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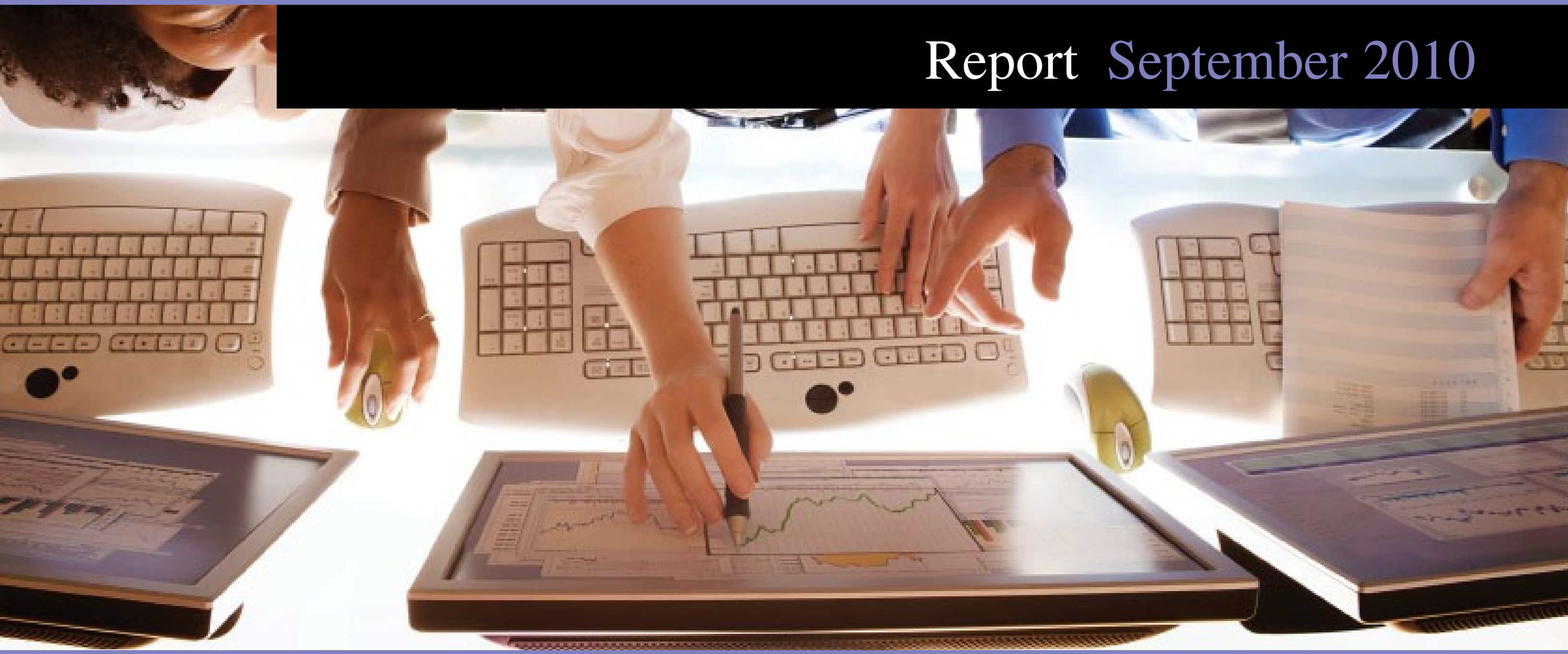

Canada's "Missing" Trade With the European Union

TRADE, INVESTMENT POLICY AND INTERNATIONAL COOPERATION

The Conference Board of Canada
Insights You Can Count On

Canada's "Missing" Trade With the European Union
by *Danielle Goldfarb and Louis Thériault*

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Preface

Public policies that are based largely on conventional trade analyses can be out of sync with international business realities. To better inform policy, and in light of Canada–EU trade negotiations, this report creates broader estimates of Canada's trade with the EU. Based on these measures, Canadian public and private leaders should be able to identify a broad range of areas for future growth.

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Canada's "Missing" Trade With the European Union

At a Glance

- This report creates measures of Canada–EU "integrative trade" that are aligned with the broad range of activities in the Canada–EU trade relationship.
- Canada and the EU conduct trade via sales by foreign affiliates; engage in substantial, fast-growing services trade in both directions; and have important value chain linkages.
- Canada should take an "integrative trade policy approach" to Canada–EU trade negotiations, eliminating barriers to services trade, people movements, digital trade, trade in technologies, and investment.

Canada is ramping up its trade negotiations with the European Union. In light of this major negotiation, this report[1] examines Canada's trade with the EU through an "integrative trade" lens. Such an approach is more aligned with international business realities than are conventional trade measures and analyses.

Research In Motion's BlackBerry illustrates the gap between conventional trade analyses and the reality of highly integrated global—and Canada–EU—business realities. The BlackBerry is a globally integrated product developed in Waterloo, Ontario. Its development depends on associated services such as design, financial analysis, financing, and engineering. This is made easier by the ability to digitize and share data electronically—both globally and within the region. The BlackBerry's hundreds of parts come from companies all over the world. In turn, these companies may manufacture and source parts from Asia, the U.S., Europe, and other locations around the globe.

Along with the physical BlackBerry, customers worldwide buy related contracts for data and voice services.

Research In Motion does some new-product manufacturing in Canada. Once it is satisfied with its model, it then outsources manufacturing to partners in Hungary and Mexico. The company's partners then sell Hungarian-made BlackBerrys to customers in Europe and Asia, and Mexican-made ones in the Americas. Along with the physical BlackBerry, customers worldwide buy related contracts for data and voice services—which translate into a meaningful portion of RIM's revenues.

This broad range of linked activities enables RIM to be a world leader, to be globally competitive, to deepen its Canadian activities, and to contribute to Canada's

1 This report builds and draws upon previous Conference Board research, including Goldfarb and Thériault, *Canada's "Missing" Trade With Asia*, and Goldfarb and Chu, *Stuck in Neutral*, as well as forthcoming Conference Board research.

economy. Yet if, say, an Asian customer buys one of Research In Motion's BlackBerrys, conventional trade statistics record it only as an export of a Hungarian good to an Asian country, entirely "missing" or undervaluing this broader range of activities.

Trade and related policies that rely strictly on conventional trade measures and language, therefore, may be out of sync with current global business realities.

We adopt a broader approach in this report. Our "integrative trade" method attempts to better reflect the roles of services trade; global and regional value chains; investment and sales by foreign affiliates; flows of people, knowledge, and technologies; electronic trade in goods and services; and the linkages between goods and services.

Trade and related policies that rely strictly on conventional trade measures and language may be out of sync with current global business realities.

Our method builds on existing data to create original estimates of integrative trade. We estimate conventional trade data where it does not exist, improve conventional data, add trade that takes place in non-traditional ways, and provide several complementary measures of Canada–EU value chain activity. This results in measures of Canada–EU integrative trade.

Integrative trade is a complex concept. It is also difficult to measure well and there are few precedents. Therefore, none of our measures are perfect. Rather than perfection, our aim is relevance. We illustrate visually and through language and numbers the importance of a broader range of current or potential activities that make up the Canada–EU relationship. We hope that, by putting such measures together visually and in one picture and analysis, we will get closer to the true picture of Canada's integrative trade relationship with the EU.

Our measures show clearly that the Canada–EU relationship is about much more than traditional cross-border final goods trade:

- When we add a broader range of activities—most notably sales by foreign affiliates—to conventional trade measures, Canada–EU trade more than triples.
  - Total Canadian sales of goods and services to the EU were over $150 billion in 2008—compared with $48 billion in conventional exports.
  - Total EU sales of goods and services to Canada were $440 billion in 2008—compared with $70 billion in conventional imports.
- The primary mode of Canada–EU trade (that we can measure) is not cross-border exports, but rather sales by foreign affiliates.
- Though Canada's services trade is often ignored or underappreciated, our broader measure of services trade shows that Canada–EU services trade is substantial.
  - We estimate that Canadian sales of services to the EU amounted to $46 billion in 2008, when we add in undercounted services and sales by Canadian affiliates in the EU. Rather than being marginal, this is almost half the value of Canadian sales of manufactures to the EU.
  - We estimate that sales of services from the EU to Canada, and from EU affiliates in this country, were over $200 billion in 2008. This is roughly the same value as our estimates of EU *goods* trade to Canada, again showing that services trade is significant rather than marginal.
- EU businesses are rapidly expanding their services sales via affiliates in Canada, growing such sales at an incredible 14 per cent annually on average over 2000–08, much more than conventional trade measures suggest. By contrast, Canadian affiliates in the EU are merely keeping their services trade (by our broader measure) roughly in line with inflation.
- Canada–EU cross-border trade in goods consists of trade in fully formed final goods, as well as Canada and the EU supplying inputs into each others' value chains.

  - Canada mostly supplies unprocessed and moderately processed goods to EU value chains.
  - The EU mostly supplies final and, to a lesser degree, semi-processed goods into Canadian value chains.
- Canada–EU value chains are not nearly as tightly integrated as Canada–U.S. value chains, or those within the EU. This is to be expected, given the tendency to prefer to trade within one's immediate geographic region. However, in contrast to Canada–U.S. value chains, Canada appears to be increasing its presence in European value chains.
- Our estimates are conservative and are not able to capture all the trade "missing" from the overall picture. The true trade picture—including the growth potential—is likely even broader. For example, digital trade and trade via temporary foreign workers appear to be under-represented in conventional trade measures as well as our broader estimates.
  - Trade that takes place via digital transfer can be difficult to see and therefore measure. For example, digital services such as software or game downloads are consumed entirely over the Internet or via mobile phone—they never take a physical form. Statistics Canada does make some adjustments for this type of trade. However, given the rapid acceleration of digital trade and the difficulty in measuring it, it is likely under-represented in Canada–EU trade. And the gap between conventional trade measures and digital trade activities seems likely to widen.
  - Conventional services imports or exports would not capture a Canadian or European temporary worker providing services in the other's market. Yet we can infer from the business concerns raised about barriers to movements of temporary workers, as well as the share of Canada's temporary workers from the EU, that trade via temporary foreign workers may be an important aspect of Canada–EU trade.

All in all, the Canada–EU trade picture goes far beyond simple cross-border trade in final goods. Trade policy has historically focused on opening markets for Canada to sell its goods exports. But our findings clearly show that Canada benefits—and could benefit further—from a broader range of interactions with the EU. This calls for an integrative trade policy approach.

Such action requires a change in mindset. Integrative trade policies would remove barriers:

- not just to trade, but to investment;
- not just for goods, but for services—including the movement of people, such as temporary workers, between Canada and the EU; and
- not just for exports, but for imported inputs and technologies.

An integrative trade approach views services trade not as marginal, but as integral to global trade. It requires thinking about ways to facilitate collaboration across borders to get the best possible results. And it means thinking about Canada's access to the EU market as access to technologies and talents from all over the world.

An integrative trade approach views services trade not as marginal, but as integral to global trade.

Given the potential size of Canada–EU integrative trade activity, Canada should continue to prioritize Canada–EU negotiations. Ottawa should also prioritize other regions with which Canada has significant integrative trade interaction and more potential for growth, such as emerging markets. And Canada should continue to advocate for advances in global trade talks. (These are largely stalled at present, but they represent the greatest integrative trade potential.)

As the negotiations already envisage, Canada should aim for improved access to the EU market across a broad variety of activities. Rather than playing defence to limit access to Canada's market, however, negotiators should aim for an agreement that allows Canadians access to the best EU inputs, partnerships, collaboration, technologies, people, and investment. Ottawa needs to accompany such policies with safeguards to protect Canadians' health and safety and to provide transition help for people disadvantaged in the short term. And, as part of Canada's broader trade and economic policies, Ottawa and the provinces should ramp up investments in communications infrastructure to be able to take advantage of opportunities in digital trade.

Such integrative trade policies could unleash the full potential of Canada's integrative trade with the EU and the world. This could boost value chain activity, services trade, and foreign affiliate trade—particularly in Canada's presence in the EU, which seems underdeveloped at present. And it could turn Canada into a model for integrative trade thinking and for seizing the benefits from integrative trade. As a result, Canada would both improve its living standards and be better positioned in future trade talks.

CHAPTER 1

Introduction

Chapter Summary

- The example of Research In Motion's BlackBerry shows that the broad set of Canadian, European, and global activities that enable RIM to be globally competitive and productive, and to contribute to Canada's economy, are largely "missing" from, or underappreciated in, conventional trade analysis.
- A broader conception of trade—"integrative trade"—would reflect the roles of services trade; global and regional value chains; investment and sales by foreign affiliates; flows of people, knowledge, and technologies; electronic trade in goods and services; and the linkages between goods and services, thus providing a relevant foundation for public policies.
- As Canada negotiates comprehensive free trade with the European Union, we need Canada–EU integrative trade measures that are aligned with international business realities.

