OliverWyman

COMPANIES MUST REDUCE SUPPLY CHAIN RISKS

Ben Simpfendorfer
Sandeep Agarwal
Tushar Narsana

EXECUTIVE SUMMARY

Global supply chains are efficient but fragile. Geopolitical tensions, natural disasters, and pandemics have all caused major disruptions to global supply chains over the past five years.

China remains integral to global supply chains. Given the size of China's domestic market and the fact there is no simple substitute for the country's export sector, it is difficult for foreign companies to fully decouple from China.

However, global companies are adopting a range of strategies to reduce their exposure to China. These strategies include "China + 1" or reshoring strategic products and parts, especially in sensitive sectors.

Foreign companies need to understand their current risk exposure. They also need to prepare a Plan B, particularly in the event geopolitical tensions worsen.

In this paper we identify a series of no-regret moves companies can take to de-risk supply chains. These include:

- Understand your geopolitical risk exposure
- Decide which products to relocate
- Choose which markets to relocate to
- Ensure regular checking of new suppliers
- Optimize inventory and cash flows

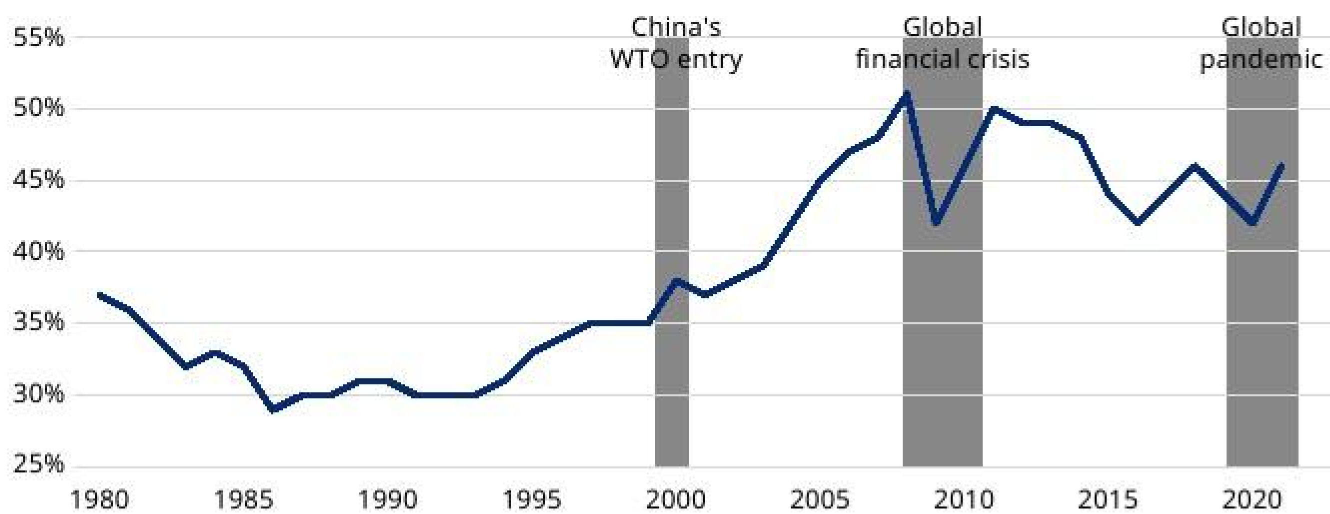
DISRUPTIONS TO GLOBAL SUPPLY CHAINS COULD CONTINUE

Politics and pandemics have reshaped global supply chains in recent years, showing them to be efficient but fragile. Initially, US-China trade tensions resulted in significant tariff hikes. The pandemic and lockdowns then disrupted supply and transport networks. Finally, the war in Ukraine resulted in shortfalls of food and other raw-material products.

Globalization was already slowing over the past decade. Exports as a share of global GDP peaked at around 50% more than a decade ago, falling to a low of 45% during the past five years (Exhibit 1). As global supply chains transform over the coming decade, we are unlikely to see the share pertaining to exports return to previous highs.

However, as supply chains will not change overnight, companies remain at risk of further disruption. The magnitude of this disruption could also be more significant should geopolitical tensions worsen or other unforseen events emerge.

