THE CANADIAN CHAMBER OF COMMERCE
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Reevaluating Canada's International Trade:

The Impact of Global Supply Chains

Policy Brief

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Introduction

Did you know?

- Canadian exports rely heavily on imported inputs.
- Services comprise a larger share of Canada's exports than our trade statistics suggest.
- Canada is less dependent on the U.S. market than we thought.

These findings challenge conventional wisdom and have major implications for the design of Canada's trade policy.

The Canadian Chamber is committed to fostering a strong, competitive and profitable economic environment that benefits all Canadians. This paper is one of a series of independent research reports covering key public policy issues facing Canada today. We hope this analysis will raise public understanding and help decision-makers make informed choices. The papers are not designed to recommend specific policy solutions, but to stimulate public discussion and debate about the nation's challenges.

Measuring Trade Flows Is More Complicated Than Ever

The nature of international trade has changed dramatically in recent decades. A key feature of this change has been the rapid growth of supply chains (or production networks) that span the globe.

Raw materials, parts and components may pass through multiple countries—each adding value through design, fabrication, assembly or other processing, and marketing activities—before the final product is delivered to consumers.

Conventional trade statistics typically record the total value of goods and services each time they cross international borders. Components that cross national borders several times in the process of becoming finished products are counted multiple times, potentially overstating the importance of trade.

Consider the hypothetical case where a part manufactured in Canada is exported to the U.S. for painting and is re-imported for sale in Canada. Let's say the part is valued at $100 and painting services cost $10. Traditional measures of trade record the transaction as a Canadian merchandise export to the U.S. of $100 and a Canadian merchandise import from the U.S. of $110—adding up to $210 in two-way trade. This is clearly misleading considering only $10 in value was effectively exported.

There are many real-world examples. The iPhone, for instance, is entirely designed by a U.S. company and is made largely of parts produced in several Asian and European countries. China's contribution is the last step—assembling and shipping the phones. Yet in the traditional way of measuring trade, China gets credit for the entire $178.96 of the estimated wholesale cost of the shipped phone, even though the value of the work performed by the Chinese workers accounts for just 3.6 per cent, or $6.50, of the total cost.[1]

To address this issue, trade statistics have been constructed that measure the contribution of each country (or each industry) to the final value of an exported good or service.[2]

The most recent (2009) data—highlighted throughout this paper—provide some interesting conclusions with respect to Canada's international trade exposure and trade patterns.

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1 Xing, Yuqing and Neal Detert. "How the iPhone Widens the United States Trade Deficit with the People's Republic of China." *ADBI Working Paper* No. 257. Tokyo: Asian Development Bank Institute. December 2010.

2 See http://stats.oecd.org/Index.aspx?DataSetCode=TIVA_OECD_WTO.

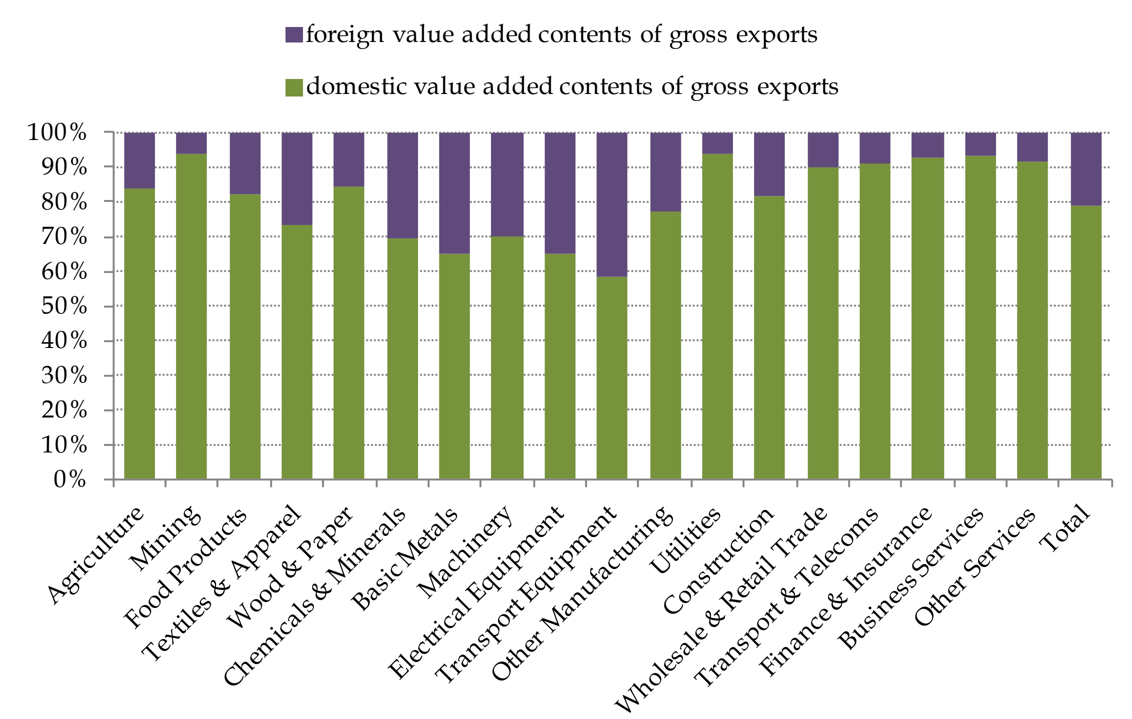
Canada's Exports Depend on Imported Inputs

