers,¹² and AI's growing role as a cyber threat accelerator. AI development also contributes to geopolitical tensions, given uneven access to technology and infrastructure. While it supports innovation and efficiency gains, rising energy and infrastructure demands may constrain long-term scalability. Main impacts may include: • Increased cyber threat sophistication, raising incident frequency, insurance claims and pressure on underwriting and pricing models • Heightened data breach risks and regulatory scrutiny, leading to stricter compliance requirements and potential penalties • Reputational harm and litigation exposure from biased, opaque, or unfair AI-driven decisions • Risk of 'silent AI' exposure in traditional business • Ongoing need to adapt risk frameworks to evolving AI-driven exposures • Workforce disruption, including job displacement and skill shortages, reducing organisational resilience • Significant investment needs in data, IT, talent and governance, with uncertain returns impacting profitability • Concentration risk from reliance on limited providers, creating systemic vulnerabilities • Efficiency gains, improved analytics and innovation opportunities		2015

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Autonomous Machines		Advances in mechatronics, AI, machine learning and data transmission are rapidly driving the development of autonomous machines across industries. While their increasing interconnectivity (AI + Internet of Things (IoT)) improves efficiency, it also introduces new risks, complexities and failure modes. Applications such as self-driving cars and drones are reshaping insurance demand: for instance, with fewer human error-related accidents, traditional motor insurance may decline, while risks related to cybersecurity, software malfunctions, operational errors and product liability require new underwriting approaches. Regulatory scrutiny and emerging safety and transparency standards are shaping the deployment and insurance of these technologies, although legal frameworks remain uncertain and are not uniform globally. The integration of machine learning enhances real-time decision-making by machines, but growing human-machine interaction creates new accident causation patterns and poses questions around liability and overreliance. The expanding use of autonomous systems in industry and critical infrastructure increases systemic risk exposure. Although adoption is currently uneven across sectors, it is expected to accelerate in the coming years, with increasing impact on insurance, business and society. Additionally, the use of autonomous weapons in military and terror attacks brings a new dimension to these threats. Effective risk management requires robust governance, clear legal frameworks and integrated cyber, operational and ethical controls. Main impacts may include: • Reduced need for conventional car insurance due to fewer human error-related accidents and a shift from personal to product liability • New insurance offerings driven by cybersecurity, hacking risks, software malfunctions and product liability concerns • Legal and regulatory uncertainty, including non-uniform rules across jurisdictions, affecting liability allocation, insurability and claims handling • Accumulation risks from cascading breakdowns and unexpected behaviour of interconnected machines • Increasing human-machine interactions in mixed-mode operations affecting operator skills, claims frequency and liability frameworks • Autonomous machines transforming industries such as transportation, agriculture, healthcare and logistics, influencing sectoral exposure and investment patterns • Social transformation through changes in professions, new skill requirements and evolving human-machine interaction models • Enhanced processes requiring advanced analytics built on telematics, sensor data and ML performance metrics • Connected autonomous systems becoming prime cyber targets, requiring secure architectures and real-time anomaly detection • Navigating legal frameworks, including AI-specific safety and governance standards • Ethical questions around decision-making algorithms and data privacy creating new strategic and reputational challenges		2017

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Climate Change Physical Risk	 	Climate change risks manifest through both acute and chronic shifts in climate patterns driven by global warming. Physical risk is a structural and interconnected long-term risk, with broad impacts on underwriting, investments and operations, and increased uncertainty in risk assessment frameworks. While some impacts may be mitigated in the short term, the evolving and non-linear nature of climate effects requires continuous monitoring. Acute risks include extreme weather events such as heavy rainfall and flooding, hailstorms, droughts, wildfires, heatwaves and hurricanes, as well as wider impacts on ecosystems, biodiversity and water availability. These events are becoming more frequent and severe, causing widespread infrastructure damage, disrupting communities and generating significant economic losses. Chronic risks result from longer-term changes, including altered precipitation patterns, rising temperatures and sea-level rise. These developments create health risks, such as heat stress and cold-related conditions and drive substantial economic impacts. Property damage, agricultural disruption, food security concerns and supply chain vulnerabilities increase financial pressures on affected regions. Climate change increasingly influences living conditions and economic systems, highlighting the need for adaptive and resilience-oriented strategies. In addition, climate tipping points may further intensify both acute and chronic effects through self-reinforcing, non-linear feedback loops, potentially accelerating and amplifying physical climate risks. Main impacts may include: • Non-life insurers are exposed to higher claims, which are already seen today and, together with reduced reinsurance capacity, could lead to higher direct insurance premiums and insurability issues in the long term • Changes in weather patterns affect risk assessment and make accurate risk pricing more difficult • From a life and health insurance perspective, key physical risks include extreme temperatures, infectious diseases, air pollution and mental health, all resulting in higher claims under morbidity and mortality covers. Additionally, extreme weather events can also negatively impact the delivery of health services • Future impacts will also be influenced by government and infrastructure adaptation measures and how insurance companies succeed in supporting clients to prevent losses, for example, by increasing their resilience. The frequency and severity of extreme events are expected to increase and insurers will need to adapt their business models and support more resilient societies • Investments can be directly or indirectly impacted, if invested companies suffer damage to production locations or supply chains • Physical risks can potentially impact the operations of insurers causing business disruption to offices or Information Technology (IT) infrastructure • Indirect macroeconomic impacts such as inflation, productivity loss, increased migration and increased debt		2006 & 2018