WHAT IS "MISSING": THE BLACKBERRY

The BlackBerry is a globally integrated product. If, say, an Asian customer buys one of Research In Motion's BlackBerrys, the Asian country records it officially as an import of a good from Hungary, where it was assembled. "Made in Hungary" is only a small piece of the story, however. The BlackBerry's Canadian and global trade role is much larger, more interesting, and more complex than the picture that conventional trade statistics paint.

To reduce costs, RIM outsources manufacturing to partners in Hungary and Mexico.

The BlackBerry device is developed in Waterloo, Ontario. Its development depends on associated services such as design, financial analysis, financing, and engineering. This is made easier by the ability to digitize and share data electronically—both globally and within the region. The BlackBerry's hundreds of parts come from companies all over the world. For example, for the BlackBerry Curve model, the screen and storage come from Samsung, a Korean company, and the processor from U.S.-based Freescale.[1] In turn, these companies may manufacture and source parts from Asia, the U.S., Europe, and other locations around the globe.

Research In Motion's Waterloo factory specializes in new product introduction. This includes building and testing prototypes and scaling up manufacturing of new models ready for market.[2] Then, to reduce manufacturing costs, the company outsources manufacturing to partners in

1 See BlackBerry Curve "tear down" at www.phonewreck.com/wiki/index.php?title=BlackBerry_Curve_8900#Bill_of_Materials.

2 E-mail correspondence with Robert Crow of RIM, July 12, 2010.

Hungary and Mexico.[3] The company's partners then sell Hungarian-made BlackBerrys to customers in Europe and Asia, and Mexican-made ones in the Americas. Along with the physical BlackBerry, customers worldwide buy related contracts for data and voice services.[4] As a result, RIM receives service revenues from the wireless carriers—translating into a "meaningful portion" of RIM's revenue.[5] The company also has one physical store in the U.S. And it provides global after-sales technical support from Canada (Halifax).[6]

Canada's relationship with the European Union goes beyond cross-border exports of final goods exports, encompassing a broad set of activities.

While Canada would not even figure into conventional trade measures of the BlackBerry's sale, a large part of the BlackBerry's value likely comes from its development and design in Canada. While we can not say exactly how much this represents, we can get a rough sense of how significant it is if we take a look at Apple's iPod. Researchers have found that the California-based development and design aspects of the iPod represent at least half its value. The associated parts—mostly from the U.S. and Asia—represent most of the rest of the value, and only about 1 per cent of the value comes from its manufacture.[7] (Yet trade statistics record the iPod as an import from China, where it is manufactured.) Applying the same percentage to the BlackBerry would mean that roughly half the value of the physical device comes from development in Canada. Again, this does not even include the associated services revenues from the use of the BlackBerry network.

In the BlackBerry example, conventional trade statistics show us only that an Asian country has traded a final product with Hungary. This is only a partial representation of where value is created in the global making of the BlackBerry. It tells us almost nothing about the global value chain that allows RIM to buy and make various parts, services, and technologies in Canada, Europe, and all over the world, from whichever locations can provide them most efficiently. It also tells us little about how RIM and other Canadian and global companies trade in services—including service revenues from global wireless carriers, via people movements, the telephone, outsourcing to other global partners, and foreign affiliates. It gives no information on the many interactions of data and knowledge that are exchanged daily in digital form. And it tells us little about the range of partnerships with parts suppliers and service providers that RIM undertakes to bring its product to global markets.

This broad range of linked activities enables RIM to focus on what it does best in Canada and draw on what others do best elsewhere. It allows RIM to access global customers, draw on the best talents and technologies in other markets, and reduce its manufacturing costs. It enables RIM to be a world leader, be globally competitive, deepen its Canadian activities, and contribute to Canada's economy.[8] Yet this broad range of activities is "missing" from conventional trade analysis. Collectively, we refer to this broad set of activities as "integrative trade."[9] (See Table 1 and box "Glossary.")

Canada's relationship with the European Union, in particular, goes beyond cross-border exports of final goods exports, encompassing a broad set of activities. This includes services trade, people movements, foreign direct investment, the use of imported inputs of services and goods, electronic trade in goods and services, cross-border partnerships, and collaboration. During Canada's current negotiations toward a comprehensive free trade agreement with the EU, governments and businesses need to examine the agreement through this integrative trade lens rather than take a conventional trade approach. This report takes a step in this direction by creating measures of Canada–EU integrative trade.

3 See www.rim.com.

4 See http://worldwide.BlackBerry.com.

5 E-mail correspondence with Robert Crow of RIM, July 12, 2010.

6 See www.rim.com.

7 Linden, and others, *Who Captures Value,* 8.

8 As we discuss in more detail later, empirical evidence (such as that in Desai, and others, "Domestic Effects") links international activities with increased domestic economic activity.

9 Hodgson, *Trade in Evolution.*

Table 1
Conventional Trade Approach Versus Integrative Trade Approach

Conventional Trade Approach	Integrative Trade Approach
Trade mainly in goods	Trade in goods, in services, and in services linked to goods
Exports across borders to end-users	Highly integrated value chains of exports and imports that can cross borders
Exports preferable to imports	Key imported inputs enhance competitiveness
Foreign direct investment (FDI) regarded as “trade substitution” to avoid trade barriers	Growing recognition of positive relationship between trade and FDI—in and out
Contracting out to company down the street	Offshore outsourcing to take advantage of lower cost structures in other countries
Cross-border exports to foreign markets	Sales via foreign affiliates, people movements, and electronic transfers, in addition to cross-border exports

Source: The Conference Board of Canada.

Glossary

INTEGRATIVE TRADE
Traditional or conventional trade measures or analyses focus largely on the role of goods exports. The concept of integrative trade additionally emphasizes the interconnections between imports and exports, the roles of global value chains and services trade, the role of people movements, cross-border collaboration and partnerships, and knowledge that can be digitized and traded via technology such as Internet and mobile phone. It also acknowledges the critical role of foreign direct investment in facilitating sales by foreign affiliates.

In this report, we use the terms “inward integrative trade” and “outward integrative trade.” Inward integrative trade refers to activities that come into Canada, such as imports and inward foreign affiliate sales (defined below). Outward integrative trade refers to activities that take place outside of Canada, such as exports and outward foreign affiliate sales. Both are ways in which Canada’s companies can engage in the global economy, and both contribute to the competitiveness of Canada’s companies.

FOREIGN DIRECT INVESTMENT
This refers to a foreign investment of a significant-enough size that it allows some exercise of control.

Canada’s inward direct investment is the sum of direct investments made by foreign companies in Canada. Canada’s outward direct investment sums up the total direct investments made by Canada companies in other countries. Though we use the terms inward and outward foreign direct investment, outward foreign direct investment is also referred to as “Canadian direct investment abroad.” Foreign direct investment facilitates sales by foreign affiliates, which we define next.

FOREIGN AFFILIATE SALES
This refers to goods and services sales by a foreign affiliate of a domestic company.

Selling goods or services through foreign affiliates is a means for Canadian companies to market their products internationally. In the case of goods, the products sold by foreign affiliates may be produced in Canada or produced abroad.

Our report defines outward foreign affiliate sales as global sales by Canadian companies that set up affiliates in global markets. Inward foreign affiliate sales are sales by multinational companies that set up affiliates in Canada. (This conceptual definition raises some challenges when measuring such activities in practice, an issue we discuss later.)

GLOBAL VALUE CHAINS
A value chain describes the full range of activities to bring a product from its conception to its end use and beyond. Rather than undertaking all such activities in one location or cluster, a global value chain spreads these activities or tasks across geographic boundaries.[1]

1 Based on the definition from Duke University’s Global Value Chains Initiative. www.globalvaluechains.org/.

INTEGRATIVE TRADE

Global production, such as that of the BlackBerry, is increasingly the rule rather than the exception. Canada's Bombardier, another Canadian case, sources the parts and services for its C-series in Canada, the U.S., Europe, and elsewhere. For example, some of its financial services come from London, England.[10]

Another instance is the production of music. It is now mainstream for someone in one location to record tracks and for someone in another part of the world to remix those tracks. A piece can take its lyrics from one location and its music from another, be recorded in multiple locations, and be finalized by a sound engineer in another location, with the related data files being transferred electronically and the final piece distributed globally via iTunes.

Services are increasingly sold via setting up a commercial presence in global markets, rather than through traditional cross-border channels.

Declining transportation and communication costs, and the ability to digitize production, have made global coordination easier and more attractive.[11] A growing body of evidence shows that companies are therefore accelerating their use of global and regional value chains. One (albeit imperfect) indicator of this trend is intermediate goods trade, which grew by a whopping 15 per cent compounded annually on average over 1988–2008.[12] Others have documented these trends in specific industries such as autos and electronics.[13]

10 Downs, "Integration of the North American Economy."

11 Baldwin, *Integration of the North American Economy*.

12 Conference Board calculations based on the Harmonized System aggregation "intermediate goods" in the World Integrated Trade Solution.

13 See, for example, Baldwin, *Integration of the North American Economy*; and Sturgeon and Memedovic, *Looking for Global Value Chains*.

Instead of asking where to create an entire product or service, businesses now ask where is the best place to locate each activity, business function,[14] or task:[15] design, engineering, manufacturing, marketing, after-sales service, etc. Value can be added at each stage of the value chain, and services are integral to the effective functioning of the entire value chain.

According to a Canadian empirical study, distance matters much less for selling services than it once did.

Related to this, the decline in global coordination costs means that services are now increasingly traded globally. Economists have long categorized services as non-tradable, since they had to be sold close to the customer. But the decline in the costs of global coordination, and the ability to send files digitally, have changed this. According to a Canadian empirical study, distance matters much less for selling services than it once did. Still, according to that study, service purchasers are willing to pay four times more for services within 100 kilometres than for service providers that are approximately 10,000 kilometres away.[16]

But there are other ways to sell services globally that consumers prefer to buy locally. Many services are traded via setting up a local presence. A consultant can travel to provide management expertise. And one can buy any number of services through channels such as the Internet and mobile phones, including data entry, translation, and customized software (though there is a debate about whether software is a good or a service). Much of this is "missing" or underappreciated in conventional services trade data and analysis.

In fact, services are increasingly sold via setting up a commercial presence in global markets, rather than through traditional cross-border channels. Though not

14 Sturgeon and Gereffi, "The Challenge of Global Value Chains."

15 Grossman and Rossi-Hansberg, *Trading Tasks*.

16 Head, and others, "How Remote is the Offshoring Threat?"

a new phenomenon, the use of foreign affiliates has accelerated rapidly in recent years. Global foreign affiliate sales considerably outstrip cross-border trade in services.[17]

Such sales are a more important strategy for distant markets and for services trade than for goods trade. A Londoner can get financing from a London-based affiliate of a Canadian bank, for example. Germany's Siemens has offices across Canada to sell its products, including home appliances. Financial services companies, such as the U.K.'s Citco, set up affiliates in Nova Scotia to do back-office processing,[18] which effectively translates as a sale of a service globally from Canada. These sales by foreign affiliates are not typically reflected in conventional trade measures and analysis.

WHY INTEGRATIVE TRADE MATTERS

Integrative trade is not just important conceptually; it has practical implications for Canadians' economic well-being. It affects Canada's trade policy, including Canada–EU negotiations.

Though not a new phenomenon, the use of foreign affiliates has accelerated rapidly in recent years.

By engaging in value chains that extend beyond Canada to the U.S., Europe, and other parts of the world—as RIM does with its BlackBerry, Canada's companies can adopt the best global technologies, making themselves more competitive and efficient. Companies can maximize efficiencies and reap gains from trade for every activity along a value chain, rather than for the good or service as a whole. By trading in services as well as component parts, this benefit can be extended even further.

17 European Commission and Government of Canada, *Assessing the Costs and Benefits*, 45.

18 E-mail correspondence with David Chaundy, Atlantic Provinces Economic Council, February 11, 2010.

Moreover, integrative trade goes hand in hand with increased productivity, which is a key driver of living standards. (Higher productivity does not mean working harder, it means working smarter: producing more for each hour worked.) Internationally engaged companies—whether through importing, exporting, sourcing globally, or having affiliates abroad—tend to have higher productivity, according to OECD research.[19] Statistics Canada also finds that the use of imported goods inputs in Canadian value chains over 1961–2003 was associated with improved productivity.[20]

Integrative trade is not just important conceptually; it has practical implications for Canadians' economic well-being, including for Canada's trade policy.