Roughly one-fifth of the value of all the goods and services Canada exported in 2009 originated abroad. See Chart 1.

The transport equipment sector had a relatively high foreign content in its exports (41.6 per cent). So did the electrical equipment, basic metals, machinery and equipment, and chemicals sectors.

Industries such as agriculture, food products, and wood and paper had relatively high domestic content in their exports (more than 80 per cent). The mining sector had the highest domestic content in gross exports (93.9 per cent).

Chart 1: Value-added Content of Gross Exports by Industry, 2009



Source: OECD/WTO Trade in Value-added Database; The Canadian Chamber of Commerce.

Services Are a Major Part of Canada's Exports

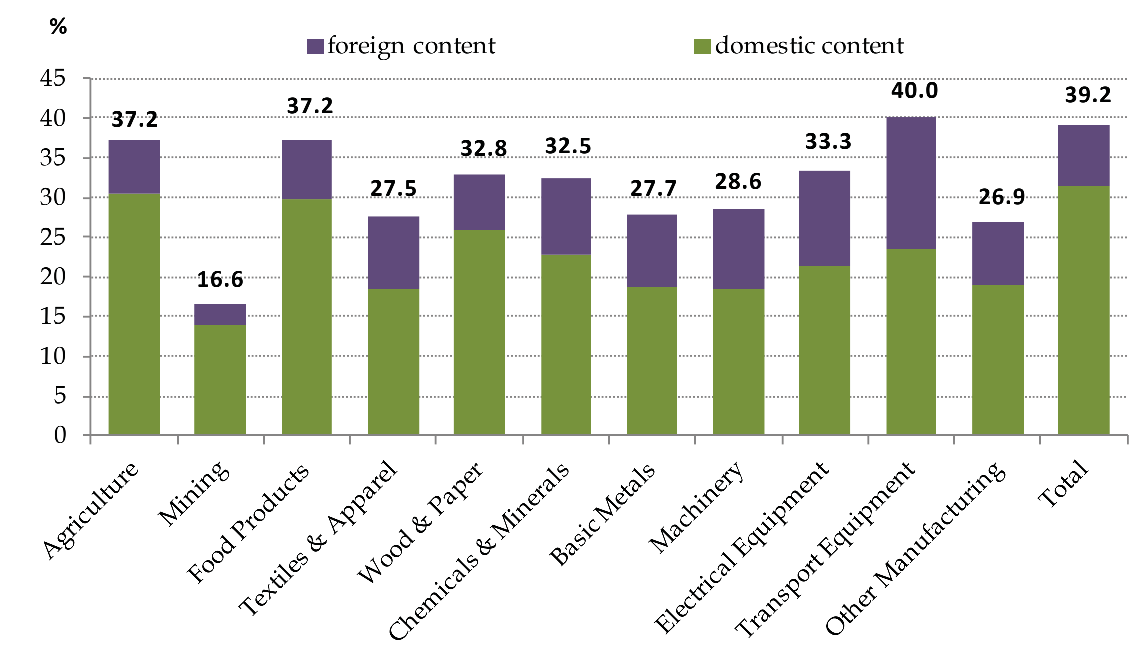
Canada's official trade figures indicate that services accounted for 16.3 per cent of total exports in 2009. As it turns out, services are more exposed to international trade and competition than we think. For example, they represent a significant share of the value of merchandise exports. A wide range of manufacturing industries rely on (domestic and foreign) services—finance and insurance, research and development, accounting, legal and other business services—to bring their goods to market.

