



# POLICY BRIEF # 1

# Identifying Critical Trade Links for Canadians

## Executive summary

Canada is heavily reliant on imported final and intermediate goods to meet the critical needs of its citizens. Canadian consumers rely on many imported products, while Canadian producers have expressed concerns about acquiring key inputs for their supply chains. Much of our current thinking on trade interruptions and critical products reflects our recent experience with the Covid-19 pandemic, but there are other potential threats arising from the weaponization of supply chains by foreign states. In this first policy brief in the global supply chains project for the Canadian Defence and Security Network, we outline the nature of the problem, our approach for analyzing the possible risks Canada faces, and identify directions for generating policy-relevant recommendations.

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## ***The Policy Problem: How can Canada identify and prepare for vulnerabilities in its supply chains?***

The recent Covid-19 pandemic has highlighted the risks of supply chain interruption for Canadians. From shortages of personal protective equipment to closures of meat processing plants, we experienced reduced access to important goods and services. Even now, the shortage of computer chips has led to long waiting lists for Canadians seeking to purchase new vehicles. Some of these supply interruptions arise as a consequence of purely domestic factors, such as restrictions on labour market activity. Others are linked to problems in global supply chains (GSCs) or global markets.

Despite the extreme circumstances of the Covid-19 pandemic and its direct toll on health, the indirect welfare consequences of international and domestic supply chain interruptions have been relatively mild in terms of intensity and duration. The risk mitigation strategies of many private firms worked remarkably well (Van Asche, 2021). While severe disruptions were largely avoided, however, that does not guarantee success into the future.

While the Covid 19 pandemic provides lessons on how address supply chain risks, it did not deliberately target vulnerabilities in a way that foreign adversaries might, and as Russia is doing with energy supplies for Europe. Some authors recognize the need for governments to coordinate with the private sector to mitigate supply chain risks (Simchi-Levi and Simchi-Levi, 2020), and this concept needs to be extended to explicitly cover the risks posed by the deliberate and malevolent actions of other states.

Implementing such a policy is very difficult. It is not easy to identify what goods and services will be critical in all cases, nor how easy it will be find substitutes. Given the enormity of the potential problem and the complexity of supply chains, governments need to know which types of threats and which critical operations to prioritize. This project focuses on the exposure of our critical imports due to the policies of foreign states.

# APPROACH & RESULTS

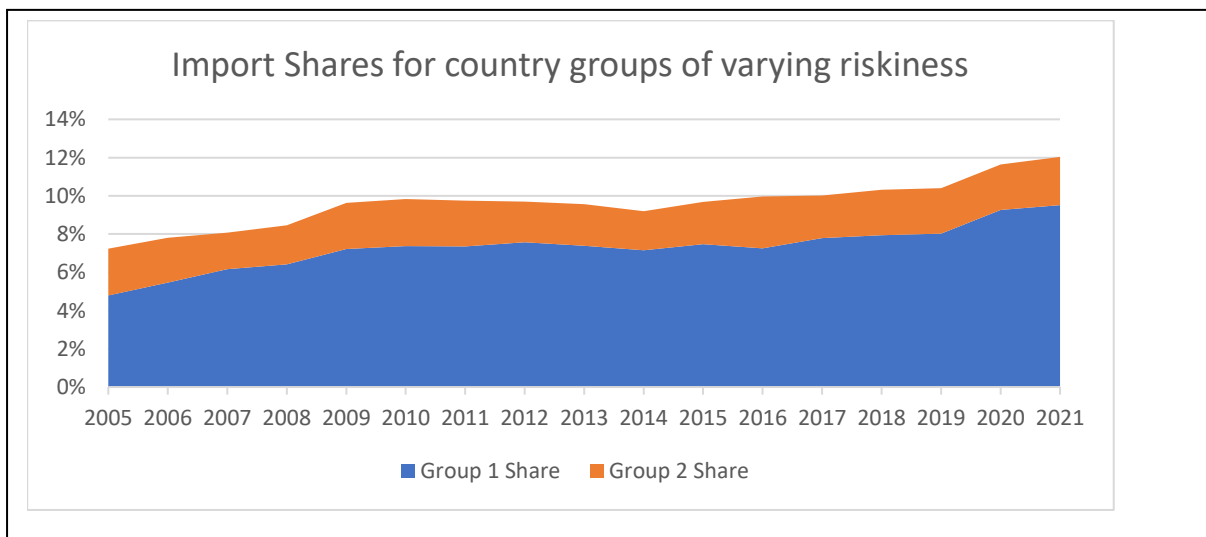
## What is a critical product?

How critical a product is depends crucially on the time horizon of a supply interruption, the availability of substitutes, existing inventories, and the importance of the product for sustaining life. All of these factors interact with one another to determine levels of vulnerability. We will work with lists of critical goods to identify sensitive products and sectors in order to determine Canada’s critical vulnerabilities.

*A preliminary list of sensitive product imports (fruits and vegetables, chemicals, pharmaceuticals, machinery and equipment, and military weapons) from 2012-2021 constitutes:*

36% of all imports

Over 10% of GDP



## What countries pose risks for Canada?

As with the identification of critical products, identifying partners whose trade flows could be at risk is difficult. Some countries, including some friendly countries, have already used trade restrictions against us and other states. While there are also losses resulting from our exports being targeted, we focus here on threats arising from a hostile country directly stopping

access to vital goods that they produce, or indirectly blocking access to goods produced by their allies or from countries they have attacked. We have initially identified six countries as being potentially “hostile” (group 1 in the chart above), and 14 others where there are indirect risks (group 2). These will be the countries of focus for this study.

## CONCLUSION

The potential for trade interruptions to seriously impinge on the welfare of Canadians is significant in a world where international trade rules are being challenged and inter-state conflict increasing. Though difficult, it is important to identify specific critical products and potential adversaries in order to determine the extent to which Canadians are vulnerable to trade risks. Preliminary evidence suggests that the list of important products that we import is extensive, and that the risk posed by some foreign suppliers of goods is significant. The objective of this project is to measure the risks to Canada's arising from the potential weaponization of trade.

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## IMPLICATIONS & RECOMMENDATIONS

Once the extent of our trade vulnerability has been identified, the Canadian government can work with key private sector stakeholders, partner countries, and even potential competing states to strengthen the resilience and reliability of existing global supply chains. This project needs to look at the intersection of product and source risk, and focus on the most vulnerable sectors to understand options for substitution and other risk mitigations strategies. The resulting evidence base can then be used to develop policies of risk mitigation, and to identify opportunities for cooperation with both allies and competitors in international trade.

### References

Simchi-Levi, D. and E. Simchi-Levi (2020). “We Need a Stress Test for Critical Supply Chains”. Harvard Business Review. <https://hbr.org/2020/04/we-need-a-stress-test-for-critical-supply-chains>

Van Asche, A. (2021). *Shortages in Essential Goods: Are Global Value Chains Part of the problem or the Solution?* The School of Public Policy Publications – SPP Communiqué. Calgary.



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