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TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Climate Change Transition Risk	 	Transition risks arise from the shift towards a green economy, such as changes in regulations, technologies and consumer preferences which nudge companies into adopting more sustainable practices. This includes mitigation efforts to reduce greenhouse gas emissions and adaptation strategies to adjust to climate impacts. Financial performance across sectors may be affected by the pace of global climate action: green industries are expected to be supported by increased demand and government policies, while brown sectors are likely to face challenges due to reduced demand, shifting investor sentiments, stringent regulations, legal actions, and resource management pressures. Social implications related to transition risks include employment patterns, requiring reskilling and upskilling. Geopolitically, the transition may reshape global power dynamics, with green technology leaders gaining influence and fossil fuel-dependent countries facing economic downturns. The impacts depend on the advancement of climate technologies and global commitment to climate action. In addition, policy volatility, uneven global policy action and political backlashes may exacerbate the transition path uncertainty. Main impacts may include: • Underwriting challenges in relation to new technologies and other changes linked to the transition • From a Life and Health perspective, upheavals in the economy, reductions in Gross Domestic Product (GDP) and struggling market segments could lead to higher claims under disability covers, driven by mental health issues • Investment risk and stranded assets: (re)insurers can face stranded assets and reduced returns from companies that suffer from the transition to a greener economy (including potential defaults). On the other hand, investments in new energy techniques or other sustainable investments might result in financial losses if these techniques have not yet been proven • Insurers are prone to legal risks including liability issues and litigation, as well as political, regulatory and compliance issues (including greenwashing) • Reputational risks result from shifts in consumer preferences, stigmatization of sectors, increased stakeholder concern or negative stakeholder feedback		2018 & 2022

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Collective Redress and Litigation Risk		Collective redress refers to procedural mechanisms that allow multiple similar claims to be pursued together, increasing enforcement leverage and lowering barriers to mass claims. While class-style litigation is long-established in North America, the EU's move toward more harmonized representative actions is a structural shift that is accelerating the scale and frequency of group claims across member states. This expansion is likely to amplify severity in long-tail lines (e.g. casualty/liability, D&O, cyber and product liability) through higher claim aggregation, greater defence and settlement pressure and heightened reputational exposure, particularly where claims target common product, conduct, disclosure, or technology-related issues. The revised EU Product Liability Directive further strengthens the litigation backdrop and will apply to products placed on the market (or put into service) after December 2026. A compounding factor is the growth of third-party litigation funding (TPLF) in the EU and UK. Where oversight is limited or fragmented, funder involvement can reduce transparency, shape strategy toward portfolio-style pursuit of insured defendants, prolong proceedings and increase total costs, raising uncertainty in reserving and claims handling. Climate, pollution and health-impact litigation is also becoming more prominent in Europe, expanding the set of collective or coordinated claims against corporates. Main impacts may include: • Claims inflation (frequency and severity): Broader collective redress and growing TPLF can lower barriers to bringing claims and increase aggregation, driving higher tail severity and defence-cost inflation in long-tail lines • Modelling and reserving difficulty: Structural legal change, cross-border coordination and funding-driven litigation dynamics reduce the value of historical data; models may understate fat-tailed, correlated loss and adverse development (incl. prolonged duration and expense) • Reputational: High-profile group claims can accelerate media and social-media scrutiny, increasing reputational harm and creating follow-on regulatory and civil actions • Evolving hotspots: Activity continues in data/privacy, consumer protection and ESG/greenwashing, with rising exposure in product liability and climate/pollution/health-impact litigation, increasing legal uncertainty and aggregation risk		



Ageing and Health



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Technological Development

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Critical Infrastructure Failures	 	Many regions face persistent underinvestment in the modernisation and security of critical physical and digital infrastructure, including energy, water, transport, communications and data centres. Financial constraints, supply chain disruptions and an ageing workforce further constrain long-term upgrades. Capacity limits, deterioration, overload and external threats - natural disasters, cyberattacks, geopolitical conflicts and sabotage and hybrid warfare - can lead to failures and outages. Although rare, geomagnetic events and satellite disruptions can also have significant impacts on power grids, navigation systems and communication networks. As complexity of interconnected systems increases, failures in one area can cascade across different sectors. Systemic fragility is further amplified by renewable energy transitions and smart grid integrations, tighter IT-OT convergence, growing reliance on AI-enabled automation and expanding digital-physical interdependencies. Advanced technologies such as AI, drones, satellite monitoring and IoT support predictive maintenance and operational efficiency. At the same time, rising ransomware attacks targeting transportation networks (e.g. airports) demonstrate how cyber incidents can halt mobility, compromise safety and trigger broader supply chain breakdowns. Geopolitical disruption affecting energy transport routes such as the Strait of Hormuz, can materialize mainly through higher oil prices, temporary inflationary pressure and market disruption, while direct impact on insurance risks may remain limited. Rising demand in urban areas, industrial hubs and data centre clusters underscores the need for resilient and adaptable infrastructure planning. Strengthening infrastructure resilience requires coordinated strategies, public-private cooperation, robust crisis preparedness, as well as considerations for geopolitical, economic and global supply chain shocks and growing regulatory pressures. Main impacts may include: • Higher than expected frequency and severity of large claims due to property and non-property damages and business interruptions • Indirect and second-order impacts through cascading effects across energy, communication, transport, supply chains and digital infrastructure • Modelling and reserving difficulty: structural legal change, cross border coordination and funding driven litigation dynamics reducing the value of historical data; models potentially understating fat tailed, correlated losses and adverse development • Infrastructure failures causing leakages of harmful substances, sewage leaks and fires (e.g. wildfires or industrial fires) • Severe and prolonged infrastructure breakdowns with potential to trigger social unrest and affect political stability • Hybrid warfare, sabotage and cyberattacks increasing operational disruption risks, particularly for energy, communication and transport infrastructure • Energy-route disruption, including oil-related infrastructure or chokepoints, potentially driving higher oil prices, temporary inflation and market volatility rather than large direct insured losses • Immediate and long-term impacts on human health and life resulting from harmful substance leaks, hospital and care facility breakdowns and delayed emergency responses • Failing government services and disrupted economic activities reducing economic growth and consequently lowering insurance demand • Resilience investments, redundancy, rapid remediation and public-private preparedness reducing the likelihood that most incidents develop into prolonged systemic failures		2008 & 2011

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Critical Resource Management	  	Pressure on many resources (e.g. water, arable land, fossil fuels, rare earth elements, minerals, ...) is increasing due to population growth, industrialisation and technological progress, climate change, nature and biodiversity loss and geopolitical tensions. Critical Resource Management is also linked to the potential damages resulting from unconventional oil and gas extraction (e.g. drilling in the Arctic, fracking, tar sands) and using new technologies in extreme environments (e.g. subsea methane hydrates and mineral deposits). Many resources are of geopolitical and macro-economic importance, leading to and or being impacted by tensions and conflicts. Examples include rare earths (dominated by China), Cobalt (concentrated in the Democratic Republic of Congo), Urea i.e. Nitrogen Fertiliser (concentrated in the Persian Gulf). Main impacts may include: • Fewer new business opportunities • Indirect negative impact on human wellbeing leading to higher morbidity and mortality • Liability risks related to new resource extraction and use • Financial Market volatility, inflation and negative impact on assets • Supply chain disruptions effects on operations of (re)insurer • Reputational risk for insurers covering disputed operations		