And the evidence suggests that integrative trade boosts productivity by a significant amount. For example, by buying information technology components globally from where they were most efficiently produced, U.S. companies lowered their prices by 30 per cent, raised the country's productivity, and boosted gross domestic product by more than US$230 billion over seven years.[21] Another example is the elimination of tariffs on Canadian exports and imports under the Canada–U.S. free trade agreement (FTA) in the late 1980s. As a result, companies accelerated their use of cross-border value chains. This was challenging for some companies and individuals who had to adjust in the short term. But it resulted in a massive 14 per cent annual increase in Canadian plant-level labour productivity over 1988–96 compared with the pre-FTA period. This translates into an increase in real Canadian compound annual economic growth of almost 2 per cent.[22]

In addition, foreign direct investment—a key part of integrative trade—boosts trade. The role of foreign direct investment is particularly important for the Canada–EU

19 OECD, *Moving Up the Value Chain*, 5.

20 Baldwin and Gu, *Outsourcing and Offshoring*, 4.

21 Mann, *Globalization of IT*, 3.

22 Trefler, "The Long and the Short," 31.

relationship, for which investment may often be the preferred mode of accessing each others' economies. While some investment can displace trade, the two are increasingly complementary. Export Development Canada finds that for every 1 per cent increase in the stock of outward direct investment, Canadian export volumes with developed economies—such as those in the EU—rise by almost 0.1 per cent in the following year. This translates into an export increase of $0.12 for every $1 rise in the stock of outward Canadian direct investment. The cumulative effect of this could be substantial.[23]

Traditionally, statistical agencies have focused on providing data on cross-border trade in goods.

In addition, investing globally actually boosts domestic economic activity. This is contrary to the popular notion of global investment being equated with jobs shipped overseas. New research from Harvard University finds that expansion abroad is strongly associated with more jobs and investment at home, more exports, and more research and development.[24] This is because, by setting up a presence in global markets to access new markets, talent, and technologies, companies can improve their profitability and global competitive position. It can also be a way to address labour shortages at home by accessing labour pools elsewhere. Of course, integrative trade can change the mix of jobs and require some adjustments in the short term. And investing abroad can also be negative for the domestic economy (though good for the company) if it is driven by a poor domestic competitive environment.[25]

WHY MEASURING INTEGRATIVE TRADE MATTERS

Traditionally, statistical agencies have focused on providing data on cross-border trade in goods. There were good reasons for this historically. It was necessary to administer and analyze tariff and quota policies. Moreover, services were not generally traded. And even if they were, data on goods trade are much easier to collect than are data on services trade. And sales by foreign affiliates and via people movements were not as important as they are now.

Trade statistics were set up along industry and country lines, rather than representing activities taking place around the globe to create a product or service. Again, there were good reasons for this: countries designed their statistical systems to measure everything within their nation, to build measures of gross domestic product and national accounts. Such measures can be important for a variety of research and policy purposes, and are internationally comparable.

Since data on nation-to-nation cross-border goods trade were readily available, trade research—including on Canadian trade—tended to focus on it. Similarly, policy-makers focused on gaining market access for their country's good exports.

New research from Harvard finds that expansion abroad is associated with more jobs and investment at home, more exports, and more research and development.

But the nature of trade and production has changed. Services are now increasingly traded, the use of global and regional value chains has accelerated, and goods, services, and ideas are traded in different ways—including digitally, via sales by foreign affiliates and by movements of people. Yet the legacy of trade statistics remains.

Even though business realities have moved on, most trade research continues to focus on nation-to-nation cross-border goods trade, which offers a rich historical dataset. Most analysts continue to use the ratio of exports to GDP as an indicator of a country's trade dependence and openness. This can be quite misleading in a world of global and regional value chains, in which value-added exports can represent only a share of conventionally recorded exports.

23 Verno, *Canadian Outward Foreign Direct Investment and Exports.*

24 Desai, and others, "Domestic Effects."

25 Hejazi, *Dispelling Canadian Myths.*

Moreover, many policies are geared largely toward nation-to-nation cross-border final goods trade. For example, Canada's existing free trade agreements largely focus on bilateral goods trade. Canada's negotiating aim was largely to gain market access, rather than primarily to benefit from adopting other countries' goods and services inputs.

Another example is that the legacy of measuring goods trade has reinforced the common perception that Canadian businesses do not actually trade in services. Some Canadian policy-makers are therefore reluctant to open up to global—including EU—services trade. They are unlikely to believe they can gain from greater access to others' services markets, including that of the European Union. Among other effects, barriers to two-way services trade impede the functioning of global value chains, for which services are a linchpin. And barriers to services trade are not necessarily the same as barriers to goods trade, and they have not been a focus of past policy.

The federal government is eliminating tariffs on machinery and equipment imports, building on Canada's already low average tariff rates.

Going forward, confining public policies to cross-border goods exports may fail to effectively position Canadian companies to sell services into global value chains, import to improve their competitiveness, and boost their competitiveness through both inward and outward investment.

In sum, the prevalence of data and analysis on cross-border final goods trade has a profound impact on trade policy in practice. The traditional approach to trade negotiations in terms of offensive and defensive interests is another example of how trade policy can reflect traditional trade analysis, but be out of sync with the reality of integrative trade.

What we measure, and the language we use to describe it, matters.

AN INTEGRATIVE TRADE POLICY

An integrative trade approach would not destroy conventional trade measures. It would build on them to develop a more relevant, complete, rich picture of Canada's global interactions, as well as of their effects. In turn, this would provide the foundation for an "integrative trade policy" that would remove barriers and support this broad range of Canada's global interactions.

As a starting point for this foundation, Statistics Canada has made some changes to better capture integrative trade. For example, it re-designed its foreign direct investment and services surveys. It also provides some data on the sales of Canadian affiliates abroad, though based on a relatively small sample size.

Some Canadian policy-makers are reluctant to open up to global—including EU—services trade.

The federal government has also started integrating such language and thinking into some of its policies. For example, it is eliminating tariffs on machinery and equipment imports, building on Canada's already low average tariff rates. The Department of Foreign Affairs Trade Commissioner Service now advertises that it will help companies "maximize [their] profitability and competitiveness abroad by linking in to complex business networks."[26] Trade commissioners now have a mandate to facilitate outward investment by Canadians abroad. And Industry Minister Tony Clement has promised to loosen restrictions on foreign direct investment in the telecommunications sector. Moreover, Canada's decision to pursue the Canada–U.S. Free Trade Agreement and the North American Free Trade Agreement were acknowledgements of the importance of regional value chains.

Moving to the Canada–Europe relationship, the breadth of current Canada–EU trade negotiations is an excellent example of integrative trade thinking. The negotiations cover not just trade in goods, but also services trade,

26 Foreign Affairs and International Trade website: www.tradecommissioner.gc.ca/eng/home.jsp.

intellectual property, investment, e-commerce, government procurement, regulatory cooperation, and labour mobility. In fact, the EU and Canada have deliberately called this a "comprehensive economic and trade agreement" rather than a narrowly defined free trade agreement.

At the global level, organizations such as the OECD and the World Trade Organization (WTO) have advocated for better integrative trade data, research, analysis, and policy. The WTO has recently expanded its coverage of services trade, including foreign affiliate sales and foreign direct investment, when member countries are able to provide such data. Top WTO officials have also recently argued for a value-added approach to trade statistics to provide a solid foundation for revisiting traditional trade policy.[27]

Without underlying measures that reflect integrative trade, many federal and provincial policies remain out of sync with global business realities.

In short, there has been some important movement toward an integrative trade approach, in terms of the underlying data, the language used, and the policy direction. Despite these changes, however, official trade data and most conventional trade research and analysis do not adequately reflect the realities of integrative trade. For example, Statistics Canada collects services trade data for roughly 30 categories, in contrast to the thousands of categories for goods trade.[28] And it does not collect data on sales by Canadian-based foreign affiliates—in contrast to the U.S. Bureau of Economic Accounts, which collects data on sales by U.S.-based foreign affiliates.

Without underlying measures that reflect integrative trade, many federal and provincial policies remain out of sync with global business realities. For example, many Canadian tariffs, rules of origin, and other non-tariff barriers still require local sourcing and limit the use of imported inputs. The country still restricts foreign direct investment in certain areas, as well. In addition, most Canadian governments focus exclusively on the benefits of attracting inward investment rather than also facilitating outward investment.

Canadian businesses and policy-makers need to secure and enhance linkages with the U.S. as a priority.

And, though the breadth of the Canada–EU negotiation is a promising reflection of integrative trade thinking, the way Canada frames its negotiating position in public discussions does not reflect this thinking. Canada's negotiating position is framed in terms of offensive and defensive interests. True, this might be an effective negotiating tactic in that Canada can "hold something back" in exchange for greater access to European markets. However, using the language of offense and defense in public and policy discussions suggests that we have much to lose and reflects conventional trade thinking. Canadian policy-makers (and European ones, for that matter), the public, and businesses need to think about the implications of the Canada–EU relationship and agreement in terms of two-way integrative trade.

WHY CANADA–EU?

The U.S. market will continue, for the foreseeable future, to be Canada's main trading partner, given geography and the related deep regional value chain linkages. However, Canada's trade integration with the U.S. has been stuck in neutral in recent years.[29] This is not simply the result of the 2008–09 U.S. and global financial crisis, nor of the post-9/11 border measures—it is a longer-term trend. As a result, Canadian businesses and policy-makers need to secure and enhance linkages with the U.S. as a priority, but also work toward integrative trade with other regions. This should include fast-growing, large emerging economies as well as more established, large trading partners such as Europe.

27 Lamy, *Facts and Fictions*; Jara, "DDG Jara Urges Another Way."

28 Sturgeon and Gereffi, "The Challenge of Global Value Chains."

29 Goldfarb and Chu, *Stuck in Neutral.*

The EU is not expected to grow nearly as rapidly as many parts of the developing world. Worse, the region is in the midst of financial turmoil. However, the EU market is huge, at roughly C$18 trillion—or more than 10 times the size of Canada's economy. Moreover, the expertise, technologies, inputs, and potential partnerships and collaboration opportunities the EU brings to the table, both in Europe and in Canada, represent enormous economic potential for Canada.

A Canada–EU joint government study evaluating the impact of a potential agreement found that both Canada and the EU would gain from eliminating barriers to both goods and the services trade.[30] Canada's GDP, for example, would grow by almost 1 per cent annually. Remarkably, almost half of this gain is due to the liberalization of services trade. This was true both for Canada and the EU. This reinforces the importance of examining Canada–EU trade from a two-way integrative trade perspective, rather than a traditional focus on goods exports.

The BlackBerry illustrates how Canadian companies can tap into Europe to reap efficiencies along its global value chain. RIM taps into the EU markets for skills and high-quality manufacturing at a lower cost. RIM effectively uses Europe as its entry point into other global markets. In other words, accessing the EU market is not just about the EU market, but about accessing global markets.

Another example of a potential benefit is European investment in Canada in the "clean energy" sector. Europe is a world leader in clean technologies. Free, two-way Canada–EU investment and trade access would enhance Europe's access to North American markets.

30 European Commission and Government of Canada, *Assessing the Costs and Benefits*.

It would also give Canada access to world-leading European technologies and a policy environment and market that is open to adopting such technologies.

Moreover, such an agreement would position Canada as a location to access both the U.S. and EU markets relatively freely, since Canada would have free trade agreements with both. The U.S. does not have a free trade agreement with the EU. And while Mexico does have a free trade agreement with the EU and the U.S. (NAFTA), a more comprehensive Canada–EU agreement than the Mexican free trade deal could give Canada a leg up.

The European Union market is huge, at roughly C$18 trillion—or more than 10 times the size of Canada's economy.

We should note that not everyone sees benefits from greater Canada–EU trade access. For example, the Canadian Centre for Policy Alternatives argues that the proposed Canada–EU agreement could threaten Canada's government procurement policies and a broad range of public services.[31] As we discuss later, it is important to ensure that trade liberalization is accompanied by adequate regulation in the public interest.

Whether one favours or opposes freer Canada–EU trade, it is clear that to understand the relationship and develop relevant trade policies, we need Canada–EU integrative trade measures that are more aligned with international business realities.

31 Sinclair, *Negotiating From Weakness*.

CHAPTER 2

Addressing Canada–EU Integrative Trade Gaps

Chapter Summary

- There are many gaps in conventional trade statistics—for example, much services trade is likely to be overlooked by existing measures.
- To address what's "missing," we aim for conservative, relevant measures that give a sense of magnitudes and trends across a broader set of activities than do conventional measures.
- We create measures of inward and outward integrative trade, supplemented by measures of Canada–EU value chain activity.

WHAT IS "MISSING"?