Exhibit 1: Global trade as a share of global GDP



Source: International Monetary Fund, World Trade Organization

THREE STRATEGIES TO REDUCE SUPPLY CHAIN RISKS

We are seeing firms responding to the current risks to global supply chains by undertaking three principal strategies.

China + 1

The global apparel sector has adopted a "China + 1" strategy for over a decade. The strategy originated in response to rising costs and labor shortages, as well as to shorten supply chains and their respective response times. Bangladesh and Turkey, for example, have been able to capture a growing share of global clothing exports.

However, a wider range of consumer and capital goods companies, particularly American firms, have adopted a similar policy in the past five years. Rather than reducing costs, their main motive has been to de-risk their exposure to China and the disruption caused by tariffs, sanctions, or geopolitics.

The China + 1 strategy assumes that besides China, a foreign company will also source a share of its products from one or more suppliers from other countries, such as Vietnam, Mexico, or Poland. The relative shares differ for each company, but they may still imply a majority of the company's products originate in China.

In China for China

China is a vast market for many products, often the largest globally. In the automobile sector, for example, over 26 million cars are sold in China annually, nearly twice that of the US. For such kinds of products, foreign companies will continue to manufacture in China for sale to Chinese consumers.

The "In China for China" strategy assumes firms will retain or even expand their local supply base. Doing so ensures it is insulated from global trade tensions, is more aligned to national policies, and can offer localized products to target the Chinese market, all while still being opportunistically available for export.

Reshoring strategic products and parts

The evidence for reshoring is less compelling in the short term and mainly found at a company-specific level. However, government policies, ranging from subsidies to bans, are accelerating the speed at which the manufacture of specific parts or products is returning to home markets, especially among advanced economies.

In the long term, however, investment in automation and other manufacturing technologies that reduce costs and improve efficiencies will make the case for reshoring more compelling. Moreover, as the local supply base deepens, the logic for bringing production home will continue to grow.

SUPPLY CHAINS WILL NOT TRANSFORM RAPIDLY

While leading companies may successfully de-risk their supply chains, we do not expect industry-wide change to occur rapidly. China's scale, speed, and productivity make it hard to beat as a manufacturing location for exports. While the media is full of relocation stories, the data tells a different story.

So far, most production leaving China has ended up in Vietnam, as Exhibit 2 illustrates. Moreover, category shifts are limited to mainly apparel, consumer electronics, and furniture. These sectors are typically easier to relocate compared to more capital-intensive types of production, such as metals fabrication or industrial machinery.

Exhibit 2: Percentage change in import market shares between 2019 and 2022

For the aggregate global imports of the US, the UK, Japan, Germany, and Australia

	China	Vietnam	India	Indonesia	Malaysia	Mexico	Thailand
Clothing	-5	1	1	0	0	0	0
Communication equipment	-4	4	1	0	1	0	1
Leather and related products	-4	4	0	2	0	0	0
Computers and related equipment	-3	2	0	0	1	1	1
Other manufactured goods	-3	1	0	0	0	0	0
Textiles	-1	1	2	0	0	0	0
Electrical equipment	-1	1	0	1	1	0	1
Food products	-1	0	0	1	0	1	0
Iron and steel	0	1	1	0	0	2	0
Non-ferrous metals	1	0	0	0	0	0	0
Machinery and equipment	1	1	1	0	0	1	0
Consumer electronic equipment	2	8	0	0	0	1	-1
Motor vehicles	2	0	0	0	0	2	0

