Why the Russia-Ukraine war may finally drive CFOs to reconfigure battered supply chains

COVID-19 rattled global supply chains. Now, the war between Russia and Ukraine threatens to shake them apart.

When the war began in February 2022, critical supply networks had not yet fully recovered from labor shortages, factory closures, and other disruptions brought on by the pandemic. For many CFOs, however, the ongoing conflict has dramatically underscored the lack of resilience in supply chains. Logjams at ports and restrictions on airspace, along with pumped-up oil prices, have driven home the need for more diversified logistics. And delivery delays and supply shortages in crucial sectors like semiconductors have raised questions about how to efficiently gain heightened supplier visibility and closer geographical proximity.

The vulnerability of far-reaching supply chains can be traced to the guiding principle that shaped many of them: ruthless efficiency. In recent decades, the drive toward hyper-globalization shaped how finance leaders and other decision-makers set up their vast networks of resources, money, and information. Traditional buffers, such as the deployment of incremental strategic stock or the use of redundant sources of materials and components, became less of a priority than staying lean. Engineered to meet just-in-time demands, these remarkably efficient supply chains nonetheless lacked the flexibility needed to cope with just-in-case scenarios.

True, isolated events, whether natural (Thailand floods, 2011) or political (China-US trade war, 2018) periodically exposed supply chain fragility. But until now, CFOs may not have likely found it necessary to explore and address the scope of their supply chain's vulnerability. Preparing merely for minor interruptions is no longer sufficient.

In this edition of *CFO Insights*, we'll investigate what CFOs can do to fortify their logistics networks, replacing fragility with agility. How has Russia's invasion of Ukraine affected supply chains differently than the pandemic? As CFOs reshape supply chains, should they and others choose between efficiency or resiliency? And rather than reconfiguring an entire supply chain, what kinds of targeted investments could CFOs consider to boost performance?

Knock-on effect

On the surface, a war involving Russia and Ukraine would seem unlikely to test the mettle of global supply chains. Russia ranks 26th among the US's largest goods trading partners,[1] and Ukraine contributes just 0.14% of global GDP.[2]

But while direct trade between countries may appear slight, it's important to detect the deeper ripples the war has triggered in global supply chains. The European Union's decision to ban most Russian oil, for example, has led to skyrocketing energy prices in Germany. The issue: Germany has been the US's top European trading partner since 1997.[3]

Russia and Ukraine also account for about one-third of the global wheat market.[4] In fact, both are key global exporters of a number of agricultural commodities as well as fertilizers that farmers rely on to improve crop yields. Reduced shipments of the commodities due to the conflict in the region have resulted in significant cost increases in global commodities, even for countries that don't rely on Russia or Ukraine.

Some connections are obvious. Ukraine produces as much as 90% of the neon gas used in the chip-making process. While some chipmakers have stockpiled neon, there are concerns about the long-term availability of the gas. Likewise, Russia produces more than one-third of the world's supply of palladium, a rare metal needed for semiconductors and catalytic converters.[5]

Fears for tiers

Russia and Ukraine may not be Tier 1 suppliers, critical cogs in large, multinational supply chains. But they may be entrenched upstream as exporters of commodities. CFOs who may view the war-related risks to be minimal at Tier 1 may find that their exposures go up substantially at Tier 2 and Tier 3.

Indeed, around 70% of chief procurement officers believe that they have good visibility into the risks that exist in their direct (Tier 1) suppliers, yet only 15% have visibility into lower tiers, according to the Deloitte Global 2021 Chief Procurement Officer Survey.[6]

The absence of visibility is far from the only supply chain issue. In Deloitte's North American *CFO Signals*™ for the second quarter of 2022, CFOs rank inflation and broader economic concerns, along with geopolitics, among their most worrisome external risks, which also include the supply chain itself (see Figure 1).[7]

To be sure, the Russia-Ukraine conflict has shone a spotlight on the risks of relying too heavily on nations or regions that seem vulnerable to disruptions. By basing sourcing decisions mostly on costs, companies may be burdening their supply chains with additional levels of geopolitical risk.