To help leaders think about the Canada–EU relationship and the potential agreement in terms of integrative trade, we developed measures of Canada–EU integrative trade. Our first step was to analyze the main gaps in existing official data sources and conventional analysis.

Table 2 provides an overview of the main existing gaps in official trade data and analysis, and shows which of those gaps we addressed in our integrative trade measure. We also discuss our method below and in more detail in Appendix B. We also note areas that our measures do not cover, or the challenges they raise.

One gap in conventional trade analysis for goods and services is that exports are still often viewed as positive and imports as negative. This may be true for GDP accounting purposes, but the reality of more complex trade dynamics and global value chains mean that exports and imports make key contributions to Canada's and the global economy.

In conventional trade analysis, exports are often viewed as positive and imports as negative.

SERVICES TRADE

Services trade data are generally not given the same profile as are goods trade data. Much of services trade is likely to be overlooked by existing measures. There are several reasons for this, including:

- historical tariff and quota policies that required a focus on goods;
- the fact that services were previously considered untradable;
- the reality that it is more difficult to measure services;
- the tendency for services value-added to be embodied in goods trade data; and
- the fact that services are sold via a range of methods.

Measuring Canada–EU services trade is a serious challenge. One cannot, as the saying goes, drop a service on one's foot. Unlike goods, services do not physically cross borders. They might show up as electronic deposits at bank branches in Europe, music downloads from Europe

Table 2
How We Addressed Gaps in Official Trade Data and Analysis

Gaps	What We Did	Remaining Gaps
• Analytical and policy overemphasis on the role of exports • Accompanying underemphasis on imports	• Reframed by raising the profile of imported inputs and analyzing two-way supply chain activity	
• Low services trade profile • Services provided by temporary foreign workers, via foreign affiliates, digitally over the Internet or via other technologies, small businesses undervalued	• Raised the profile of services trade and digital trade • Showed services trade as part of the broad trade picture • Estimated foreign affiliate sales • Partly corrected for undercount in conventional services trade data	• Some services sold via temporary foreign workers, small businesses, and digital services still not captured
• Recognition of regional and global value chains • Related undercount of trade with non-U.S. partners • Counting of entire value of good every time it crosses a border (rather than value added only)	• Examined Canada–EU trade by region, rather than by country • Adjusted for regional undercounts • Showed imports, exports, foreign affiliate sales, services, and goods in same picture • Provided estimates of value-added versus gross trade, trade by stage of production, and trade by stage of entry into importers' supply chain	• Analysis of value added at each stage of value chain • Trade data not collected by task in value chain • Lack of clarity about the degree to which this activity is intra-company activity • None of the measures capture the role of services in Canada–EU or global value chains
• Inward and outward foreign affiliate sales	• Used Canada's inward and outward foreign direct investment stocks to adjust Canada's inward and outward foreign affiliate sales • Estimated share of foreign affiliate sales that may double-count conventional trade (See box "Do Foreign Affiliate Sales Double-Count Conventional Trade?")	• Estimates could be further refined if underlying foreign affiliate sales data coverage were enlarged and more up-to-date.

Source: The Conference Board of Canada.

in Canada, a Canadian affiliate in France selling engineering services locally, or an individual travelling to Canada to sell a service in this country, or through telephone calls or data sent over the Internet. Many "digital services," such as software and games, may be bought and sold over the Internet or by mobile phone without anything physical being exchanged.

Many of these types of transactions are not captured adequately by existing trade data. It is challenging, in particular, to record services traded electronically, since it is difficult to establish where, when, and between whom transactions have taken place.[1] This may become an even more significant gap as goods and services become increasingly sold electronically.

1 Persin, "Preferential Versus Multilateral Service Trade Liberalization."

Conventional trade data do not capture services that take place via the movement of temporary foreign workers—a potentially important gap in the Canada–EU case. (See box "Still 'Missing': Services Sold Via Temporary Foreign Workers.") As well, conventional goods trade data appear to embody a lot of services value-added activities.[2] This leads to an understatement of services trade statistics and an overstatement of the related goods trade.

To be sure, Statistics Canada has made some adjustments. For example, the agency adjusts for undercounted Internet transactions, has redesigned its services trade survey, and has opened the survey up to a larger and broader set of respondents. Still, these measures are not enough to capture all of Canada's services trade with the EU, and the survey results undercount the role played by smaller businesses, in particular. A further problem is that the surveys are paper-based, making them more costly to process and more cumbersome to fill out, likely reducing response rates and the associated data quality. An additional challenge is that the line between what is a good and what is a service is increasingly blurred.

Conventional trade data do not capture services that take place via the movement of temporary foreign workers—a potentially important gap in the Canada–EU case.

There is another important limitation to official Canada–EU services trade statistics. Official statistics do not include sales by companies that have set up a commercial presence abroad (that is, foreign affiliate sales). These are critically important in the Canada–EU relationship. For example, Canadian outward affiliate sales are almost twice as important as conventional exports for Canada's sales to the European Union.[3] Our integrative trade measures explore this further.

While Statistics Canada data has some information on Canadian outward affiliate sales, the data are limited, based on a very small sample size and not available for all regions. Furthermore, they are available only with a long lag—the 2008 data became available only in August 2010. They are also available with industry breakdowns only for total sales, and there are no industry breakdowns by country. Another limitation is that they do not tell us whether the foreign affiliates are selling back to Canada, to the country in which they are located, or to a third country or region. Worse, there are no existing data on inward foreign affiliate sales. However, as we will describe later, it is possible to make an informed and solid estimate of Canada's inward foreign affiliate sales based on the existing data.

2 Johnson and Noguera, "Accounting for Intermediates," 16.

3 Foreign Affairs and International Trade, *Canada's State of Trade*, 41.

Still "Missing": Services Sold Via Temporary Foreign Workers

If a European temporary worker travels to Canada, or vice versa, any services he or she sells are not recorded as a Canadian service import. This could include services provided by both unskilled as well as highly skilled workers.

While services trade via movements of temporary foreign workers is not directly recorded, some indirect information suggests that these activities are important in the Canada–EU case. For one thing, according to the most recent Canadian census (2006), over one-fifth of Canadian temporary workers came from Europe.[1] (The EU does not collect comparable data on Canadian temporary workers in the EU.[2]) It seems reasonable to assume that they perform services while they are here. For another thing, barriers to the movements of temporary workers between Canada and the EU are often cited by businesses as problematic,[3] suggesting that trade via people movements is an important part of the Canada–EU relationship.

Not counting such services in the trade measures may downplay the relevance of related policies. But there are important policy impediments to the movement of temporary workers between Canada and the EU—which impede the related services trade. These include difficulty securing temporary work permits, spousal visas, double taxation, and withholding taxes.[4]

1 Thomas, "Foreign National Working Temporarily in Canada," Table 1.

2 European Commission and Government of Canada, *Assessing the Costs and Benefits.*

3 Ibid.

4 E-mail correspondence with Jason Langrish, Canada–Europe Business Roundtable, August 10, 2010.

GOODS TRADE

In contrast to services trade, official Canada goods trade figures are readily available. Despite historical attention to goods trade, however, there are still problems with existing data.

Statistics Canada's measure of Canada's imports from the EU is likely more reliable than its measure of Canada's exports to the EU. Customs officials are typically more vigilant in checking goods entering Canada than those leaving. However, goods import data do not take into account the use of global and regional value chains. As the BlackBerry example illustrates, an item created mostly outside the EU still gets recorded as an EU export. Official trade data may simply reflect the last place goods were shipped from, rather than where most of the value was created.

Calculations from two sources confirm that there is a modest undercount of Canada's exports to the EU.

Canada's official exports to the EU are likely understated. They may get captured as trade with the U.S., even if the goods go on to Europe. As well, Statistics Canada reconciles export data with the U.S., using more reliable and generally more comprehensive import data. It does not do so for trade with the EU.

Calculations from two sources confirm there is a modest undercount of Canada's exports to the EU. We first compare Statistics Canada's assessment of the undercount[4] with Canada's conventional official exports to the EU. According to this calculation, roughly 10 per cent of Canadian exports to the EU were not counted in official trade statistics in 2008. Next, we compare UN Comtrade's reported EU imports from Canada—which we estimate for 2009 based on historical trends—with conventional official Statistics Canada exports to the EU. That calculation finds roughly a 4 per cent undercount.

4 Correspondence with Statistics Canada, May 22, 2009.

While 1 in 10 or, to a lesser degree, 1 in 20 exports is still a material undercount, it marks a significant improvement over recent years. The undercounts in 2000 were 26 per cent and 29 per cent, respectively, for the same two calculations. This is good news in that counts of exports to the EU appear to be more accurate than in the past. The problem is that it can be challenging to interpret trends. For example, growth in Canada's exports to Europe likely reflects better counting, rather than actual growth.

Statistics Canada reconciles export data with the U.S., using more reliable and generally more comprehensive import data. It does not do so for trade with the EU.

Related to this, Canada's goods trade with specific European countries could be misleading. They may overstate trade with countries that simply ship goods rather than add value, and conversely understate trade with countries that do add value. This is because bilateral trade data fail to reflect the tendency for most trade to take place within regions, using parts and services from different countries in the region. Most of Canada's trade, for example, takes place within North America,[5] and most of Europe's within the European Union. One indicator of this is that value-added trade between Germany and its large EU partners is much lower than Germany's value-added trade with more distant trade partners.[6] Sweden's Volvo illustrates the tendency toward trade within regional value chains. Though its headlights come from the U.S. and Canada, and some parts such as the navigation control from Japan, most of its other components, including its side mirror, shock absorbers, and fuel tank (Germany), its air conditioner (France), and its air bag and seat belts (Sweden) come from Europe.[7] It is therefore more meaningful to examine North American trade with Europe, rather than Canada's trade with specific European countries.

5 Rugman, "Are Supply Chains Regional or Global?"

6 Johnson and Noguera, "Accounting for Intermediates."

7 Baldwin, *Integration of the North American Economy*, 11.

FOREIGN DIRECT INVESTMENT

Foreign direct investments—which include European Union investments in Canada and Canadian investments in the EU—are often overlooked in discussions of trade. As discussed above, however, they increasingly complement trade and boost domestic economic activity.

But it is not easy to measure Canada–EU inward and outward direct investment. One reason is that companies are often reluctant to divulge final destination information, and even if they do divulge, it is not clear whether their information is accurate.

We aim for relevant measures, rather than perfect ones.

Moreover, Canada's outward direct investment is likely undercounted for the EU. One reason statistics likely undercount investment is that they measure investment at its first destination. But a Canadian company investing in the EU may have the investment first transit through the U.S. or through a tax haven or low-tax jurisdiction en route.

Another problem is that reported foreign direct investment may be different depending on which country's statistical agency one asks. To take a non-EU example: in 2007 Canada's reported inward foreign direct investment from Australia was only one-quarter the size of what Australia reported.[8] In this case, the Canadian data appear to be more accurate in that they are more consistent over time. However, this raises doubts about the quality of FDI data generally.

Additionally, Statistics Canada foreign direct investment surveys are paper-based rather than electronic, making them more burdensome than necessary. This potentially affects response rates and the associated data quality.

8 Ciuriak, "Benchmarking Canada's Commercial Relationship."

ADDRESSING THE GAP: OUR AIM AND METHOD

We build on this overview of gaps by developing a methodology to estimate a broader picture of Canada's interactions with the European Union. Our estimates represent a starting point; they do not include all "missing" trade. They are based on what we consider to be reasonable assumptions and existing data sources. Therefore, our estimates reflect the limitations of those sources.

Our aim is to provide conservative, relevant measures that give a sense of magnitudes and trends across a broader set of activities. We are not aiming for perfection. Our view is that it is more meaningful for leaders to have a more complete, relevant measure that is imperfect than a precise, narrow measure that is out of sync with business realities.

Foreign direct investments—which include European Union investments in Canada and Canadian investments in the EU—are often overlooked in discussions of trade.

Note that this approach is not an attempt to "fix" how trade is measured in the system of national accounts. Rather, our aim is a broader conception and estimation of Canada's international activities. Many integrative trade activities may contribute to the competitiveness of the country's businesses while not actually being a part of the national economic accounts. They may not be counted at all, or they may be counted as part of other countries' national accounts.

We estimate "integrative trade" from 2000–08. We decided not to report 2009 data for several reasons. First, we had only partial data. More importantly, we are interested in trends, and using 2009 would, at the height of the global financial crisis—with its associated trade collapse—mask the long-term trend. (Including 2008 data could reflect the global financial crisis as well, but to a much lesser extent.)

To arrive at our integrative trade measures, in simple terms (see Appendix B for details), we:

- start with existing official export and import data; and
- estimate official export and import data where official measures do not exist.

