

Supply Chains

Turning risks into opportunities

Supply chain risk and disruptions continue to impact nearly every corner of commerce and remain firmly on the minds of global business leaders. Supply chain vulnerabilities were exposed during the COVID-19 pandemic, first by a considerable drop in demand followed by a sharp recovery swing that caught a fragile system unprepared. Risks continue to increase vulnerabilities, causing leaders to make critical changes to mitigate supply issues that have hampered revenues.

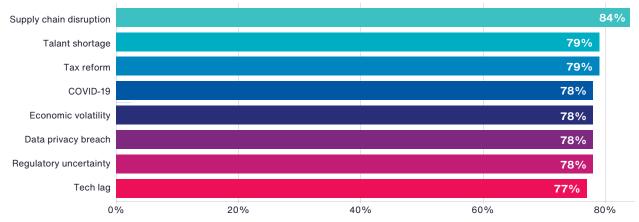
Nearly 79 percent of businesses surveyed report 4 percent or more of their revenue lost to supply chain disruptions over the past three years.¹



Supply Chain Disruptions Pose Greatest Risk to Business Finance Leaders²

CFOs eye shortages, delays as top risk

% of CFOs who identify business concern as a 2022 priority



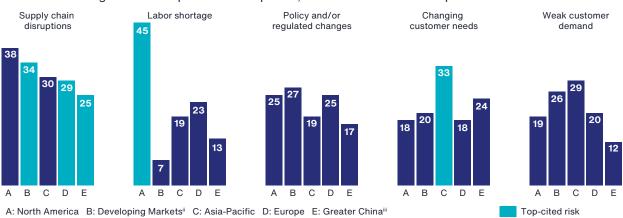
Fragile supply chains have proven costly to businesses

Nearly 79 percent of businesses surveyed report 4 percent or more of their revenue lost to supply chain disruptions over the past three years.¹

In late 2021, corporate CEOs identified the supply chain turmoil for the first time as the greatest threat to growth for both their companies and their countries' economies – greater than the pandemic, labor shortages, geopolitical instability, war and domestic conflict.³

Supply chain disruptions are a top risk to company growth in most regions, and labor shortages are an outsize concern in North America

Potential risks to growth for respondents' companies, next 12 months 9% of respondents



Out of 16 risks that were presented as answer choices. North America, n = 170; Developing Markets, n = 166; Asia-Pacific, n = 98; Europe, n = 265; and Greater China, n = 100. Includes India, Latin America, Middle East, North Africa, South Asia, and sub-Saharan Africa. Includes Hong Kong and Taiwan.

Source: McKinsey & Company

¹ Riskmethods Survey Reveals Supply Chain Disruption is Costing Many Businesses 4% or More of Revenue | SupplyChainDive

^{2 2022} BDO Middle Market CFO Outlook Survey

³ The coronavirus effect on global economic sentiment | McKinsey

What are the major issues organizations are facing?

A set of complex and often interconnected risks continues to hamper supply chains and frustrate business leaders worldwide, with more than nine in 10 executives surveyed planning to take steps to improve supply chain resilience.⁴

Longer and more complex supply chains:

A chain of interconnected companies typically includes manufacturers, logistics firms that provide transportation and storage. Complex and lengthy supply chains increase the chances for bottlenecks and disruptions, creating a ripple effect that ultimately impacts global trade flows.

"Just in Time" vs. "Just in Case" supply chain philosophies:

There's been a recent push to eliminate strict scheduled deliveries and logistics delays in favor of a just-in-case philosophy that holds more inventory. Any disruption to a just-in-time model impacts links in the chain immediately. The shortage of computer chips and its impact on the global auto industry is a prime example. It is estimated that the industry lost \$210 billion in revenues and production of 7.7 million vehicles in 2021 as a result.⁵

Continued port congestion and lack of workers across supply chain:

Scarcity of labor is creating bottlenecks throughout the logistics industry. By 2030, the American Trucking Association predicts a shortage of 160,000 truck drivers in the U.S. alone.⁶

More intense and frequent natural catastrophes due to climate change:

Disruptions continue to occur from intense hurricanes, floods, wildfires and other catastrophic risks. Ports, rail lines, highways and other supply infrastructure will all be threatened by average increases in sea level of 7.2 feet by 2100.7

Rising geopolitical and political violence risks:

Due in large part to the Ukraine conflict, the U.N. lowered its midyear 2022 global economic growth forecast from 4 percent to 3.1 percent and also projected global inflation to increase to 6.7 percent, more than double the average of 2.9 percent from 2010-2020, with sharp rises in food and energy prices.⁸ Price volatility is increasing costs and impacting revenues.

Cyber attacks:

Supply chains are attractive targets to threat actors as they provide the potential for large-scale extortion attacks. From one entry point in a supply chain, cyber criminals can use one attack to infiltrate multiple organizations. 93 percent of global firms admit they have suffered a cyber breach because of weaknesses in their supply chains.⁹

COVID-19 restrictions in China preventing shipment of goods:

Throttled by China's zero-tolerance approach to COVID-19, its economy is facing a spell of slower growth. Shanghai, home to the world's largest container port, has remained shuttered since late March. One in five container ships have been stuck in ports. When lockdowns are lifted, experts predict that ports will be slammed with pent-up cargo from newly reopened factories in China.¹⁰

⁴ Risk, resilience and rebalancing in global value chains | McKinsey

⁵ Automakers, chip firms differ on when semiconductor shortage will abate | Reuters

⁶ Driver Shortage Update 2021 | American Trucking Association, Inc.