Source: ITC Trade Map; Oliver Wyman analysis

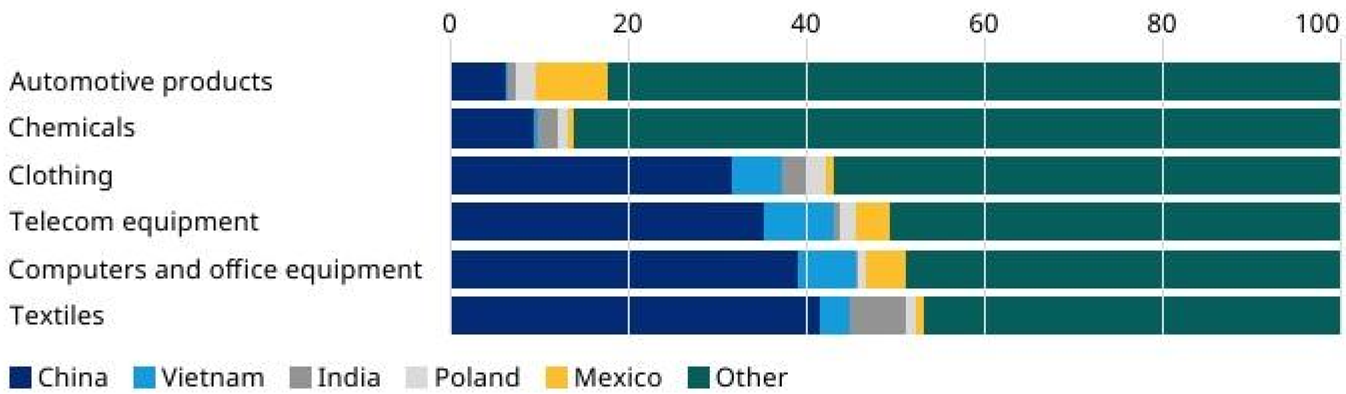
The challenge is that Vietnam is far smaller than China. No larger than Guangdong province, which itself only accounts for 24% of China's total exports. Not surprisingly, land and labor constraints are already emerging. Mexico, which has a larger population than Vietnam, also suffers from similar constraints relative to China's scale.

India and Indonesia are the two potential exporting giants that offer greater scale. However, they have been slow to develop as production alternatives. Neither country has captured significant market share in the past few years, as Exhibit 2 shows. Success stories are more often limited to individual companies, such as Apple, which manufactures 7% of its iPhones in India, and IKEA, which already has established supply base in India.

While global companies will continue to develop alternative production hubs in India, Indonesia, and other countries, such as Mexico and Poland, we expect progress to take multiple years. Large global companies will find it easier than small and medium-sized enterprises, and progress will be faster in sectors where governments are intervening most aggressively. However, for the foreseeable future, China will remain the world's largest manufacturer of a range of export products and a key supplier of component parts.

Exhibit 3: Global export share for select products (2022)

Percentage share of global exports



Source: World Trade Organization

GEOPOLITICAL RISKS ARE AN IMMEDIATE CONCERN

The constraints on short-term production shifts make the global supply chain highly vulnerable to geopolitical shocks, particularly in North Asia. This region accounts for 42% of office and telecommunications equipment and 32% of general manufacturing exports. The figures are even higher for specific goods, such as smartphones (74%), notebooks (72%), and integrated circuits (ICs) and electronic components (59%).