We call both the official and the estimated official trade data "conventional trade."

To convert these conventional measures into "integrative trade," we:

- adjust them to take into account undercounts of services trade and potential misallocations of Canada's trade between regions;
- add estimated foreign affiliate sales; and
- estimate Canada's trade with Europe, rather than by specific European country, to capture the reality of intra-Europe value chains.

This provides an estimate of Canada's global integrative trade.

Each measure on its own is imperfect. But, taken together, they should provide us with a broad sense of the degree of Canada–EU value chain activity.

Our measure of Canada's "outward integrative trade" with the EU therefore includes:

- Canadian conventional exports to the EU, with our adjustments as appropriate; and
- Canadian affiliated sales from the EU.

For our measure of Canada's "inward integrative trade" with the EU, we include:

- Canadian conventional imports from the EU, with our adjustments as appropriate; and
- EU affiliated sales from Canada.

An alternative to our measures would be to show conventional trade measures alongside, say, foreign affiliate sales, since such sales are not necessarily the same in characteristics and effects as are exports and imports sold through more traditional routes.

We complement these integrative trade measures with three indicators that, combined, may provide a better picture of the degree of Canada–EU value chain integration:

- Canada–EU trade values by stage of production for 2000–08, based on aggregations of UN Comtrade data from the World Integrated Trade Solution. Trade values by stage of production—raw, intermediate, capital, or consumer good—provides the most up-to-date data and is a reasonable proxy for value chain activity. These data have not been adjusted for inflation, and are not a perfect measure of when a good enters a value chain. A minimally processed good such as a steel plate, for example, could enter a value chain at a very early stage.
- Canada–Europe trade volumes by stage of entry into the value chain—early, middle, and end-stage—for the top 25 traded goods over 2000–06, based on Conference Board methodology.[9] Our data are imperfect, since they focus on only the top 25 goods and have been calculated only up to 2006.
- Canada's value-added trade with specific EU countries as a share of Canada's conventional or gross trade with those countries for 2004, based on calculations from global input-output tables. In oversimplified terms, a low share might imply significant back and forth movement, with value being added at each stage. These data are not easy to come by, not in wide distribution, and not available for the most recent years. However, thanks to emerging research in this area, we have been able to obtain these values for Canada's trade for the 2004 year.[10]

We discuss the measures in more detail when we present our results.

Each measure on its own is imperfect. But, taken together, they should provide us with a broad sense of the degree of Canada–EU value chain activity.

9 See Goldfarb and Chu, *Stuck in Neutral.*

10 We are grateful to Robert C. Johnson and Guillermo Noguera for sharing these calculations with us, which are based on their method in Johnson and Noguera, "Accounting for Intermediates."

We then:

- show the inward and outward integrative trade results together visually on maps, to represent the interconnectedness between exports, imports, goods, services, global value chains, foreign affiliate sales, etc.; and
- show the three measures of value chain activity that one should take into account as part of this broader picture.

The result paints one possible broader picture of Canada–EU integrative trade.

Do Foreign Affiliate Sales Double Count Conventional Trade?

Conceptually, foreign affiliate sales are fairly straightforward. They encompass all sales of goods and services by foreign affiliates. This includes sales to the local or regional market, sales back to the parent ("intra-firm" trade), and sales to third markets. In the Canada–EU case, inward foreign affiliate sales would include sales to Canadians, back to the EU parent company, to the North American market, and to the rest of the world. All of this is part of integrative trade.

However, if someone were to add inward and outward integrative trade together, some trade may be double-counted. The sum could count some sales by EU affiliates as both Canadian exports and inward affiliate sales. Similarly, the sum could count imports to Canada from Canadian affiliates in the EU as both outward affiliate sales and Canadian imports. (The double count of imports by Canada companies from EU affiliates is likely to be comparatively small relative to the potential double count of exports). For similar reasons, this would also make an "integrative trade balance" misleading.

Since this part of foreign affiliate sales is part of integrative trade, we do not take it out of our measure. Instead, we show inward integrative trade and outward integrative trade separately rather than added together. (This is parallel to the way conventional exports and imports are presented in the system of national accounts.)

CHAPTER 3

Adding Up Canada–EU Integrative Trade

Chapter Summary

- Canada–EU integrative services trade is both faster growing and much more significant than conventional services trade measures suggest.
- Canada–EU integrative trade takes place primarily and increasingly via foreign affiliate sales—which represent roughly five times cross-border imports and two times cross-border exports.
- European businesses are rapidly expanding their services sales via affiliates in Canada, while Canadian companies are expanding their EU affiliate services sales merely in line with inflation.
- Canada and the EU have moderate value chain links, with Canada mostly supplying raw and moderately processed goods into Europe's value chains. In contrast to Canada–U.S. value chains, Canada is increasing its presence in the EU value chains.

OUR FINDINGS

As we bring our integrative trade measures and estimates together, it becomes clear that the Canada–EU relationship is indeed far broader than the picture painted by conventional trade statistics. Several areas in particular are striking: the key roles of services trade and foreign affiliate sales, and the makeup of Canada–EU value chain linkages.

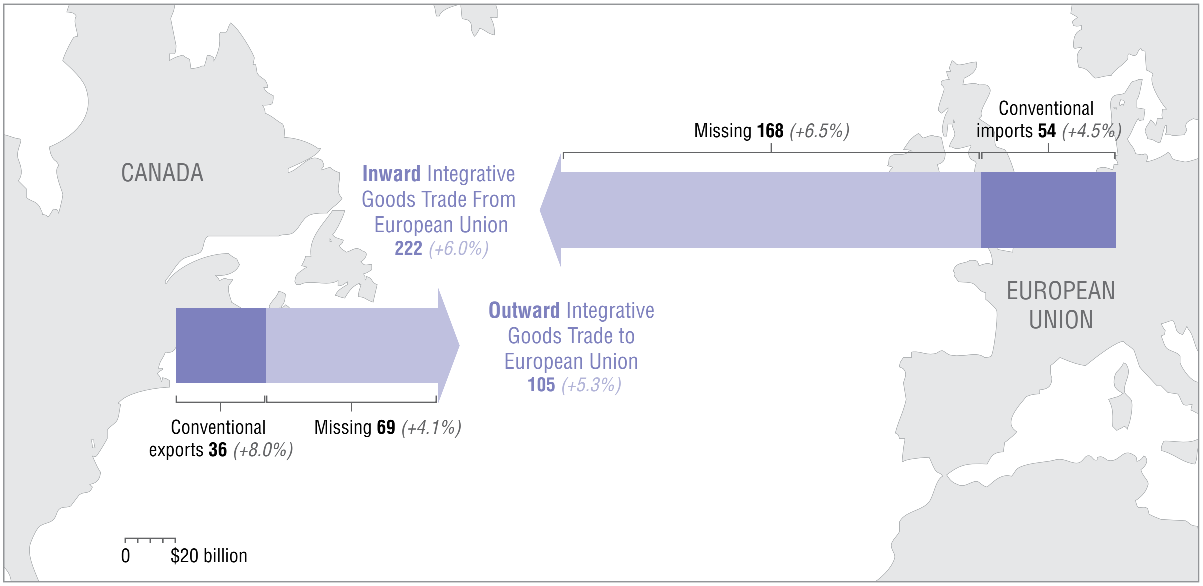
THE ROLE OF SERVICES TRADE

Services trade is not a marginal activity, but an integral one. It is both an end "product" and critical to the effective functioning of value chains. The BlackBerry example illustrates the range of financing, engineering, design, after-sales support, and other services that go into the final product that is sold in the EU and around the world. Overlooking services trade, therefore, overlooks a critical piece of Canada's relationship with the EU and other trade partners.

The results show that Canada's services trade is more than an afterthought and should be given a higher profile.

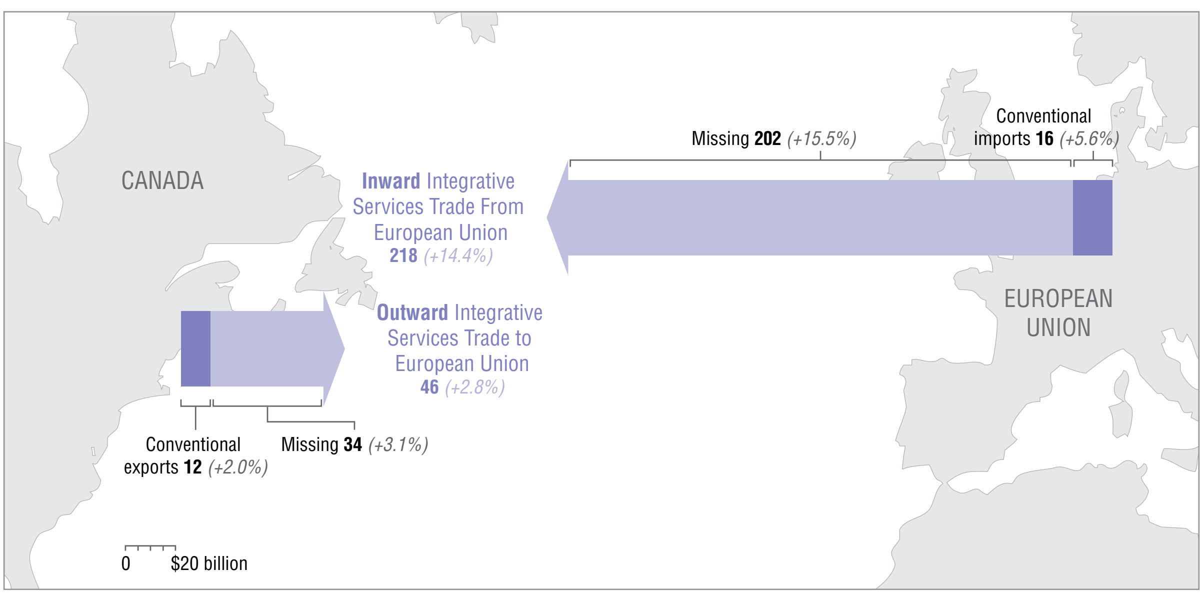
While services trade is often treated as an afterthought to goods trade, our measures show that services trade really matters. Exhibit 1 shows our estimates of Canada's integrative goods trade with the EU, Exhibit 2 shows Canada's integrative services trade measures, and Exhibit 3 provides the sum of goods and services. Comparing exhibits 1 and 2 shows that conventionally measured services trade in either direction is roughly only one-third of conventionally measured goods trade. Even before we make our adjustments, this result shows that Canada–EU services trade is more than an afterthought and should be given a higher profile.

Exhibit 1
A Broader Picture of Canada–European Union Goods Trade, 2008
($ billions; growth, per cent)



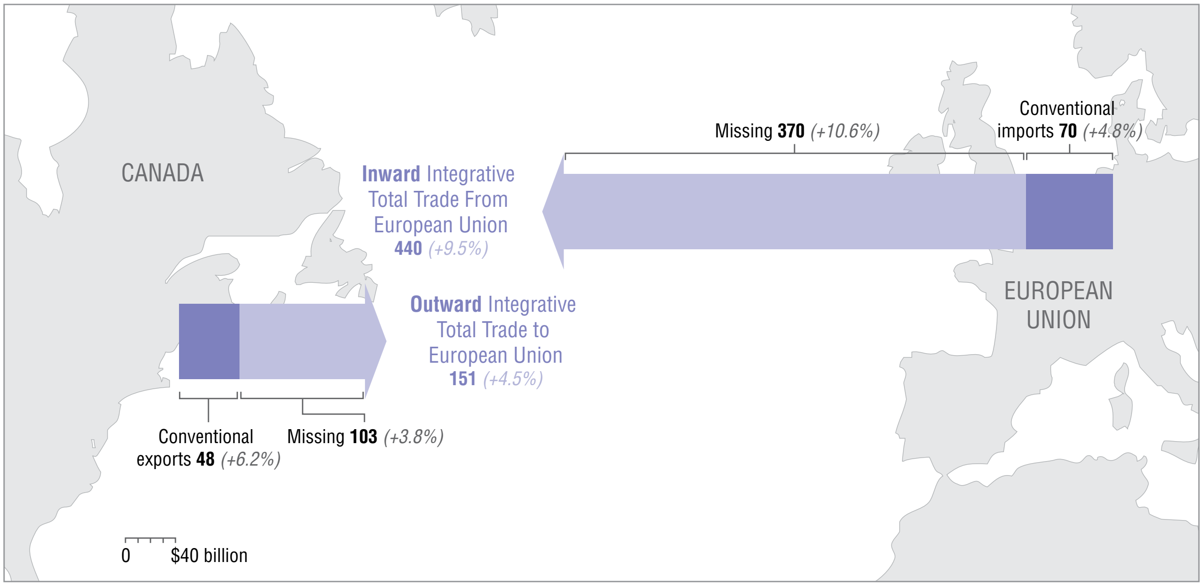
Note: Trade is for 2008 (shown in bold); growth is annual average compound rate over 2000–08 (shown in parentheses).
Source: The Conference Board of Canada.