Figure 1. Supply chain and related issues rank among CFOs' most worrisome risks
Which external risk worries you most? *(Key themes)*

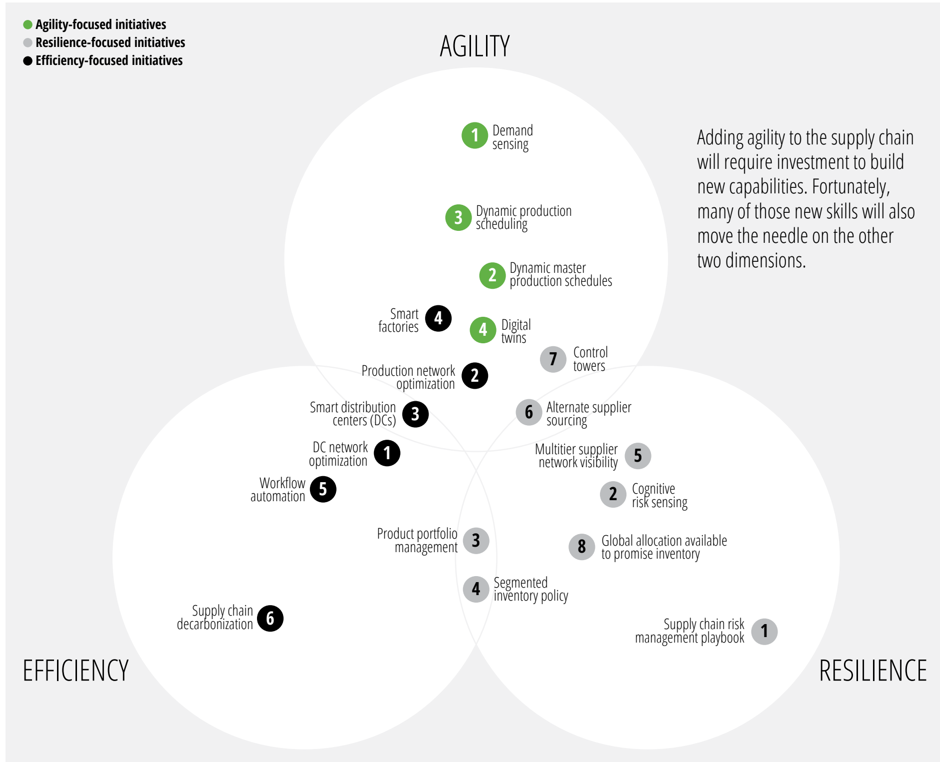
Source: *CFO Signals* Q2 2022, US CFO Program, Deloitte LLP

Still, some CFOs may be reluctant to revisit their supply chain strategies. Added inventory or partnerships with a greater variety of suppliers can come at a hefty price. Before making any decisions, CFOs should ask four fundamental questions about their supply chain management capabilities:

1. **How useful is the company's data?** Poor data quality can hamstring any attempts at applying analytics to diagnose and fix supply chain issues (see "Supply chain risks: How to identify and mitigate your weakest links," *CFO Insights*, March 2021). Partnering with the IT function may be necessary to, among other things, standardize internal and external data and ensure access to those who need it.
2. **How detailed is your supply chain information?** Visibility into suppliers is only as comprehensive as the information that is being captured and reported. Companies may identify and survey their most critical suppliers, but they often stop there. In the Deloitte procurement survey, 75% of CPOs chose enhanced supplier information-sharing as their top supply risk mitigation strategy.[8] Visibility into suppliers' operational performance can be critical in meeting sudden changes in demand.
3. **Where in the world is your supply chain most vulnerable?** Companies should track where—and in what proportions—critical commodities are being sourced from at-risk geographies. Overdependence on one country or region can pose undue risks. Companies that rely on minerals from Eastern European countries, for instance, may already be looking to diversify as a result of the Russia-Ukraine war. Advanced technology, including AI, may be helpful in pinpointing geographical clusters.
4. **Which technology investments could boost flexibility?** Rising labor costs and rampant labor shortages are fueling the use of technology in both factories and distribution centers. By automating their factories, some manufacturers may broaden the range of products they turn out. Redesigning products to use interchangeable parts could help cut inventory. In addition, information technology can improve resilience by flagging potential or developing bottlenecks.

Figure 2. Investments in agility move the needle in other dimensions

A new tripolar strategy



Source: "The new supply chain equilibrium," *Deloitte Insights*, April 2022

Redefining supply chain optimization

No matter how motivated a company's leadership may be to make a supply chain more resilient, the level of investment will no doubt vary according to the operation's business positioning.

Virtually all corporations are facing pressure from various stakeholders to adopt sustainable practices and disclose environmental, social, and governance (ESG) risks. That development, in itself, will likely require some reexamination of supply chain practices. But many CFOs at companies that compete on price—sellers of bulk commodities, for example—may well stick with their traditional focus on lowering costs. Finance chiefs at companies that compete on differentiation, such as time of delivery or product customization, will likely seek ways to optimize their supply chains in an increasingly risky environment.

