Global Supply Chain Risks: COVID, Ukraine Conflict, and OECD Policy Responses

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🎯 COVID-19 and Russia's war of aggression against Ukraine have triggered a new debate on risks associated with production in global value chains (GVCs).

Explain this debate from a theoretical and policy perspective and provide a list of trade policy recommendations for OECD countries to address the issue.

> Key takeaways:
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> *Covid19 and Russia's war put front and center the issue of supply chain resilience and sustainability. The case for public intervention and international cooperation is clear as the risk both in the short and long term are significant.*
> → *There are a significant number of policy options, yet the focus should be put on international cooperation and experience sharing but also on putting forward innovative solutions relying on digitalization.*

The issue of supply chain resilience and sustainability may not be as obvious as it seems for Government. On the one hand, there are valid reasons for questioning the appropriateness of government intervention in this area, which falls within the core activities of companies. On the other hand, despite the turbulence, supply chains have shown themselves to be somehow resilient in the face of the latest major shocks (COVID, Aggression of Russia in Ukraine) and potential foreseeable shocks (semi-conductor disruptions, climate change and related policies and digitalization).

The value of looking at the resilience and sustainability of supply chains lies in the different order of magnitude of the risks, vulnerabilities and challenges facing the global economy in the coming years. **For this reason, in this note we will respond to the arguments ruling out public intervention before presenting the compounding risks that justify not only public intervention, but also stronger public-private partnerships and better international cooperation. We conclude by presenting the tools already in use and a panorama of public policy recommendations (based on current multilateral work and our own proposals).**

1. Rationale for public intervention

Some authors rightfully question the legitimacy of public intervention in supply chain risk management:

- A recent paper from Grossman, Helpman, and Lhuillier (2023) identifies two opposing market failures that policy could only potentially correct. In this perspective, the rationale for public intervention outside ensuring that the market failures effect are limited (ensure fair competition, counter-incentivize opportunistic behaviors) is "subtle" to paraphrase the Chief Economist of the WTO Ralph Ossa
- Additionally, one could argue that it is p**articularly hard for governments to identify strategic supply chains or essential goods** to be monitored and to mitigate the risks associated. The risk of fighting yesterday's battle remains high. The definition of an essential good vary greatly in time, and knee jerk policies such as stockpiling can come with a great fiscal cost.
- The government action could also be redundant. There is a growing awareness in the private sector regarding the need for resilient and sustainable supply chains. Shift from cost base supply chain management to revenue-based supply chain management. Meaning that the supply chain is not only a cost that the company should minimize but a process allowing it to maximize the revenue on the longer term (even if the cost in short run is higher). In France L'Oréal is communicating significantly about it supply chain management. Many consulting firms are already working and researching the topic, for instance Gartner and BCG.

Yet, one could also argue that the stakes are too high to be ignored by Governments. There is a gap between the firm optimum and the social optimum, especially regarding risks and vulnerabilities that on the short, medium or long run can weigh heavily on the well-being of the population, with potential life-threatening consequences.

2. Address a large set of risk and vulnerabilities not accounted for by private companies.

We can highlight at least 5 types of risks and vulnerabilities to Global Supply Chains that call for Governments intervention and cooperation.