Exhibit 2
A Broader Picture of Canada–European Union Services Trade, 2008
($ billions; growth, per cent)



Note: Trade is for 2008 (shown in bold); growth is annual average compound rate over 2000–08 (shown in parentheses).
Source: The Conference Board of Canada.

Exhibit 3
A Broader Picture of Canada–European Union Total Trade, 2008
($ billions; growth, per cent)



Note: Trade is for 2008 (shown in bold); growth is annual average compound rate over 2000–08 (shown in parentheses).
Source: The Conference Board of Canada.

But our integrative trade estimates leave no doubt as to the importance of services trade. We estimate that Canada's inward integrative services trade from the EU ($218 billion in 2008) is roughly in line with Canada's inward integrative goods trade from the EU ($222 billion in 2008). And our estimate has Canada's outward integrative services trade to the EU ($46 billion in 2008) at roughly half of the equivalent goods trade ($105 billion in 2008).

Why is Canada–EU integrative services trade so much larger than conventional measures?

For one thing, our integrative trade estimates adjust for undercounting of conventional services trade. But a much more important reason is the role of foreign affiliate sales, as we discuss in the next section. Since Canada and the EU are separated by an ocean, setting up such affiliates is a key way for Canadian companies to access the EU market and beyond, as well as for EU companies to access North America. Selling via foreign affiliates is particularly important for services that require a local presence.

Two-way Canada–EU integrative services trade is not only more robust than conventional services trade measures, it is growing faster. Growth has been incredible on the inward side in particular, as Exhibit 2 highlights. Canada's inward integrative services trade with the EU grew by over 14 per cent per year over 2000–08. This compares with a growth rate of about 6 per cent for Canada's inward integrative goods trade with the EU, and a growth rate of only about 3 per cent for Canada's outward integrative services trade with the EU.

Selling via foreign affiliates is particularly important for services that require a local presence.

In other words, EU businesses are rapidly growing their services sales in Canada, and doing so at a rate more than two times faster than for their goods sales. But Canadian businesses are not taking advantage to anywhere near the same degree of the opportunities to sell their services in the large European market and beyond.

The overall growth in Canada–EU integrative services trade measures is being driven by rapidly growing foreign direct investment related to services. Exhibit 4 shows that, in both directions, Canada–EU services-related FDI stocks are more robust—and growing much faster—than goods-related FDI. Canada's goods-related FDI stocks in the EU are relatively weak at $30 billion and have been declining by over 2 per cent annually over 2000–08. By contrast, this country's services-related FDI stocks in the EU are roughly four times as large ($121 billion) and grew by almost 14 per cent annually over 2000–08. On the inward side, the EU's goods-related FDI stocks in Canada are quite robust at roughly $100 billion. But they grew only at about 5 per cent annually over 2000–08. This compares with the $65 billion of EU services-related FDI stocks in Canada that had a 10 per cent annual growth over the same period.

Businesses are not taking advantage of opportunities to grow their services activities in the EU to the same degree that Europeans are doing in Canada.

Which industries are behind the large amount of Canada–EU services FDI? Financial services dominate, accounting for 40 per cent of Canada's direct investment in the EU and 13 per cent of the EU's foreign direct investment in Canada in 2008. Next most important is the management of companies and enterprises sector,[1] which made up 9 per cent of Canada's FDI in the EU and 14 per cent of the EU's FDI in Canada in 2008. The dominance of financial services in EU FDI activity in Canada is consistent with the important role of EU affiliate sales of financial services in Canada. We estimate that EU affiliate sales in Canada in financial services represented 13 per cent in 2007, the latest year for which underlying data are available. This share is consistent with the EU's foreign direct investment in that sector. Wholesale trade may also play an important role, though the magnitude of the importance is different for FDI and foreign affiliate sales. EU foreign affiliate wholesale sales in Canada represent more than one-fifth of the total. This contrasts with its 5 per cent share of EU FDI in Canada.

This high concentration of activity in a few sectors is consistent with the theory that foreign direct investment and foreign affiliate sales are highly interconnected. (Unfortunately, we cannot provide a similar analysis of the composition of Canadian FDI and foreign affiliate sales of services in the EU, given lack of detailed data for outward foreign affiliate sales by sector and region.)

Canadian companies are more deeply engaged in services trade with the EU than conventional measures suggest.

Despite the low profile services trade receives, our measures suggest that Canada–EU integrative services trade is more robust and growing faster than conventional services trade measures. Our estimates are quite conservative and do not capture all of the "missing" trade, which includes much of the activity that takes place via digital transfer, the role of smaller businesses, the movement of ideas, and the role of services trade via movements of people. Canada's services trade in both directions is likely higher than these estimates, further reinforcing their importance.

Canadian companies are much more deeply engaged in services trade with the EU than conventional measures and analyses suggest. And Canadian and European companies trade in services in a range of ways. But there is important unmet potential: Canadian businesses are not taking advantage of opportunities to grow their services activities in Europe to anywhere near the same degree that Europeans are doing so in Canada. European businesses are active and expanding services sales here, while Canadian companies are merely keeping their services trade expansion stable (after taking inflation into account). (See box "Measuring Canada's Outward FDI to the EU.")

1 According to the North American Industry Classification definition of industries, this sector includes establishments primarily engaged in managing companies and enterprises and/or holding the securities or financial assets of companies and enterprises.

Measuring Canada's Outward FDI to the EU

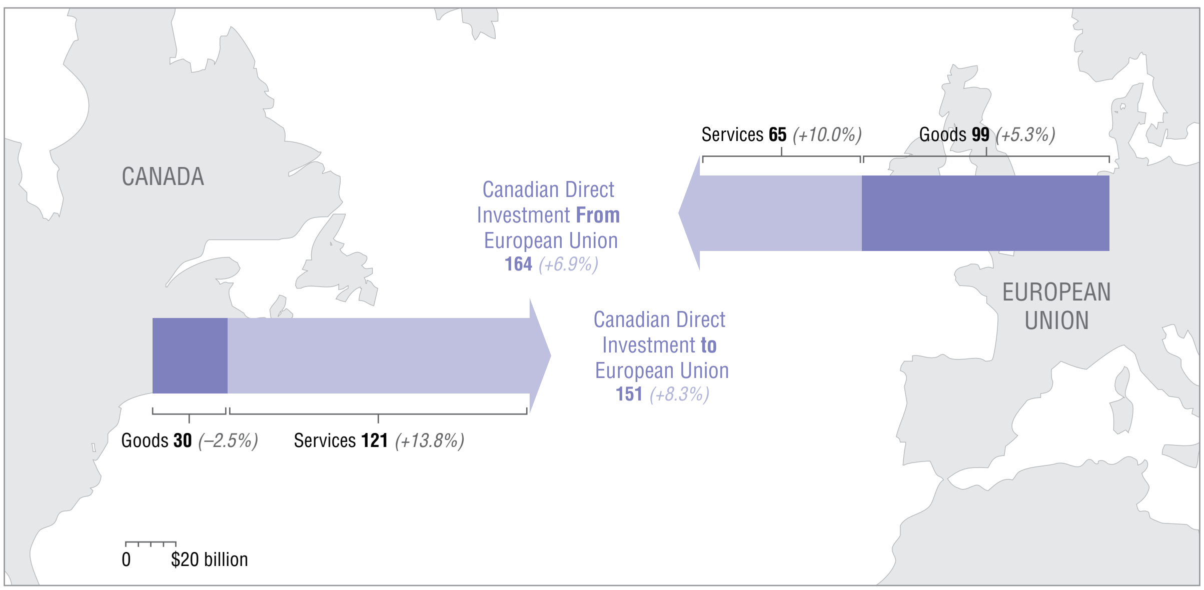
Why is Canada's outward FDI to the EU so much larger relative to inward FDI than are Canada's outward affiliate sales from the EU relative to inward affiliate sales?

Exhibit 4 shows Canada's outward FDI in the EU roughly in line with inward FDI from the EU. By contrast, Canada's outward foreign affiliate activity captured in the "missing" and integrative trade measures in Exhibit 3 is much smaller than Canada's inward affiliate activity from the EU. Why the difference?

The reason is the way Statistics Canada defines the underlying statistics. Statistics Canada defines Canadian outward investment as investment at least 10 per cent owned by a Canadian enterprise. The definition for outward foreign affiliate activity, however, is more restrictive. It only includes majority-owned foreign affiliates. In other words, outward foreign direct investment activity appears much larger than outward foreign affiliate activity because the former is measuring something broader.

Majority-owned may be a more relevant metric for measuring foreign affiliate activity, so we do not adjust our foreign affiliate estimates according to the broader outward investment definition. This discrepancy highlights the fact that foreign direct investment can represent a broader set of activities than simply foreign affiliate sales.

Exhibit 4
A Canada–European Union Trade Enabler: Foreign Direct Investment Stocks, 2008
($ billions; growth, per cent)



Note: Investment is for 2008 (shown in bold); growth is annual average compound rate over 2000–08 (shown in parentheses).
Source: The Conference Board of Canada.

THE ROLE OF FOREIGN DIRECT INVESTMENT AND FOREIGN AFFILIATE SALES

While the focus of trade analysis has traditionally been on cross-border goods exports, our measures show that, for the Canada–EU relationship, trade takes place primarily via foreign affiliate sales (and perhaps via other modes—such as trade that is digitized and sent electronically—that our estimates do not capture). In other words, Canada and the EU invest in each other more than they trade with each other. Canadian and EU companies increasingly set up foreign affiliates and sell via those affiliates. The use of foreign affiliates relative to traditional cross-border trade appears to be much more pronounced for Canada's trade with Europe than it is for Canada's trade with the U.S. or Asia or as a whole.

Most of the "missing" or overlooked trade we show in exhibits 1, 2, and 3 is attributable to foreign affiliate activity. Canada sells roughly twice as much via foreign affiliates in the EU than it actually exports to that market. The EU sells roughly five times as much via EU affiliates in Canada than the EU exports directly to Canada.

Moreover, our measures show that the tendency for Canada–EU trade to take place via foreign affiliates is growing rapidly. From 2000–08, sales by Canadian affiliates in the EU grew by 5 per cent annually. Sales by EU affiliates in Canada grew twice as rapidly over that period, driven by very rapid growth on the services side, but also strong growth in goods sales.

We would not expect Canada–EU value chain activity to be as tightly integrated as is Canada–U.S. value chain activity, simply because of geography.

Several other studies confirm both the relative and growing importance of foreign affiliate sales in the Canada–EU relationship.[2] What motivates the use of foreign affiliate sales in this relationship? For Canada, foreign affiliate sales appear to be one of the preferred modes to access more distant EU and global inputs, technologies, talents, and markets. For the EU, it is a way to access North American markets, inputs, technologies, and talents. Access to a wider market and the need to be close to customers are the key reasons to invest, according to Canadian and EU companies interviewed for a 2005 report.[3] For smaller businesses, the key reasons for Canada–EU investment (compared with investing in other regions) tend to be language and fast, clear procedures for business incorporation.

Overall, we find that foreign affiliate sales and foreign direct investment play a significant role in the Canada–EU relationship. This means that Canada–EU integrative trade is much larger than the picture conventional trade measures present. EU businesses have been expanding in Canada much more rapidly via foreign affiliates than Canada has done in the EU, suggesting potential for growth.

2 Ghémar, and others, "Study on Foreign Direct Investment"; European Commission and Government of Canada, *Assessing the Costs and Benefits*.

3 Ghémar, and others, "Study on Foreign Direct Investment."

CANADA–EU VALUE CHAIN ACTIVITY

We would not expect Canada–EU value chain activity to be as tightly integrated as is Canada–U.S. value chain activity, simply because of geography. Our measures of value chain activity confirm this. They also confirm that Canada and the EU do have some value chain links, with possible potential to develop further. And they point to important differences in the inputs Canada provides in EU supply chains versus those the EU supplies in Canadian supply chains.

