

Complex supply chains are vulnerable and prone to business interruption. IT outages are the most critical events that are likely to test supply chain resilience.

Supply chain risks

The dependency of businesses on stable global supply chains continues to grow in stride with ever-increasing globalisation. The resilience of supply chains has been tested many times in the past, but never have there been stress tests like in recent years. In particular the Covid-19 pandemic, but also the series of severe natural disasters have shown how vulnerable global supply chains have become. For (re-)insurers, these events led to substantial claims. Global supply chains for all kinds of products and raw materials were abruptly disrupted by lockdowns in all parts of the world and there is still no talk of a normalisation of the movement of goods and commodities. This affected all industries globally.

Supply chain vulnerability has developed over the last decades in line with evolving processes that promoted the ideas of "lean manufacturing" and "just-in-time" supply. There has also been an increasing trend to source globally in order to further reduce costs along the chain.

Business interruption continues to develop into a major issue. Already business interruption claims on average are substantially higher than related average direct property damage claims. Recent industry surveys show that supply chain risks are rated as a top peril by industry leaders. Nevertheless, the majority of industries seem to have no full overview of their supply chains.

Interviews with key industry experts also found that many such respondents had experienced supply chain interruptions already and that in many cases these disruptions were not resolved smoothly. Affected parties suffered from productivity losses, higher costs, drops in revenue, but also from damage to reputation. Unexpected IT outages as a result of cyber-attacks and data breach are assumed to be the biggest threats for the near and mid-term future.

Companies can address this risk of financial loss either through business interruption insurance or contingent business interruption insurance. Business interruption (BI) insurance covers lost profits after a company's own facility is damaged by an insured peril (e.g. fire, natural catastrophe), while contingent business interruption (CBI) insurance covers lost profits if an insured peril does not affect over the policyholder's own facilities but rather its critical supplier or a major customer. Business interruption and CBI losses typically account for 50% to 70% of catastrophe losses.

BI and CBI insurance typically only cover supply chain disruptions resulting from a physical loss or damage to insured property. Consequently, standard BI policies do not cover other disruptive events without a physical loss. However, numerous disruptive events may lead to BI without a causative physical loss, e.g. failure in service delivery by a supplier, product quality incidents, strike, riots, outbreaks of infectious diseases, outages of IT and communication systems, or cyber attacks. Of all such disruptive events affecting supply chains, IT outages appear most critical.

Supply Chain Interruption (SCI) insurance products gradually are being introduced in the market. Historically, these products have gained traction slowly due to limited capacity, high prices and prohibitive risk data requirements. Most markets do not provide all risks policies but offer named risks covers with restrictions and exclusions.

One of the main reasons for (re-)insurer reluctance in offering SCI policies is the critical issue of risk accumulation. Whilst major parts of the supply chain are unknown (re-)insurers attempt to mitigate their accumulation exposure.

For risk evaluation it is necessary to analyse the interdependencies of different supplier levels (1st tier, 2nd tier, 3rd tier) in as much detail as possible. Essential details include in particular the location of suppliers' facilities and the extent of business continuity plans the policyholder has in place to remain operational if faced with a disruptive event. Transparency and a deeper knowledge of supply chains are necessary to create tailor-made solutions.

hannover re®