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Cyber Risks		Cyber risks have already emerged as a persistent, high priority and systemic threat, spanning geographies, industries and financial sectors. Increasingly sophisticated and fast-evolving attacks can be observed, sometimes leveraging the complexity of software supply chains, exploiting vulnerabilities in outdated software, or using new technologies. For instance, Cybercrime as a Service has lowered the technical barrier to cybercrime while AI is being used by cyber criminals to enhance their attacks, among others with deepfakes and AI powered malware. However, AI not only increases cyber risks but can also be used to defend against malicious actors. In the future, quantum computing could disrupt current encryption protocols. Despite growing awareness of quantum threats, there is limited industry readiness for post quantum cryptography, posing a latent systemic risk to data security and digital infrastructure. Rising geopolitical tensions increase the risk of hybrid war, (e.g. politically motivated hacker attacks by nation state actors for sabotage and espionage purposes) which warrants a heightened monitoring of cyber risks. At the same time, the ongoing digitalisation of all areas of life (e.g. smart home appliances and connected vehicles capable bidirectional communication with external systems), digital concentration and dependency as well as technological power concentration (e.g. software, cloud services, digital payment services) are creating new vulnerabilities. <u>Main impacts may include:</u> • Main consequences include financial losses, operational failure and reputational damage (e.g. through direct cyberattack on the insurer or via business interruption and cyber claims) • Spillovers into the physical realm also affecting critical infrastructure (e.g. power blackouts) as well as cyber-bullying, disinformation and data leakages can have implications for Life and Health and Property and Casualty insurance claims • Certain assets can be impaired by cyberattacks, e.g. by causing lasting damage to the operations of companies in which investments have been made • Increased complexity of regulatory landscapes related to cyber insurance, including data protection laws and regulatory requirements for cybersecurity risk management		

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Data Privacy and Data Ethics		The regulatory frameworks surrounding data ethics and privacy (e.g. General Data Protection Regulation (GDPR), AI Act, Digital Services Act(DSA)) are imposing stricter controls on data collection, processing and usage, while at the same time, the EU is facing pressure to deregulate and public awareness of digital rights, surveillance and algorithmic bias continues to grow. Insurers are under pressure to balance data-driven business models with ethical and regulatory expectations, amidst increasing scrutiny over fairness, transparency and obtaining informed consent. As data privacy regulations empower individuals with greater control over their personal information, insurers face potential restrictions on accessing critical data used for risk assessment, underwriting, claims management and fraud detection. The use of external data providers, cloud platforms or AI vendors may also introduce opacity over how data is stored, reused or repurposed, increasing legal, ethical and contractual risk. Missteps in data usage may amplify or expose insurers to cyber risk, reputational damage, litigation and regulatory sanctions. These challenges are especially acute in the context of AI-driven decisions, health data processing and behavioural profiling, as well as the use of biometric data, where heightened sensitivity, irreversibility and stricter regulatory thresholds increase both privacy and security risk. Main impacts may include: • Restrictions on the use of certain data types (such as genetic, health, or behavioural data) and regulatory complexity could limit product innovation and personalization across both Life and Health and Non-life lines • Regulatory limits on data use in pricing models may erode risk-based pricing, threatening the principle of actuarial fairness and reduced affordability for higher-risk groups • Limited access to predictive data increases the risk of adverse selection. Actuarial models may become less reliable, leading to premium volatility, reserve uncertainty and reduced capital efficiency • A rise in litigation over data misuse, especially under collective redress frameworks, may increase claims and compliance costs. High-profile cases could damage trust in insurers' handling of sensitive data • Navigating overlapping regulatory regimes creates compliance complexity and cost. Ensuring compliance across jurisdictions demands significant investment in data governance, staff training and legal expertise. It may also delay or deter adoption of advanced analytics, AI, or connected devices due to legal uncertainty		

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Deterioration of Public Healthcare Systems	 	Public healthcare systems are under increasing strain, representing a long-term structural challenge with implications for mortality, morbidity, medical cost inflation and pandemic preparedness. This pressure is driven by several converging trends, including an ageing population, rising life expectancy, a growing gap between lifespan and years spent in good health and a growing burden of chronic conditions such as diabetes and cardiovascular diseases. Moreover, recent studies show a concerning rise in tumours among younger populations, requiring intensive and long-term care. Medical innovation, although beneficial, can further drive costs, particularly when treatments require lifelong use. Shortages of trained healthcare professionals, combined with recurring shortages of essential medicines due to supply chain disruptions, manufacturing constraints and geopolitical dependencies, can further undermine timely access to treatment and worsen health outcomes. These factors are widening the gap between public healthcare demand and available funding. Underfunding also limits access to mental healthcare, while mental health disorders can contribute to the development of chronic diseases. Overall, the deterioration of public healthcare systems amplifies existing health and socio-economic risks, reduces resilience and increases inequality. This has direct implications for morbidity and mortality in both public and insured populations, with broader impacts on private health and life insurance, workforce productivity and economic stability. Main impacts may include: • Increased mortality adversely impacting Life Protection Claims, while changes in longevity are relevant for Lifetime Annuity Claims • Increased morbidity adversely impacting Private Medical Insurance (PMI) claims and Income Protection claims, leading to absenteeism and weakening economic productivity, while increasing pressure on the sustainability of health insurance portfolios • Public healthcare demand for clinical staff and medicines may act as a driver for medical expense inflation impacting PMI claim costs • Concerns over social equity, i.e. differing health outcomes for those who can and cannot afford PMI, may drive government intervention in PMI market such as premium taxes, or redesign of the existing system, while also increasing reputational risk for private insurers • Opportunities for insurers to complement public healthcare through prevention, telemedicine, health services and care pathway management, provided affordability and social equity are appropriately addressed		