⁷ Climate Change: Global Sea Level | NOAA climate.gov

⁸ World Economic Situation and Prospects as of mid-2022 | United Nations

⁹ The Supply Chain is the Next Big Cyberattack Target | SDC Executive

¹⁰ China's COVID-19 lockdown is inflaming the world's supply chain backlog | Fortune

What are the opportunities created by these issues?

How can leaders turn risks into opportunities?

- Make the supply chain risk management strategy truly enterprise-wide by connecting risk and insurance professionals with senior directors in supply chain, procurement, treasury, strategy and operations in a business around a common set of data and decision-making.
- Build visibility. Procurement functions in multinational companies will often have insight into supply chain mapping but may not share these insights with risk professionals. Visibility needs to go beyond the most important suppliers toward a better understanding around their levels of capacity and utilisation and dependency on other third parties.

Loss of income from supply chain disruptions has risen from 21 percent to 35 percent, while risk readiness has declined from 70 percent to 63 percent.¹¹

What should be done immediately?

Gain an understanding of the triggers in the supply chain:

Do you know who your suppliers' suppliers are? Which are critical? Procurement and supply chain professionals often define a critical supplier by the level of spend but in reality, risk will be more a characteristic of criticality.

Quantify the likely financial impacts

that would follow the loss of a critical supplier and think beyond material damage losses to better understand the measures being taken by suppliers to manage risk. Review your own supplier contractual terms from a liability perspective.

Global connectiveness and interlinked exposures require right risk solutions:

Alongside keeping manufacturing facilities intact and logistics moving, ESG performance, solvency of critical suppliers and increased intellectual property and cyber exposures all require comprehensive risk and insurance solutions to protect revenues from physical and non-physical events.

11 2021 Global Risk Management Survey | Aon



What should organizations be doing long-term?

Expected losses from supply chain disruptions equal 42 percent of one year's earnings before interest, taxes, depreciation and amortization (EBITA) over a decade, according to McKinsey.

Actions for the c-suite to harness data and protect the bottom line: engage with risk and data

1. Use data to quantity business exposure to supply chain risk:

Data lies at the heart of understanding a company's exposure to supply chain risk.

Data and risk teams should:

Obtain company-specific information: an overview of the organization; detailing entities; sites and identification of key functions performed at each location; and production details, including product mix and volumes.

Perform supply chain mapping to gather detailed information on each supplier – including addresses, type of supplier, supply volumes and utilization.

Review the companies' risk management processes to understand the impact of supplier failure, governance, business continuity and previous incidents across the chain.

2. Use loss modeling for better predictions:

Loss modeling can quantify the impact of possible future events, via these four steps:

- a) Identify suppliers by tier and map the manufacturing process
- b) Understand the interconnectivity of suppliers and processes
- c) Identify critical failure points and the frequency of loss scenarios
- d) Quantify the impact of a disrupting event Standard statistical techniques are used to provide a view of the expected impact on the supply chain and the distribution around it

3. Gain greater contingent business interruption insight:

As more data is gathered, benchmark exposure curves can be calibrated and employed to obtain a view of the scale of contingent business interruption events. This provides greater insight into the potential range of outcomes to inform estimated costs, as well as limit decisions.

With these insights, leaders can make better decisions about deploying resources to manage supply chain risk and the financial impacts on the bottom line.

Supply chain risk is complex, multi-faceted and costly with disruptions having a significant impact on company business and financial performance. Improved insights around where and how risk impacts the supply chain can help businesses prepare for, finance and respond to unplanned events and volatile supplier performance.

LINKS TO INSIGHTS

Evaluate your Supply Chain for Emerging Risk Vulnerabilities | Aon Insights

The Manufacturing Supply Chain Challenge | Aon Insights

A Perfect Storm: The Rise of Supply Chain Risk | On Demand Aon Webinar

What a Stuck Ship in the Suez Canal Teaches Us About Supply Chain Risks | The One Brief

<u>Video: How Can We Build More Resilient Supply</u> Chains? | The One Brief

Supply Chain Risk Management. Innovative solutions for resilient operations | Aon Client Alert

Aon Supply Chain Diagnostic Tool

2021 Aon Global Risk Management Survey



Contact Us

The Aon Centre, The Leadenhall Building, 122 Leadenhall Street, London EC3V 4AN

aon.com

This paper constitutes information only and is not intended to provide advice. Professional advice should always be sought regarding insurance coverage or specific risk issues.

About

Aon plc (NYSE: AON) exists to shape decisions for the better—to protect and enrich the lives of people around the world. Our colleagues provide our clients in over 120 countries with advice and solutions that give them the clarity and confidence to make better decisions to protect and grow their business.

©2022 Aon plc. All rights reserved.

Aon UK Limited is authorised and regulated by the Financial Conduct Authority. Registered in England and Wales. Registered number: 00210725. Registered Office: The Aon Centre, The Leadenhall Building, 122 Leadenhall Street, London EC3V 4AN. Copyright 2022 Aon UK Limited.