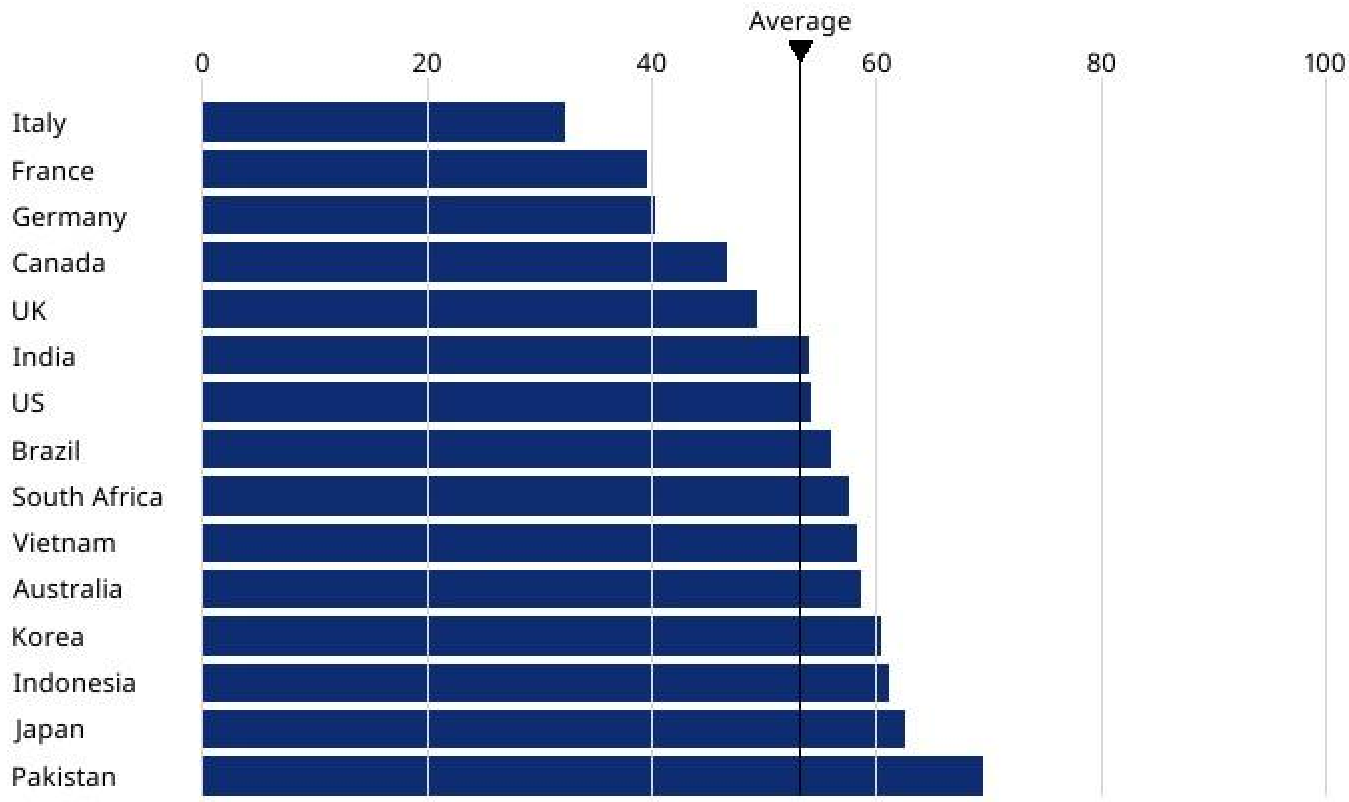
If a political crisis disrupted the manufacture and movement of goods across North Asia and to the rest of the world, there would be a material effect on global supply and inflation. To date, many analysts believe the inter-dependency between major economies will deter the respective participants from conflict. However, companies should still plan scenarios and de-risk where possible.

SYSTEMIC COUNTRY-LEVEL EXPOSURE VARIES

A supply shock would have global implications. However, not all countries would face the same level of exposure. We have developed an exposure index based on the weighted importance of over 5,000 products imported by any given country from China (Exhibit 4). There are sharp differences between countries, such as Australia and a number of countries in Western Europe, with regard to their dependence on China.

Exhibit 4: China-imports dependence index

Scaled from zero to 100



Note: This index measures imports originating from China as a share of over 5,000 import product categories. Final shares are weighted by the importance of each product category to the total imports

Source: ITC Trade analysis, Oliver Wyman analysis

High dependence

- Asian countries tend to have a high dependence as they import from China to supply domestic demand and also buy component parts for export processing
- Developing countries with a greater number of Belt and Road Initiative (BRI) projects and where China's commercial presence has grown rapidly also have a high dependence
- Australia stands out for its high dependence as it imports substantially from China primarily for its domestic demand. Compared to the US or countries in Western Europe, Australia also has more limited nearby alternatives for its import needs

Medium dependence

- The US and the UK have a lower degree of dependence relative to Australia, but their respective dependence is still higher than most of the rest of Western Europe

Low dependence

- Western European countries generally have a lower degree of dependence given the continent's large manufacturing base and alternative suppliers in Eastern Europe

Our analysis looks at the various countries' exposure to imports from China that are finished goods. Even in cases where the finished goods are imported from a country other than China, there is still a high possibility that the product uses a component part or ingredient sourced from China. In our client work, we have helped map out the true source of component parts. For most firms, this is a tricky yet critical step.

"NO-REGRET MOVES" FOR DE-RISKING SUPPLY CHAINS

We have identified a series of "no-regret moves" that companies and financial institutions can take to de-risk their global supply chains. In our experience, there is no single template. Options not only differ by sector, but are influenced by a company's geographical footprint, market, and organizational structure.