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Economic Trade Conflicts and Sanctions		Sanctions, tariffs and trade barriers are used to exert influence and achieve economic and strategic objectives. Sanctions and export restrictions can undermine competitive advantages by limiting access to advanced technologies, critical resources (e.g. rare earths) and reduce investment and innovation while also contributing to structural breaks in global trade, capital flows and technology exchange. Escalating tariff tensions, particularly involving the US, increase risks to growth and financial stability, while the global role of the USD extends sanctions' reach. Over time, shifts toward local currencies may challenge USD's dominance amid rising inflationary pressures. To reduce dependencies, mitigation actions include strengthening the management of country, FX and compliance risks, as well as diversifying portfolios, markets and supply chains. Main impacts may include: • Sanctions complexity restricts business activity and raises compliance and operational costs • Heightened regulatory pressure increases legal and reputational risks • Trade tensions drive macroeconomic volatility, affecting growth, inflation and asset values • Insurers face indirect exposure as collateral victims of sudden geopolitical events • Supply chain disruptions increase inflation, business interruption and claims pressure • Policyholder behaviour shifts toward liquidity and lower-risk products • Foreign exchange volatility increases transaction and balance sheet risk • Reinforces need for active country, FX and compliance risk management and portfolio diversification		
Emerging Infectious Diseases		Pathogens are evolving and global factors like climate change, trade, travel and migration, demographics and human behaviour are increasing opportunities for their spread. New communicable diseases pose serious health risks and pandemic potential, especially when they are poorly understood, highly contagious, or hard to treat. Zoonoses - diseases transmitted from other animals to humans - can lead to new diseases. Old diseases may re-emerge due to social factors, waning immunity or rising antimicrobial resistance. In addition to pandemic risk, infections can also cause long-term health effects. Beyond human health, pathogens affecting food crops, livestock and pollinators create emerging risks. The response to potential outbreaks will depend heavily on the capacity of the healthcare systems and drug availability, but also on factors such as international cooperation and the attitude towards pharmaceutical and non-pharmaceutical interventions. Main impacts may include: • Higher claims for insurers across disability, life, funeral and health (hospitalization, diagnostic testing and treatment) lines and from trip and event cancellation covers • Endemic infectious diseases can lead to attritional losses for L&H covers and have erosive impact on GDP • Overall, pandemics disrupt financial stability and cause insolvencies especially for SMEs • Own operations and third-party suppliers can be negatively affected by pandemics • Poor pandemic response can damage reputation		2007

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Environmental Pollution	 	Environmental pollution refers to the introduction of harmful substances or contaminants into the natural environment, which can cause adverse effects on ecosystems, biodiversity, human health, natural resources and the overall quality of life. Pollution can originate from industrial activities (e.g. mining/extraction, chemicals and materials synthesis), agricultural practices, waste disposal, transportation and household pollutants (cleaning products, medicines etc.). Different types of pollution exist and are typically described by the environmental compartment impacted (e.g. air, water and soil pollution) or by the source (e.g. light, noise and plastic/chemical pollution). Certain pollutants impact multiple compartments of the environment (e.g. water, soil and air), are persistent and accumulate in the food chain, making them difficult or costly to remediate (e.g. plastic and microplastics, PFAS). Main impacts may include: • P&C: Increased claims frequency and severity for Casualty portfolios, resulting in higher insurance premiums for this coverage and/or tightening of Terms and Conditions to exclude certain risks • Life & Health: increased claims frequency/severity for Mortality/Morbidity business due to the impacts of ambient environmental pollution on human health • Investments: Potential loss in the value of investments in polluting companies • Legal and regulatory changes related to environmental regulation and remediation impacting claims costs and future insurance coverage • Reputation damage for re/insurers involved in underwriting or investing in polluting companies • Wider economic impacts due to the negative impacts of pollution on the environment and human health (e.g. lowering of land values; lowering of economic productivity)		2009



Ageing and Health



Demographic and Social Change



Economic Development



Environment and Climate



Shifting Geopolitical Landscape



Technological Development

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Evolving Terrorism	  	The risk of evolving terrorism threats is challenging to assess due to its inventive and adaptive nature and the rapid development of new technologies, which undermine probabilistic modelling based on past events. Although the likelihood of major attacks remains relatively low, the risk is monitored because of its potential for high-impact, multi-vector disruption. Future attacks may combine old methods with new technologies such as drones, AI, cyberterrorism and even space terrorism. Non-conventional approaches, including electromagnetic pulse (EMP) and nuclear, biological, chemical and radiological (NBCR) attacks, further complicate the landscape, especially amid significant geopolitical investments in weaponry. A clearer distinction is emerging between low-probability, high-impact scenarios, such as NBCR attacks and more frequent, smaller-scale incidents using accessible and low-cost tools. In Europe, terrorism incidents remain relatively limited and often individual in nature, with the highest global impact concentrated elsewhere, as also reflected in the Global Terrorism Index 2026. Nuclear terrorism poses severe risks if state-owned military resources are involved, while rising 'eco-terrorism' reflects growing environmental activism. Criminal groups often act as logistical facilitators, creating complex intersections between organized crime and geopolitical threats. The growing use of autonomous systems and AI driven tools, social media for radicalization and recruitment, combined with encrypted communication channels and decentralized digital ecosystems, poses new challenges for counterterrorism efforts and necessitate broader resilience planning to address both emerging threats and underlying socioeconomic disparities. Main impacts may include: • Direct threat to Property Business with increasingly complex multi-vector attacks combining physical, digital and drone enabled operations • Overall impact currently assessed as low in Europe, with cases often individual and limited compared with regions more heavily affected by terrorism • Critical infrastructure disruption, e.g. attacks on data centres and network hubs could cause widespread outages and cascading Business Interruption losses across multiple insureds • Hybrid war impacts, including sabotage, cyber-enabled disruption and state-sponsored proxy activity, may blur the boundary between terrorism, political violence and geopolitical conflict • Increase of Life and Health claims, driven by more sophisticated attack methods and the expanded use of AI assisted targeting • Cyber insurance: cyberterrorism and related disruptions • Impact on financial markets and economic growth may result in losses in asset values and increased credit risks		2007