In 2009, services represented nearly 40 per cent of value-added in total Canadian exports. See Chart 2.

Services represented a significant share of the value-added of exports in the transport equipment sector (40.0 per cent), food products (37.2 per cent) and agriculture (37.2 per cent).

Foreign services providers played a relatively larger role in sectors like transport equipment, machinery equipment and electrical equipment manufacturing.

Chart 2: Services Content of Gross Exports by Industry, 2009



Source: OECD/WTO Trade in Value-added Database; The Canadian Chamber of Commerce.

Canada Depends Less on U.S. Demand Than We Thought

- According to official trade statistics, approximately 70 per cent of Canada's exports of goods and services were destined for the U.S. in 2009. In actual fact, the U.S. accounted for a smaller share (58.2 per cent) because some of the value of our exports originated abroad.

- The share of imports sourced from the U.S. was also lower in value-added terms compared to conventional trade estimates (43.6 per cent and 61.7 per cent, respectively). This is because many of the goods and services Canada imports from the U.S. contain value created elsewhere.

- Although the U.S. remains by far our biggest trading partner, Canada's trade relationship with Europe and parts of Asia are more significant than suggested by conventional trade data because some of Canada's production is exported there indirectly via supply chains.

Making the Most of the Opportunities Associated With Global Value Chains

To significantly enhance the commercial relevance of our trade relationships, we need a new approach—one that centers on policies that have a major impact on the efficiency of the entire supply chain.

- Because Canada's exports depend in varying degrees on imported inputs, our capacity to import world class inputs (goods and services) is just as critical to our competitiveness and success in international markets as is our capacity to export. As such, continued vigilance against protection measures (tariffs and other barriers on imports) is imperative as they increase costs of production and reduce a country's ability to compete in export markets. Canada has much to gain by collaborating through multilateral institutions and working with other international partners to stop protectionism and promote rules-based trade liberalization.

- Fast and efficient customs-clearing and port procedures and high quality trade-infrastructure are essential to the smooth operation of supply chains.

- Harmonizing standards and certification requirements and encouraging mutual recognition agreements can also improve the operation of global supply chains.

- As the services sector is integral to producing goods exports, liberalization of services trade would enhance the competitiveness of manufacturing firms and enhance the participation of service providers in global production networks. In March 2013, Canada officially joined negotiations towards an international trade in services agreement that, if successful, will liberalize 70 per cent of global services trade.

- Businesses operate globally and need predictable and transparent international trade rules to manage increasingly global supply chains. A strong and modern multilateral trading system is the most effective means of achieving a coherent international framework. A strong multilateral trading system can be complemented by regional and bilateral trade agreements; however, these contain agreement-specific rules of origin. Businesses are obliged to tailor their products for different markets to satisfy the rules of origin. This complicates the production process and makes life difficult for customs officials who have to assess the same product differently depending on its origin. The harmonization of rules of origin and technical standards can significantly improve the efficiency of global supply chains and the competitiveness of businesses.

- There is a case for Canada to coordinate trade policies with supply chain partners to gain joint access to foreign markets. For example, Canada should try to access emerging markets in Asia and elsewhere through the U.S., Europe and Japan—not just on its own. This means working together at regional and multilateral levels (e.g. the Trans Pacific Partnership and the Comprehensive Economic and Trade Agreement with the European Union).

- In a world of highly integrated supply chains, Canada benefits when its supply chain partners get improved market access (e.g. the India and European Union broad-based Bilateral Trade and Investment Agreement that has been in the works for six years could spur Canadian intermediate exports to India via Europe). Canada should support such initiatives.

In Summary

The growth in trade in recent decades has been dominated by trade in intermediate inputs—goods and services that are not consumed directly but are used to produce other goods and services. The paralysis of the global supply chain caused by the March 2011 earthquake and tsunami in Japan showed just how interconnected and interdependent production activities have become globally.

The proliferation of global value chains and the growing trade in intermediate inputs raises the stakes for countries to have open and predictable trade and investment regimes, to cut red tape, to streamline customs procedures and to have world-class infrastructure and logistics.

If we seize the opportunities presented by the changing nature of trade, our economic prosperity will be secured for generations to come.

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