1. **Geopolitical tensions,** geo-economic fragmentation, and public health: Example of Covid 19, effect on labor, consumption that could be symmetric (pandemic) or regional. Regarding the geopolitical risks, example of Ukraine regarding food and fertilizers, China and Taiwan regarding semi-conductor and critical minerals.
2. **Climate change,** climate related policies and biodiversity risks: both transition risks, with global shifts in production, consumption and saving balances between countries, notably fossil fuels exporters and with the foreseeable subsidy race regarding green transition, and physical risks with both short-term disruption for instance the Panama Canal drought during summer 2023 and longer term effect for instance with labor migration due to climate change. Regarding biodiversity, with potential nonlinear effect of ecosystem degradation (see OECD report on Biodiversity: Finance and the Economic and Business Case for Action)
3. **Logistical and Technological risks**: Logistical risks are often not caused by public policy but are related to the actual flows of goods and services for instance the Suez Canal incident with the Ever-Given incident in 2021. Regarding the technological risks, both related to innovation, for instance with IA impact on trade of services and industrial risks, for instance with an heavier reliance on nuclear energy and the risks implied, Fukushima or cybersecurity risks.
4. **Labor and responsible business conduct opportunity**: global supply chains and production fragmentation justification for private companies have often been related to labour cost, quality and availability. To ensure not only resilient but also sustainable supply chains, labour conditions and labor standards calls for public intervention and international cooperation. The collapse of the Rana Plaza Building in Bangladesh in 2013.
5. **Economic risks**: both effect of major players economic slowdown (for instance currently in China), financial cycle, inflation and monetary tightening and its effects on capital flows or spike in demands

The call for government action was heard, as evidenced by existing declarations and multilateral tools:

- G7 Finance Ministers published in April 2023 a **G7 High-level Policy Guidance for Public Finance Tools to Build Resilient Supply Chains in the Era of Decarbonization creating the RISE initiative.**
- The precedent G7 UK presidency made a commitment with 22 leading food and agriculture companies in 2021 to take action to improve their environmental and social impact of their supply chains and business operations.
- The OECD published in 2021 an online tool for resilient supply chains based on 4 keys (Anticipate risks, minimize exposure to shocks domestic level, Build trust between public and private sectors and open Markets).

But much is still needed.

3. Concrete options to improve supply chains resilience: limited, targeted but coordinated intervention.

Most of the policy recommendation here have already been made, notably the OECD in its dedicated report to the G7 in 2021. Yet we can contribute by detailing operational implementation of these principles:

- **Improve market conditions**: Public policy should help rebound after shocks by allowing for more agility within firms (more skilled workers who will be able to change jobs or shift activities within their current jobs for instance), and fiscal support to help mitigate the effects of a shock.
- **Resist the urge of Friendshoring**: Governments should prefer diversification over onshoring – (as demonstrated by OECD Policy Paper 141 Feb 2023). Focus should also be put on the export restriction dimension of the WTO legal framework, that is somehow less developed than the other dispositions but will be used in particular regarding environmental goods (recent export restriction of Gallium by Chian).
- **Improve risk sharing**: BCG Consultant Dustin Burke recommended the implementation of industry wide risk pooling structures, on the model of insurance, allowing competitors to pool strategic resources enabling a greater resilience of their common supply chains. This idea could be declined on a regional, national, and international level depending on the supply chain.

- **Improve supply chain transparency using digital tools** (IA, blockchains and zero knowledge technology[1]): it seems possible to gather enough data, while preserving confidentiality to build early warning indicators for the public and private sectors when for instance certain supply chains will be blocked. An early warning system is part of the recent US-IPEF deal
- I**mprove transparency:** For both public and private sectors. For the public sector, it could be valuable to build on past success such as the Agricultural Market Information system (AMIS) and explore the British proposal of a Critical Minerals Information System. For the Private sector, there is an urgent need to improve “know your supplier” capacity by integrating this requirement as a key part in responsible business conduct frameworks.
- **Experiment and share best practices**: Following the example of the work being done on central bank digital currencies, the creation of a network of governments and private companies sharing experiments in innovative solutions for the resilience of supply chains seems relevant. The OECD could contribute to these Innovation Hubs
- **Get ready for frictions**: Preemptively think and design frameworks for future climate related disputes at the WTO with, according to Baldwin 2022, a significant work on including scientific expertise related to climate policies effectiveness into the legal framework.
- **Double down on trade facilitation**: as supply chain implies for intermediate goods to cross several borders often several times, the effect of the lack trade facilitating measures are magnified (for instance burdensome red tape).
- **Be creative**: G7 and G20 members could launch with the help of IOs, new inclusive forums on the model of IFCMA or TESSD, where both public and private sectors could meet.

[1] Notably see IMB Research Sahai 2020 for the use of zero knowledge technology