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Genetic Engineering / Synthetic Biology		Genetic engineering involves artificially redesigning the genetic structure of animals, plants, or other organisms, to modify their traits for specific purposes. Similarly, synthetic biology focuses on designing and constructing new biological components not found in nature. Both fields share the common goal of genetic modification that can have uses in various fields such as medicine (e.g. production of vaccines and of therapeutics), environmental management (e.g. breaking down of hazardous substances) and food production (e.g. increase in vitamin content, flavour, or shelf life). Depending on the approach used and the application, there can be ethical and consumer acceptance issues and there is a lack of regulation. Risks include unintended side-effects as well as intentional nefarious use of such techniques for terror and warfare by individuals, groups or states. They are aggravated by the fact that AI tools enable non-experts to apply these techniques and that the technical hurdles are comparatively low. Main impacts may include: • Liability and product risks, intellectual property disputes • Environmental impacts including health and safety hazards and environmental liability, D&O • Potential for bioterrorism, pandemics and man-made catastrophes with impact on morbidity and mortality as well as on assets and operations		

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Geopolitical Conflicts		Geopolitical tensions and ongoing conflicts have broadened the range of plausible risk scenarios, placing defence higher on political agendas. This acts as a structural geopolitical driver with indirect but potentially material impacts on markets, operations and insurance coverages. Rising tensions may lead to armed conflict, economic warfare and further erosion of the post WW2 rules-based international order, including multilateral institutions such as the UN and EU. Shifts in spheres of influence as well as continuing conflicts (e.g. Russia-Ukraine, Israel-Palestine/Iran) and tensions (e.g. China-Taiwan) could escalate into broader regional or global confrontations. The increased geopolitical risk is compounded by nuclear proliferation, new military technologies, such as autonomous weapons and, with an increased emphasis on national interests, a significant rise in military expenditure in many countries. The military build-up is often accompanied by a reprioritization of other government spending priorities. Further threats arise from proxy war, grey-zone activities, hybrid warfare and unconventional warfare (e.g. through cyber-attack, large-scale use of (commercial) drones and social media manipulation). Militarization and scalability of emerging technologies, such as AI-enabled targeting systems, (long-range) autonomous weapons, space-based capabilities and low-cost drones, are broadening the spectrum and complexity of conflict while weakening relative advantages of traditional military powers and defence structures as well as empowering new state and non-state actors. For insurers, impacts are already materializing through sanctions, market volatility, supply chain disruptions and operational exposure. Hybrid warfare also complicates insurance policy interpretation, particularly regarding war exclusions and business interruption cover and creates uncertainty around premium adequacy and underwriting capacity. Main impacts may include: • Naval conflicts may lead to increased maritime insurance rates and transportation costs; supply chain disruption impacting operations and claims resolution (e.g. auto repairs) and inflation, with heightened exposure in strategic corridors and critical maritime choke points • Increased tensions may impact losses under property schemes (e.g. Business Interruption (BI/CBI) and Strikes, Riots and Civil Commotions (SRCC)) and give rise to claims and legal disputes related to BI and SRCC policy wording exclusions • Impact of (trade) wars on financial markets and economic growth resulting in losses in asset values and increased credit risks, driven by volatility in commodities, energy markets and defence related sectors • The lower priority governments give to other important public tasks such as climate protection could exacerbate risks and necessitate reassessment, as defence driven fiscal diversion accelerates long-term environmental and social vulnerabilities • Increased sanctions (e.g. on Russia and Iran) leading to compliance challenges and expanding the burden on multinational companies navigating fragmented regulatory regimes • Escalation of armed conflict potentially leading to mass migration, economic pressure, increased political tension in neighbouring countries and added strain on public services and social cohesion		

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Global Debt Crisis		Many sovereign states, corporates and consumers have accumulated elevated (and in some cases near-record) debt burdens relative to their income and assets compared to historic norms. Much of this debt was issued during the post-Financial Crisis era of very low interest rates and will require refinancing over the next years — in many cases at materially higher interest rates. Structurally increasing geopolitical instability introduces friction and makes trade more costly, driving up prices and depressing economic growth. Emerging market economies with foreign-denominated debt face additional risks if their currency depreciates, making repayment more costly. Rising sovereign debt levels increase servicing costs, straining national budgets and reducing funds for infrastructure investment and essential services like healthcare and education. Specifically, rising US federal debt and political dysfunction could undermine confidence in federal institutions and result in additional credit downgrades for US government debt. A loss of confidence could reduce the US's safe-haven premium, triggering a wider global financial crisis. Furthermore, the interconnectedness of global financial markets means that a debt crisis in one region can have widespread ripple effects, impacting economies and financial institutions worldwide. Main impacts may include: • Defaults, downgrades and depressed asset prices adversely impacting insurers' capital and solvency • Liquidity impacts from customer mass lapses and derivative margin calls depending on hedging strategies • Change in customer appetite for investment risk, shift to cash or propositions with guarantees • Possible flight into safe-haven assets (high rated government bonds) and high losses on risky assets like equities, real estate and alternative credits • Macro-economic stagnation / deterioration impacts future growth of Insurance portfolios and profitability		
Hazardous Substances		Many chemicals can be both harmful to the environment and to human health if inhaled, ingested, or absorbed through the skin. They can be carcinogenic, act as endocrine disruptors and can be bio-accumulative and persistent, such as PFAS also referred to as 'forever chemicals'. Although PFAS restrictions and/or bans are drawing nearer, the effects on people and the environment will not disappear as a result. Small particles (e.g. fine dust, microplastics, nanoparticles) can also be harmful. Recent studies highlight the increasing presence of microplastics in remote environments, including the Arctic and deep-sea sediments, raising concerns about their global impact. Additionally, the emergence of engineered nanomaterials in consumer products poses challenges due to their unique properties and potential health risks. For many substances, their widespread use, chemical stability and accumulation through the food chain make them prone to serial and cumulative losses. Main impacts may include: • Increase in liability claims from policies underwritten before scientific links to environmental and health harm had been identified • Higher morbidity and mortality claims due to long-term health impacts • Higher risks for assets linked to these substances • Uncertain (prototype-) risk from new substance innovation • Potential regulatory changes affecting coverage for environmental impacts and cleanup efforts		2010 & 2012