As the BlackBerry example illustrates, it is difficult to get a sense of Canada–EU or Canada's global value chain activity from existing trade data. Moreover, available emerging measures are imperfect. Therefore, our method combines three relatively underused measures that we or others have developed:

1. **Stage of production:** Canada–European Union trade values by stage of production—raw, intermediate, consumption and capital goods—for 2000–08. (Capital goods include factories, machinery, tools, equipment, and buildings that are used to produce other products for consumption.) Intermediate goods trade can indicate significant back and forth value chain activity. Raw materials trade can also do so, though this is usually a one-stage process, with the raw material sent into the importers' value chain.
2. **Stage of value chain entry:** Canada–Europe trade volumes by stage of entry into the value chain for the top 25 traded goods over 2000–06. This helps indicate the stage at which goods are used—early or middle stages of the supply chain, or as end goods that are consumed. A minimally processed good—such as a steel plate—could enter a value chain at a very early stage, but be recorded as an intermediate good according to its production stage.
3. **Value-added trade:** Canada's value-added trade with specific EU countries as a share of Canada's conventional or gross trade with those countries for 2004 (the latest available year). Conventional trade data may over-represent the true value of trade. (See box "What Is the Value-Added of Canada–EU Trade?") Recall that value-added is the value of what is

What Is the Value-Added of Canada–EU Trade?

As the BlackBerry example illustrates, country-to-country or even region-to-region trade statistics can mislead as to where value is actually created. A BlackBerry is made up of parts and services from around the world. Still, the entire value of the actual physical product is likely to be recorded in the export statistics of its final place of manufacture—even if much of that value had already been captured when the parts were shipped earlier.

By examining trade in value-added, we can understand better how much of the trade figures is true value-added. This can help us interpret existing Canada–EU trade data. Assuming the estimates of value-added that we have are roughly accurate and have remained stable since 2004, value-added Canadian exports to the EU are largely equal to or slightly higher than conventional exports. (See Table 3.) The exception is Canada's exports to the U.K., which are roughly 22 per cent smaller in value-added terms than in conventional gross trade terms. Overall, conventional exports to the EU seem to adequately reflect value-added trade, making it relatively straightforward to "read" data on conventional Canadian export to the EU.

By contrast, for Canadian imports from key European trade partners, the estimates range from 12 to 23 per cent smaller measured in value-added terms than in conventional gross trade terms. So, Canadian imports from the EU may represent only three-quarters or slightly more of what gets reported in the trade statistics. This could also mean that conventional measures of Canadian imports from Europe will overstate the degree of competition that comes from the EU.[1]

Furthermore, reliance on conventional trade statistics can distort the trade balance picture. Use of conventional statistics would overestimate Canadian imports from the EU and therefore the Canada–EU trade deficit. What really matters, as WTO Director-General Pascal Lamy noted in a recent speech, is not the imbalances as measured by gross values of exports and imports, but how much value-added is embedded in these flows.[2]

1 Lamy, *Facts and Fictions*.

2 Ibid.

produced less the cost of what is used to produce it. This is what generates incomes and economic activity. Coming back to the BlackBerry example, that product is made up of parts and services from around the world. When it is shipped to its final customer from, say, its place of manufacture in Hungary, its entire value will be recorded in trade statistics. But much of the value will already have been captured in Hungary's import statistics when the device's parts entered that country. In other words, trade statistics do not reflect the true value-added in Hungary. Therefore, if the share of the actual value that is added, relative to the trade that gets recorded, is low between two countries, this may indicate significant back and forth with value being added at each stage, and therefore lots of value chain interaction. Related to this, a low ratio may also indicate a high degree of manufacturing activity. In practical terms, even though the U.S. sends car parts to both Canada and Germany, the U.S.–Canada value-added to conventional imports ratio is lower than the U.S.–Germany one, because Canada and the U.S. have cross-border production chains. If the ratio of value-added to conventional trade is high, this could indicate that most trade is in final goods. It could also indicate that a large share of trade is in unprocessed raw materials, which can have a high ratio of value-added to conventional trade.

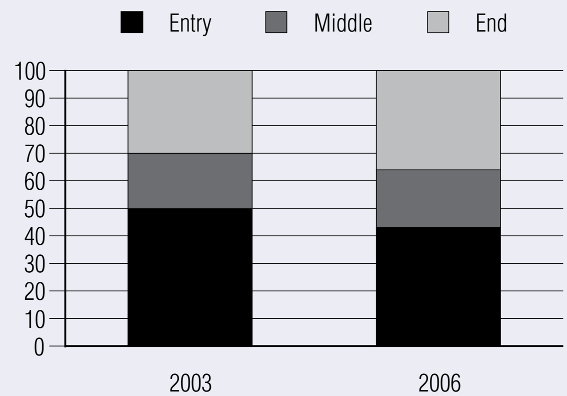
We should note that we suspect these bilateral value-added estimates may be too high. They are much higher than Canada's manufacturing value-added to gross output ratios, which are in the 50 per cent range. Though we would expect domestic value-added to gross output ratios to be lower than value-added to exports of trading partners, given the higher degree of value chain activity within a country than between countries, we wonder whether this can explain the entire gap. Another issue is that the bilateral value-added to export ratios we are using do not account for processing trade in China, Mexico, and Eastern European countries, which would lower the ratios.[4] We therefore recommend that the ratios be interpreted relative to each other, and with caution.

4 E-mail discussion with Robert C. Johnson and Guillermo Noguera, June 28, 2010.

Each measure on its own is imperfect and has limitations. But taken together, they should provide us with a broad sense of the degree of Canada–EU value chain activity. Still, we need to keep in mind their limitations: none of the three measures captures international services value chain activity, for example.

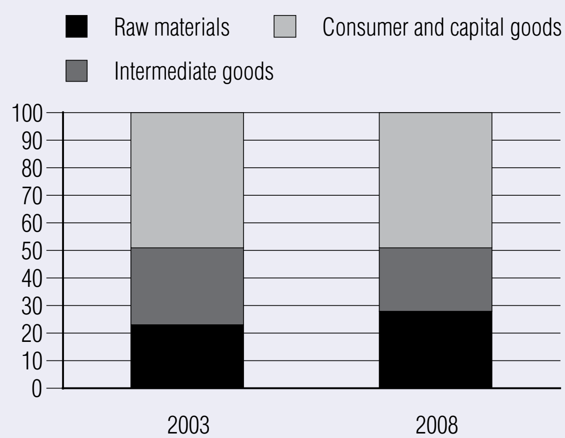
Some raw materials—such as oil and gas—represent higher value-added than many more-processed goods.

Chart 1
Canadian Exports to the EU by Stage of Entry Into EU Supply Chain
(per cent)



Sources: The Conference Board of Canada; Strategis.

Chart 2
Canadian Exports to the EU by Stage of Production in Canada
(per cent)



Sources: The Conference Board of Canada; UN Comtrade via World Integrated Trade Solution.

The measures suggest a few trends in Canada–EU value chain activity. In terms of Canadian contributions to European value chains, we find the following:

- Canada appears to be actively involved in supplying raw materials and partly transformed inputs into EU value chains. Combined, these activities represent most of Canada's exports to Europe, whether we measure Canadian exports according to their stage of entry into European value chains (see Chart 1) or by stage of production in Canada. (See Chart 2.) It is also consistent with our third measure. The value-added of Canadian exports to key European countries as a share of conventional trade are consistently higher than the value-added of imports from European countries as a share of conventional trade. (See Table 3.) This is consistent with exporting raw materials, which can have high value-added. We calculate that for Canada, some raw materials—such as oil and gas—represent higher value-added than many more-processed goods.
- Canada also appears to be increasing its sales of raw materials into European value chains, according to both stage of production and stage of entry into value chain. This does not simply reflect commodity price increases: the volume of Canadian goods that entered European value chains at an early stage grew by 7 per cent annually over 2000–06.
- Canadian goods that enter European supply chains at a middle stage of production, or are intermediate goods, represent a moderate share of activity. In the most recent years for which we have data for our measures, they account for between one-fifth to one-quarter of exports.
- Canada has been increasing its presence in European value chains. Europe's imports from Canada of intermediate inputs have been growing rapidly. They grew by 7 per cent annually, both according to stage of production from 2000–07 and stage of value chain from 2000–06. This contrasts with Canada–U.S. supply chain activity, which has plateaued in recent years.[5]

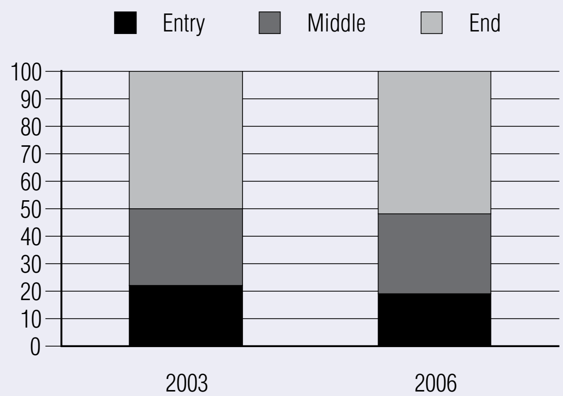
5 Chu and Goldfarb, *Stuck in Neutral.*

Table 3
Canada's Value-Added to Gross Trade With Key Trade Partners, 2004

	Canadian exports to	Canadian imports from
United States	0.64	0.61
China*	0.75	0.73
Japan	0.95	0.99
United Kingdom	0.78	0.77
Germany	1.04	0.88
Mexico	1.12	0.74
France	1.03	0.85
Korea	0.76	0.77
Italy	1.02	0.79
Rest of Western Asia	0.95	1.18
Caribbean	0.71	0.58

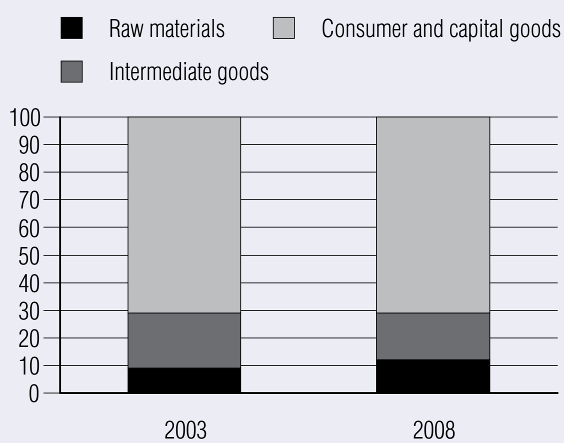
*We suspect that, given the raw materials-dominated nature of Canada's exports to China, the ratio of value-added Canadian exports to China as a share of conventional gross trade should be higher than Johnson and Noguera's estimates. One should therefore not interpret these numbers as suggesting that Canada's trade is any less integrated with Europe than it is with China.
Note: EU members are highlighted.
Sources: Robert C. Johnson and Guillermo Noguera; The Conference Board of Canada.

Chart 3
Canadian Imports From the EU by Stage of Entry Into Canadian Supply Chain
(per cent)



Sources: The Conference Board of Canada; Strategis.

Chart 4
Canadian Imports From the EU by Stage of Production in the EU
(per cent)



Sources: The Conference Board of Canada; UN Comtrade via World Integrated Trade Solution.

In terms of European goods sold into Canadian value chains or to get Canadian consumers, we find:

- Capital and consumer goods dominate Canadian import volumes from the EU, whether we measure by stage of entry into value chains (see Chart 3) or by stage of production in Canada. (See Chart 4.)
- Intermediate or middle-stage inputs play a moderately important role, ranging from over one-fifth of Canadian imports to close to one-third.
- This mix (predominantly final goods, with some intermediate inputs) is also consistent with value-added to conventional trade ratios. Such ratios indicate that Canadian imports from EU countries are only 12 to 23 per cent smaller than conventional trade figures. This contrasts with, say, Canadian imports from the U.S., which are almost 40 per cent smaller, indicating much more integrated value chain activity. It also contrasts with intra-EU figures. The most obvious example is Germany's value-added imports from the Czech Republic, which are over 50 per cent smaller than conventional exports.[6]

6 Calculations based on data provided by Johnson and Noguera on May 31, 2010.

- It is not clear how successful Canada has been at increasing its adoption of EU inputs in its own value chains. The value of Canada's intermediate inputs bought from the EU has barely grown, at 2 per cent annually over 2000–07. But the volumes of European goods that entered Canadian value chains at a middle stage grew by a much better 6 per cent over 2000–06. Of course, Canada may also be adopting European inputs in its value chains through European affiliate sales in Canada rather than via direct imported inputs.

Commodity exports could play an important role in generating increases in Canada's future living standards.

All in all, Canada mostly supplies unprocessed and moderately processed goods into Europe's value chains. Europe mostly supplies final and, to a lesser degree, semi-processed goods into Canadian value chains. Overall, Canada and the EU have a moderate amount of value chain activity. It is not nearly as tightly integrated as Canada–U.S. value chains, or as within Europe integration. This is to be expected, given the tendency to prefer to trade within one's immediate geographic region. In contrast to Canada–U.S. value chains, however, Canada appears to be increasing its presence in European value chains. This potentially points to further growth possibilities in the Canada–EU value chain relationship.