While costs will remain a sizable consideration in supply chain strategies, selective investments can be weighed against a heightened awareness of what may be at risk. In Deloitte's North American *CFO Signals* survey for the third quarter of 2021—before the war began—44% of CFOs reported that supply chain shortages or delays had increased their companies' costs by 5% or more. Nearly one-third said their sales had already suffered.[9] Investments in agility may also yield gains in supply chain efficiency and resilience (see Figure 2).

As CFOs balance risk and inflation with improved resilience, the principles below may prove helpful.

- **Being global doesn't mean doing business everywhere**. Companies aren't likely to reject globalization, but they can approach it selectively. Acutely aware of the dangers of working with certain countries, companies may want to focus on "trusted partners," as

Treasury Secretary Janet Yellen recently suggested.[10] Higher costs may be an acceptable trade-off for gaining resilience through forging stronger, deeper trade links (see sidebar, "Friendshoring: A matter of trust").

- **All inventory isn't equal**. The decision to improve resilience doesn't mean stocking 10% more inventory across the board. Which components are absolutely vital to keeping goods flowing? Increase incremental stock strategically, buffering in the regions or product lines that need it most.
- **Follow the route to logistics flexibility**. When pent-up demand exploded after COVID-19 waned, the limits of relying just on ocean freighters or even air shippers became obvious—and expensive. Lead times expanded, container prices soared, and growing shipping costs devoured profit margins. Companies may need to adjust their routes, utilizing different modes of transportation.
- **Embrace digitalization**. Many technological tools can help boost resilience, but companies should find those that best suit their needs. Some CFOs may decide they would benefit from real-time visibility into inventory levels. Others may start using blockchain to track products or begin leveraging predictive analytics to model scenarios.

The next supply chain strain

The prospect of a long war between Russia and Ukraine isn't the only looming threat to supply chains. The possibility of China weighing in on the current conflict could disrupt the availability of certain strategic minerals and metals, and Taiwan's involvement could cast a cloud over a global hub of advanced chip manufacturing.[11] Inflation, already a constraint, could mutate into stagflation, partly because of the Russia-Ukraine war.[12]

Then again, the next supply chain upheaval—like the pandemic and the war—could seemingly come out of nowhere. That's what makes it imperative for CFOs to prepare their supply chains for just about anything.

Friendshoring: A matter of trust

The tumultuous impact of geopolitical risks on supply chains is nearly enough to drive CFOs into the arms of deglobalization.

Such a costly retreat, however, could reverse several decades' worth of effort to cut costs by expanding supply chains in any and all directions. The push for localization, in part a product of growing nationalism and increasing ESG requirements, can only go so far. It's not as if every company can afford to build its own $15-billion semiconductor plant, patiently waiting several years for it to get commissioned.

Other familiar supply chain strategies—the descendants of offshoring— have their drawbacks. Onshoring is impractical and risks alienating foreign markets; nearshoring may reduce some costs, but imposes constraints due to the emphasis on reducing distances and cultural divides; rightshoring demands applying a deeply analytical approach to choosing locations, which may be susceptible to political unrest or other disruptions that could be difficult to predict and address expeditiously.

The desire to limit potential political risk while leveraging the cost savings from diversification has given rise lately to another variation, friendshoring. The strategy focuses on identifying suppliers and manufacturers that share a common characteristic: They are trusted trading partners. Combining domestic sources with trusted international suppliers can improve resilience by helping ensure access and reducing single-source risk. Collaborating with designated allies can also help ensure high labor standards and required environmental practices.

Determining which nations have earned trust can start by looking at existing pacts. These range from the Five Eyes intelligence alliance—consisting of the US, UK, Australia, Canada, and New Zealand—to NATO's 30 member countries. Ultimately, governments may end up playing a role in launching a marketplace for trusted suppliers or intervening to help nurture links with trusted partners. In mid-2021, with the pandemic raging, India, Japan, and Australia struck the Supply Chain Resilience Initiative. Among other provisions, the three nations agreed to share best practices regarding supply chain resilience and to hold buyer-seller matching events.[13]

Of course, such a strategy implies unfriending some countries as well—a calculation that's best to make ahead of the next supply chain disruption.

End notes

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Contact

Jim Kilpatrick
Global Supply Chain & Network Operations leader
Canadian Consumer Products Industry leader
Deloitte Canada
Jimkilpatrick@deloitte.ca

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Deloitte *CFO Insights* are developed with the guidance of Dr. Ajit Kambil, Global Research Director, CFO Program, Deloitte LLP; and Josh Hyatt, Manager/Journalist, CFO Program, Deloitte LLP.