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Information Reliability		Digital abilities to manufacture fake content such as photos, videos, audio and text are proliferating. The rise in generative AI applications is notably making it easier to create and distribute sophisticated fakes. Social media are also contributing to the spread of misinformation, as viral content is driven by emotional appeal irrespective of reliability. People in positions of power have been known to endorse misinformation for their own purpose. Fake content can be used for fraud (via fabricated evidence, identity theft and phishing), to incite social unrest, harass/defame individuals and social groups and destabilise political systems, companies and markets. Information reliability also relates to erasing and altering historical data, resulting in misleading representations of past actions by individuals or entities. Trust in reliable evidence may thus be eroded and false information could overshadow the facts needed for informed decisions, affecting both consumer behaviour and democracies. The risk is aggravated by a lack of education and digital skills that make it harder to discern reliable information from fake news, fuelling social polarisation and distrust in institutions. Main impacts may include: • Increase in fraud, e.g. fake evidence and supporting material in claims submissions, social engineering attacks and phishing, internal fraud • Risk selection/underwriting and pricing errors due to unreliable input • Reputation and credibility risks for the insurance industry • Operational losses and claims from social unrest and cyber events • Increased societal polarisation and impact on mental health		
Legal and Regulatory Uncertainty		The pace and scope of legal and regulatory change continue to accelerate. The continued adoption of new regulations covering topics, such as ESG, data protection, AI and business conduct, can lead to increasing complexity of compliance and operational challenges. Over the past few years, the compliance costs have grown significantly, becoming a burden on both operational budgets and long-term planning. Multinational insurers face additional pressure to comply with fragmented regulations (e.g. for principle-based regulation) based across jurisdictions, including mandatory disclosures and capital efficiency requirements, potentially further exacerbated by differences in supervisory interpretations. As some regulations and laws have become the centre of political controversy (e.g. ESG), the legal framework may become even more volatile, regionally diverse and less predictable. Political interference may even lead to a general weakening of trust in the rule of law in various countries. Main impacts may include: • All these changes have far-reaching implications for the insurance business, from operational costs to comply and adapt, to product design, the provision of insurance and the investment chain • Litigation risk (such as allegations of greenwashing) and D&O coverage • Competitive disadvantages with different regulatory approaches in other jurisdictions or differing approaches within a jurisdiction due to the use of principles-based regulation • Increased pressure on legal and compliance professionals potentially leading to burnout, recruitment challenges and retention issues		

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Medical Advances	 	Advances that are made in several medical fields could bring considerable benefits in predicting, preventing, diagnosing and treating illnesses and thus have the potential to improve human health and longevity. As an example, GLP-1 based drugs have benefits beyond weight loss. Improvements in data processing algorithms and AI are expected to increase the accuracy and reliability of predictive genetic testing and of medical image analysis. However, adverse selection and information asymmetry between insurers and applicants may arise, affecting the availability, accessibility and affordability of insurance policies and cause an increase in claims. The cost of new treatments could impact premiums and product design. The legal landscape and related ethical implications are complex and constantly evolving and could impact liability insurance and brand reputation. Main impacts may include: • Increase in the average cost of claims for some insurance products • Increased uncertainty in the underwriting, pricing and valuation assumptions for life and health insurance products • Reputational impact stemming from the legal landscape and related ethical implications for some aspects like predictive genetic testing • Prototype risk from new substances impacting liability		2019
Mental Health	  	Mental health conditions range from mild to moderate issues such as anxiety, burnout and stress, to more severe and lasting disorders like depression or psychotic disorders. Mental health risks are increasing worldwide due to (i) growing economic inequalities and geopolitical risks, (ii) dependence on social media for interaction and information, exposing users to addictive applications and cyberbullying, (iii) environmental factors such as pollution and climate change, (iv) demographic changes that increase isolation and loneliness in modern societies and (v) limited access to care. Mental health is increasingly recognized not only as a public health issue but also as a systemic risk with implications for productivity and social cohesion, while the stigma surrounding mental illness continues to hinder early diagnosis and treatment. Research also indicates that the current healthcare system is inadequately equipped to address the challenges posed by mental health disorders. Main impacts may include: • Increase in claims for Life (higher suicide rates, decrease in life expectancy), Health (higher medical expenses), Protection (occupational disability claims) and P&C (Workers' Compensation, Employers' Liability, Accident and Health, etc.) products, exacerbated by the shift from public coverage to private insurance • Potential burden for insurers own operations, also due to absenteeism and loss of productivity • Potential reputational impact for companies not covering this type of risk		2021

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Nature and Biodiversity Loss	  	Nature encompasses all elements of the natural world, such as plants, animals and landscapes, while biodiversity refers to the variety and variability of life that underpin ecosystem services essential to human wellbeing. Despite growing awareness, biodiversity continues to decline globally due to changing use of land and sea (e.g. agricultural expansion, use of pesticides and urbanisation), leading to habitat loss, overexploitation of natural resources (e.g. overfishing, deforestation), pollution, invasive species, water risk and stress and climate change. Physical risks can be acute, such as deforestation (biodiversity), or chronic, such as a decline in the quality of air, water and soil (biodiversity). Accelerated by climate change, tipping points can cause abrupt, irreversible and non-linear shifts in ecosystems and accelerate biodiversity collapse. Early warning indicators (EWIs) are statistical or structural changes in ecosystem data that signal a loss of resilience and help forecast when a system is approaching a tipping point. Biodiversity loss is increasingly recognised as a material financial risk. It affects not only ecosystems and people (food security, diseases, mental health, etc.) but also the stability of economies and financial systems. The insurance sector is particularly exposed through underwriting, investment and operational channels. Global frameworks like the Taskforce on Nature-related Financial Disclosures (TNFD) are guiding insurers to better understand and report their nature-related risks; however, corresponding regulatory frameworks are still emerging. Expectations on insurers are especially relevant with respect to clients and investees in high-impact sectors such as agriculture and mining. Main impacts may include: • Potential liability claims linked to physical impacts such as a decline in soil or water quality, more frequent and more severe natural catastrophes • Underwriting risk from increased exposure in sectors dependent on ecosystem services (e.g. agriculture, fisheries, forestry) • Increase in catastrophe risk due to loss of key habitats, such as coastal dunes and mangroves that protect coastal areas from flooding • Impact on diseases, mental health as well as on food quality and availability having negative effects on morbidity and mortality • Investment portfolio devaluation due to nature-related transition risks or stranded assets • Operational impacts e.g. disruption of value/supply chain, relocation of activities due to ecosystem degradation • Reputational impact if insurers do not contribute sufficiently to protecting nature and biodiversity • Regulatory and compliance risk due to new disclosure requirements and supervisory expectations (e.g. TNFD)		2009