Understand your geopolitical risk exposure

Many companies are managing conventional risk effectively but have not yet experienced significant geopolitical risks. Firms should conduct a review of products, components, or materials, as well as key shipment hubs, to understand how a geopolitical event might impact revenues, such as an extended supply disruption or a significant cost increase.

Firms must also assign responsibility to a dedicated risk owner or team who will monitor and drive risk management, rather than simply conducting one-time risk reviews. As horizontal risks, in particular, can cut across multiple business lines, such as merchandising and logistics, a holistic view toward risk exposure is critical in order to achieve a truly robust and accurate assessment of risk.

Decide on the products that need alternative suppliers

Companies need to next agree on the level of exposure they are prepared to accept at a product and component level. China is likely the lowest cost option already, so developing alternative suppliers, such as ones in India or Indonesia, will be more expensive. It therefore makes sense to utilize alternative suppliers for select products rather than the entire portfolio.

To make this decision, firms need data-driven insight into a greater number of variables than is typically available. Leading companies are only just starting to track the physical location of suppliers via digital control towers, for instance. Translating these insights into a financial impact at the product level will improve decision-making on which products need alternative suppliers.

Make market choices for relocation

Companies then need to assess the alternative markets and suppliers available to them. The optimal mix depends on a range of inputs, including but not limited to costs, supplier availability, and incentives. There is no single template for success, as a company's capabilities, footprint, and customers will shape and impact its decisions.

- **Operating costs:** The playbook for assessing operating costs, such as labor, logistics, and raw materials, is well understood. However, structurally higher inflation globally and the wide differences between countries will complicate calculations

- **Business environment:** Companies need to consider the depth of the local supply chain in new markets. ESG standards are also rightly higher today, so firms need to exhaustively qualify new suppliers to avoid complications later
- **Public subsidies and incentives:** Governments around the world are offering compelling packages to attract manufacturing investment. However, these packages can be complex, so companies should be cautious of being locked into unfavorable deals
- **Reshoring and automation:** Reshoring is still in its infancy, but it is accelerating thanks to government support. There is also a greater mix of automation in the production process to help offset labor costs and productivity
- **Supplier relationships:** Smart organizations can also work with their suppliers to reduce risk, by encouraging them and their suppliers to diversify their own supply base, such as by sharing risk and providing a safe market

Ensure regular checks on new suppliers

Companies that switch to markets outside of China must ensure that the new suppliers they employ are meeting their contractual obligations. In some cases, companies have discovered that the new suppliers are simply rebranding products imported from China, or relying more heavily on Chinese component parts than originally agreed, thereby negating the company's original de-risking initiative.

Optimize inventory and cash flows

Many companies have also responded to uncertainties by building up their inventory. This inventory is expensive to buy, maintain and monitor. It directly impacts a firm's financial health and is not a sustainable option in the long term. Most companies are now looking for ways to improve their resilience while also reducing the stock they hold.

Developing alternative suppliers or markets less prone to disruption is a first step. Companies may also choose to change their SKU (stock keeping unit) inventory mix to avoid over or under-stocking specific products. Better communication with suppliers, or negotiating contracts with suppliers to ensure they supply on demand, rather than contingency, is another option.

FOCUSING ON RESILIENCY AND TRUST

The new global supply chain has created challenges and opportunities for companies. Switching from a methodology that is mainly based on cost efficiency to one focusing on resiliency and trust is a critical step for companies seeking to reduce their exposure to geopolitical risks.

Please do not hesitate to contact us if you would like to discuss these ideas further.

Oliver Wyman is a global leader in management consulting. With offices in more than 70 cities across 30 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm has more than 6,000 professionals around the world who work with clients to optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities.

For more information, please contact the marketing department by phone at one of the following locations:

Americas
+1 212 541 8100

EMEA
+44 20 7333 8333

Asia Pacific
+65 6510 9700

AUTHORS

Ben Simpfendorfer
Partner
ben.simpfendorfer@oliverwyman.com

Sandeep Agarwal
Partner
sandeep.agarwal@oliverwyman.com

Tushar Narsana
Partner
tushar.narsana@oliverwyman.com