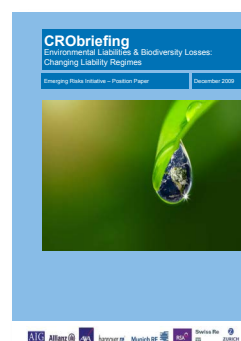
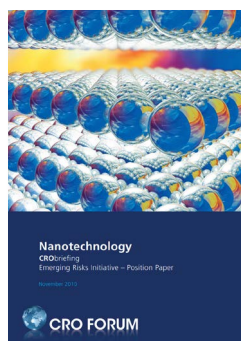
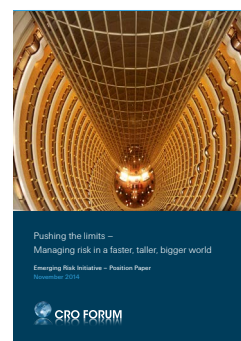
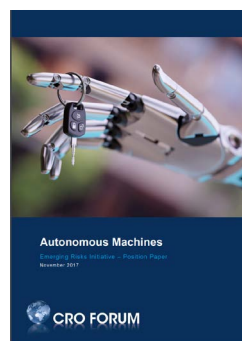
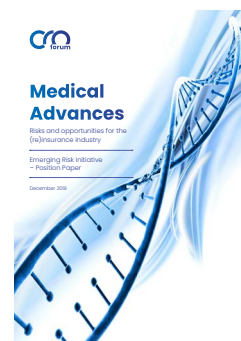
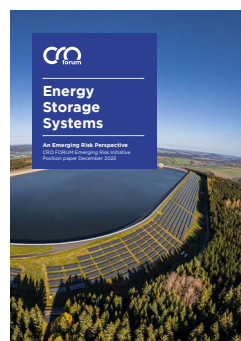
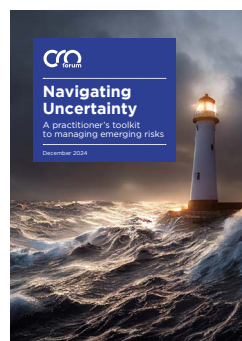
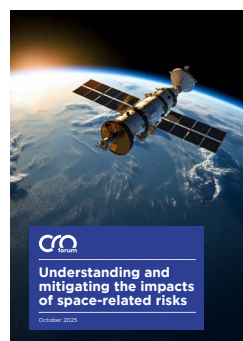
TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Social Fragmentation and Disorder	  	Social fragmentation (i.e., the loss of social cohesion and the emergence of distinct, isolated groups that interact with each other, leading to reduced social interactions, increased divisions and conflicts and a loss of shared identity and values) and related disorder are on the rise, accompanied by growing polarisation (e.g. irreconcilable political views). These trends are driven by increasing economic and social inequalities, geographical disparities and climate change, political and ideological divisions, intergenerational conflicts, immigration and cultural integration tensions, the influence of AI and new technologies, as well as fake news and polarisation on social networks. Social media can serve as an additional catalyst to amplify anger and frustration and harness it for a specific purpose, such as gaining political power or triggering unrest. From a macro perspective, democratic processes and market stability are influenced by increasing social tensions and movements. Main impacts may include: • Increasing challenges to the insurance business model and its principle of mutualisation • Change in the role insurers play in society (e.g. how an insurer invests and brings products to market and delivers its services) • Changes in product design (e.g. inclusive insurance) • Increasing claims, notably for SRCC (strike, riot, civil commotion), property and motor and health claims • Decreasing effectiveness of prevention measures (e.g. increased losses from natural catastrophes due to inability to implement collective protective actions and growing scientific scepticism) • Increasing macroeconomic risks • Increasing operational risks, notably physical security and safety and higher risk of fraud • Increasing regulatory scrutiny (e.g. on vulnerable customers) • Increasing reputational risks		

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Space Risk		Space is currently receiving heightened attention in politics and business. In modern society, humankind's dependency on technology and space-based infrastructure continues to grow. The number of objects in orbit has increased rapidly due to a significant increase of satellite launches since the last decades, increasing collision risk and space debris, potentially damaging critical operational systems. Other space risks arise from space weather events, such as solar storms and cyber-attacks that can disrupt vital infrastructure supporting critical terrestrial services, such as communication, defence, GPS and Earth observation. Cyber threats may fuel geopolitical tensions, while concentrated control over space assets may raise concerns of political or economic misuse. While the risk is rare, impacts on people and infrastructure are potentially high. Main impacts may include: • Direct physical damage to insured space infrastructure, such as satellites and spacecraft and terrestrial infrastructure, i.e. destruction of transformers leading to electricity blackouts • Wider secondary impacts on Earth, resulting from outages of critical space infrastructures essential for example communications systems, GPS systems and defence • Escalation of geopolitical tensions due to companies from a small number of countries dominating the space resource or nation-state backed attacks on the critical infrastructure of a rival country • Indirect impacts on market risk as tech companies expanding into low earth orbit are influencing earnings and stock market performance		2025
Substance Abuse		Substance abuse is the use of illegal substances or the misuse or excessive use of legal substances, ranging from opioids and prescribed medications to alcohol and nicotine. The common denominator is the harmful impact on physical and mental health, with the problem often aggravated by addiction. Drug overdoses, predominantly by opioids, are the leading cause of death of Americans under the age of 50. Alcohol abuse shortens life expectancy by 24 years on average. E-cigarettes, which were promoted as an aid to help smokers quit, sometimes have the opposite effect by making more people addicted to nicotine. Hundreds of new psychoactive substances are discovered every year in the EU and distributed faster than they can be monitored and regulated. They have the specific risk of unknown effects and side effects. The abuse of illegal drugs causes social problems such as acquisitive crime. Substance abuse is also implicated in traffic and workplace accidents and negatively impacts work performance. Main impacts may include: • Increase in morbidity and mortality • Higher healthcare costs • Potential impact on Property and Casualty lines such as motor • Litigation similar to what happened in the US with the painkiller 'OxyContin' • Additional burden on social systems • Poorer performance of the economy		

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Supply Chain Complexity		The supply chain is becoming increasingly vulnerable due to geopolitical dependencies, market fragmentation and the growing scarcity of energy and critical raw materials. This vulnerability is further amplified by concentration risks, such as reliance on strategic suppliers and single points of failure, particularly where supply chain and data dependencies are based in foreign locations. Global demand for essential resources such as energy, water, rare earths and agricultural land is rising sharply, while the availability and quality of these resources are declining. This dynamic increases dependence on dominant market players and heightens exposure to supply disruptions. This gives rise to supply chain reactions, including disruptions to supply chains. The complexity of supply chains leads to unforeseen effects. While the long-term impacts are inherently uncertain, they are potentially very significant. Main impacts may include: • Higher claims • Price inflation and impairment of investments in vulnerable sectors • Increased volatility in investments • Operational downtime for customers and internal processes and higher operational costs • Delays in performing activities, including claims handling • Reputational and liability risks		
Technological Power Concentration		Technological power concentration refers to the risk that a limited number of large technology companies hold or acquire a dominant position across critical technological products, services, data and digital infrastructure. This concentration spans multiple layers of the digital ecosystem, including cloud infrastructure, core software platforms, identity and security services, data and analytics environments and increasingly AI capabilities. As a result, (re)insurers become structurally dependent on a small group of providers, often with limited availability of equivalent European alternatives. High switching costs, technical lock-in, lack of interoperability and contractual or technical barriers may significantly constrain the ability to diversify or exit. Dominant providers may exercise pricing power, impose unfavourable contractual terms, or unilaterally change service conditions. As businesses and public institutions increasingly depend on a small number of centralised technology providers and shared digital infrastructures, this concentration can create systemic dependencies across sectors and geographies. Strategic or political decisions, operational failures, cyber incidents, supply chain disruptions, or regulatory conflicts affecting dominant technology providers could propagate widely through the global economy. Main impacts may include: • Potential higher claims due to liability claims and/or business interruption • Business continuity of operations of (re)insurance services is jeopardised if geopolitical developments trigger limited IT servicing by technology providers • Potential higher operational expenses in case of switching, diversifying or even exit of provider • Potential higher operational expenses as dominant providers may exercise pricing power, impose unfavourable contractual terms, or unilaterally change service conditions • Potential compliance issues (data privacy and data ethics) if data is shared with foreign governments		

TOPIC	ASSOCIATED TRENDS	DESCRIPTION	IMPACT ASSESSMENT	ERI PUBLICATION
Ultra-processed Food	 	Ultra-processed foods (UPFs) are industrial formulations made from food substances and additives using sophisticated techniques, resulting in ready-to-eat products. They often contain substances that are not used in home cooking, such as hydrogenated oils, modified starches, protein isolates, flavour enhancers and colouring. In addition to high levels of sugar, salt and fat, additives used are preservatives, sweeteners, emulsifiers and flavours to mimic real food textures and tastes. Over the last few years, several medical studies have focused on the health effects of UPFs. They linked ultra-processed food consumption to chronic disease risk. The main health risks mentioned are: cardiometabolic diseases, weight gain and obesity, mental health disorders, cancer, gastrointestinal issues and various forms of genetic and molecular damage. Lawsuits against manufacturers of UPFs are now picking up speed. A growing wave of litigation can be expected in particular in the US. Main impacts may include: • Increase in product liability claims against the food and beverage (F&B) industry. Key themes of litigation will be deceptive marketing, failure to warn and addictive product design • Higher morbidity and mortality claims due to long-term negative health impacts • Regulatory changes affecting coverage for F&B products		
Workforce Dynamics	  	Persistent skill mismatches and worker shortages, particularly among technical and healthcare professionals, are currently being exacerbated by demographic changes, changing skill requirements and societal changes. Advances in technology and the green and digital transitions are expected to further increase the demand for new skills and exacerbate existing shortages. Moreover, AI is becoming increasingly important in the workplace, further affecting the labour market and amplifying the skills shortage. In addition, potential long-term consequences include hampering investment and innovation due to a shortage of skilled workers, mental health impacts of overtired or under-skilled workers, and future shortages of experienced workers due to a decrease in entry-level jobs. For the insurance industry specifically, companies rely on highly skilled actuaries, loss adjusters, underwriters and asset managers and are thus directly exposed to this risk, particularly given the expected upcoming waves of retirement of specialists and experts (e.g. underwriters). Main impacts may include: • Inability to sustain risk prevention measures, longer business interruption periods, costlier repairs, more product failures and as a result higher Property & Casualty claims • Inappropriate decisions or mistakes made by inexperienced or overworked healthcare staff and reduced or delayed medical services could lead to an increase in medical malpractice claims and worsening mortality and morbidity • Operational risk for the insurance industry, which relies heavily on highly skilled employees • Longer-term impacts on mental health of overtired employees		

Emerging Risks Initiative Position Papers published by the CRO Forum



Title	Year
Understanding and mitigating the impacts of space-related risks	2025
Navigating Uncertainty	2024
Energy Storage Systems	2022
Mental Health - The Hidden Crisis	2021
Imagine all the people	2020
Medical Advances	2019
The Heat is on	2018
Autonomous Machines	2017
Water Risks	2016
The Smart Factory	2015
Pushing the Limits	2014
Food and its impact on the risk landscape	2013
Endocrine Disruptors	2012
Power Blackout Risks	2011
Nanotechnology	2010
Longevity	2010
Environmental Liabilities	2009
Critical Information Infrastructure	2008
Influenza Pandemics	2007
Terrorism	2007
Climate Change	2006

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