Some may be concerned that—in oversimplified terms—Canada exports natural resources into EU value chains and gets back more processed and final goods. Shouldn't we be trying to "move up the value chain" to generate improvements in living standards?

Natural resources can make important contributions to Canadian living standards. For one thing, raw materials can represent high value-added. For another, even if they represent low value-added, Canada's wealth rises when the price of what this country exports increases relative to the price of what it imports—or what economists call changes in the "terms of trade."

So, if Canada primarily exports raw materials and imports manufactured goods, and the price of raw materials rises relative to the price of manufactured goods, then the country is better off even if trade volumes do not change. Commodity exports could play an important role in generating increases in Canada's future living standards, especially given the increasing demand for commodities from large, rapidly growing developing economies.

CHAPTER 4

Adopting an Integrative Trade Policy

Chapter Summary

- An integrative trade policy requires a change in mindset—understanding services, imported inputs and technologies, people movements, digital trade, and investment, as integral to Canada's EU and global trade.
- More relevant data and analysis—such as the measures in this report—should provide the foundation for Canada's integrative trade policies.
- Integrative trade policies include eliminating two-way barriers to goods, services, and foreign affiliate trade; ramping up investments in communications infrastructure; putting in place appropriate safeguards; and prioritizing regions of greatest integrative trade activity and potential, such as the EU and emerging markets.

AN INTEGRATIVE TRADE APPROACH

Our analysis demonstrates that the Canada–EU relationship goes far beyond traditional final goods trade. Going forward, government and business leaders, as well as researchers, should take an integrative trade approach to the Canada–EU relationship—and Canada's relationship with all of its trade partners.

STEP 1: DEVELOP AN INTEGRATIVE TRADE MINDSET

The language and the frame we use to describe and picture trade matters. If policy-makers fail to shift their language and thinking toward a broader, more holistic, more integrated, and more nuanced picture of trade, policies will be out of touch with global realities. So the first step to applying an integrative trade approach to the Canada–EU relationship—as well as to Canada's broader trade relationships—is to reframe traditional trade research, analysis, and policy language and thinking.

Our analysis demonstrates that the Canada–EU relationship goes far beyond traditional final goods trade.

This requires a change in mindset. For example, it means thinking about not just trade, but investment, and not just about exports, but imports. It means viewing services trade not as marginal, but integral to global trade. It means thinking beyond trade that physically crosses borders to trade that travels electronically and via people movements. It also means thinking about Canada's access to the EU market as access to technologies and talents from all over the world. And it means thinking about collaborating across borders to get the best possible results.

Incorporating integrative trade language into academic and policy discussions of trade would reinforce the concept, and underline the integrated nature, of Canada–EU and Canada's global trade. Governments in Canada and around the world have already taken steps to incorporate integrative trade language into their trade-related discussions. For example, Foreign Affairs and International Trade Canada's (DFAIT) website features much discussion of global value chains. Still, many Canadian governments and agencies have not adopted this approach, used it in public forums as a tool to educate the public, nor reflected it in existing and new policies.

STEP 2: CREATE INTEGRATIVE TRADE DATA AND ANALYSIS

The next step to applying an integrative trade lens to the Canada–EU relationship—as well as to Canada's broader trade relationships—is to obtain more relevant data and analysis. Our integrative trade measures propose one starting point for more relevant data and analysis.

Governments in Canada and around the world have already taken steps to incorporate integrative trade language into their trade-related discussions.

Governments in Canada and around the world have been taking steps to align their data and analysis with the realities of integrative trade. Industry Canada and DFAIT, as well as other federal and provincial departments, have also moved to adopt analysis more in line with integrative trade. For example, DFAIT reports on services trade, foreign direct investment, and foreign affiliate sales in its annual *State of Trade* reports, and it conducts research on Canada and global value chains. And international agencies such as the World Trade Organization now include available figures on foreign affiliate sales when they present data on services trade.

To better align data and analysis with integrative trade realities, we recommend this approach:

- Aim for relevance, not perfection.
- Aim for a broad set of measures that capture a range of activities.
- Use existing data in new ways, and with appropriate caveats in mind.
- Develop new measures in line with integrative trade.

Specific suggestions include:

- Collect data based on business functions that can better capture the range of tasks in global value chains.[1]
- Reduce the attention given to goods trade, including the number of categories for goods trade, and devote those resources to obtaining better services trade statistics.
- Educate the public and frequent data users about existing data sources and their nuances.
- Learn from counterpart agencies in other countries. For example, the U.S. Bureau of Economic Analysis has services data more detailed than Canada's, as well as data on inward affiliate sales (Statistics Canada does not provide this at all) and more detailed data on two-way foreign affiliate sales than does Statistics Canada.
- Collaborate with Eurostat and Canada's other counterpart agencies to reconcile trade, foreign direct investment, and foreign affiliate sales data, as Canada already does for U.S. cross-border trade.
- Aim for better electronic reporting of such data, which has become standard EU and global developed-country practice, and which seems likely to increase responses and accuracy.
- Partner with industry to get better data.
- Analyze trade between regions rather than between countries.

STEP 3: DEVELOP AND IMPLEMENT INTEGRATIVE TRADE POLICIES

The next step is to apply the new mindset and the more relevant measures and analysis to reframe trade policies into integrative trade policies.

In broad policy terms, this means removing barriers—not just to trade, but to investment and foreign affiliate sales; not just for goods, but for services; and not just for exports, but for imported inputs and technologies. It means recognizing that barriers to services trade and foreign affiliate sales are not the same as those for cross-border goods trade.

1 Sturgeon and Gereffi, "The Challenge of Global Value Chains."

Integrative trade policies should facilitate not just cross-border trade, but electronic trade, movements of people, and collaboration across borders to get the best possible results. It also means providing appropriate protections for knowledge-based trade. And it means putting measures in place to address the short-term adjustments that some sectors and individuals will face in order for Canadians, as a whole, to benefit from the long-term gains that integrative trade provides.

To boost beneficial two-way services trade and the related value chain activity, policy-makers should eliminate barriers to Canada's services trade with the EU.

It also means moving beyond traditional thinking that "trade policies" are confined to free trade agreements and limited to Canada's policies vis-à-vis other trading partners. An integrative trade policy approach also encompasses actions at home that are critical to success in global value chains, electronic trade, and attracting inward and facilitating outward foreign direct investment. This means that integrative trade policies are not strictly a federal matter: provinces play an integral role. The current Canada–EU negotiations already recognize this. The provinces are at the negotiating table—a first for Canadian free trade negotiations.

Some policy-makers—in Canada and its provinces, in the EU, and globally—have already started to rethink traditional trade policies along these lines. To help them, and to encourage others to move in a similar direction, below are some recommendations to boost Canada's integrative trade and the benefits that flow from it. These apply both to the Canada–EU relationship and to Canada's integrative trade policy generally.

Eliminate Barriers to Services Trade

Barriers to services trade are often different than barriers to goods trade. For example, EU businesses point to delays in obtaining work permits and labour mobility barriers within Canada as impediments to services trade. Canadian businesses point to barriers to labour mobility, such as lack of transparency and harmonization between EU member states.[2]

To boost beneficial two-way services trade and the related value chain activity, policy-makers should minimize or eliminate barriers to Canada's services trade with the EU and with all its trade partners. This would include:

- streamlining or eliminating visas for temporary workers;
- facilitating transfers within companies;
- mutually recognizing professional qualifications between Canada and the EU; and
- focusing on impediments, especially in sectors that are value chain facilitators, such as financial and information technology services.

Integrative trade policies are not strictly a federal matter: provinces also play an integral role.

Eliminate Tariffs and Other Trade Barriers

To allow Canadians to further take advantage of the best EU and global technologies, talents, and inputs, and to sell its own into EU and global markets, the federal and provincial governments need to proactively eliminate trade barriers and not introduce new ones. This is because even small trade barriers are magnified in global and regional value chains, as they are imposed at each stage of the value chain. This includes the following:

- Eliminating remaining tariffs. Ottawa has announced it will do this for all machinery and equipment imports by 2015. It is important to do so for all tariffs. This could boost two-way Canada–EU value chain activity.
- If tariffs are not eliminated, keeping rules of origin, specifying a certain amount of Canada–EU content to qualify for duty-free treatment, simple and to a minimum.

2 European Commission and Government of Canada, *Assessing the Costs and Benefits.*

- Gradually eroding high tariffs—such as those on dairy products. These tariffs reduce the competitiveness of Canada's dairy industry and impede Canada's ability to successfully negotiate freer access for all Canadian goods and services to world markets. It is a key challenge to a successful Canada–EU agreement. One way to erode these tariffs would be to not introduce new dairy tariffs (a new one was introduced in 2009) and to phase-in a gradual enlargement of the volume of allowed dairy imports that are not subject to the high tariffs. This could be done as part of the Canada–EU negotiations.
- Eliminating "non-tariff" barriers. One example is "buy local" rules, such as Ontario's new local content requirements for green energy. Requiring individuals and businesses to buy Canadian may appear to be an effective way to boost the development of Canadian technologies. However, such policies ultimately make Canadian companies less globally competitive. For example, these policies could increase the price of such projects. They may also discourage the more efficient practice of Canadian businesses focusing on what they are best at and adopting what others make best. Other examples of non-tariff barriers include Canadian regulations that are deliberately different from EU, U.S., or global standards, with no compelling policy rationale for that difference.

Integrative trade may, in fact, reduce pressures to maintain such protections, since jurisdictions that impose them only penalize themselves in the long run. Leaders may therefore have the policy room needed not only to resist new trade barriers, but also to remove a wide range of existing trade and investment barriers.

Establish the Right Conditions for Canadians To Be Successful Integrative Traders

Policies to promote Canada–EU and Canada's global collaboration, and boost Canada's ability to be a technology leader and draw on the best global technologies, include:

- Making world-leading investments in communications infrastructure. Canada's digital performance appears to be lagging, rather than leading, that of peer countries. For example, according to Industry Canada's 2010 digital economy consultation paper, Canada lags behind other countries in the adoption and use of digital technologies. The federal government, the provinces, and cities need to make world-leading investments in infrastructure to become world-leading digital performers.
- Ensuring that Canadians have the right skills and education to be able to succeed in an integrative trade world.

Integrative trade may, in fact, reduce pressures to maintain protections, since jurisdictions that impose trade barriers only penalize themselves in the long run.

Encourage Inward and Outward FDI

Promotion of two-way foreign affiliate sales that have accelerated, and are the mainstay of Canada–EU integrative trade, includes steps such as:

- Balancing the traditional policy focus on inward investment attraction with a focus on facilitating outward direct investment. This could address the untapped potential for Canadian affiliate sales in the EU, since EU affiliate sales in Canada are growing much more rapidly. The federal government has recently moved to explicitly mandate the country's Trade Commissioner Service to "facilitate" outward direct investment. This should be encouraged, and it should be expanded to form part of provincial mandates as well.
- Reducing Canadian foreign ownership caps that may restrict EU and global affiliate sales from and in Canada.
- Putting in place and reinforcing the importance of effective "framework" policies that facilitate both inward and outward foreign direct investment.[3] This includes transparent regulations and investments in education and infrastructure.

Prioritize Areas of Largest Integrative Trade Gains

In 2009 and 2010, Canada signed free trade agreements with Colombia, Peru, Jordan, Panama, and the European Free Trade Association (Iceland, Liechtenstein, Norway,

3 Globerman, *Best Policy Practices.*

and Switzerland). In addition to negotiations with the EU and the Doha Round of global trade talks, Canada is currently in exploratory talks or formal negotiations with Ukraine, the Dominican Republic, the Caribbean Community countries, the Central American Four countries, Singapore (though this is currently stalled), Morocco, the Andean Community, South Korea, and India. Canada has also recently concluded investment protection agreements with Bahrain, the Czech Republic, Hungary, India, Kuwait, Latvia, Madagascar, Romania, and Slovakia, and it is negotiating seven more.

Policy-makers should accompany integrative trade policies with safeguards to protect Canadians' health and safety and help displaced workers adjust.

This is an ambitious agenda, to say the least. But it seems unlikely to yield the greatest integrative trade benefits. If Canada intends to pursue all these agreements, it should prioritize the regions with which the country has the greatest integrative trade activity or the greatest potential for integrative trade growth. In an ideal world, this would mean giving priority to global negotiations that offer the greatest potential. However, multilateral negotiations are largely stalled. Practically speaking, then, Canada should place priority on its relationship with the U.S., the EU, other large regions in general, and specifically large emerging economies or regions that present the greatest integrative trade growth potential. And the focus should be on concluding comprehensive agreements that address a broad range of integrative trade activities.

This is a difficult area to get right, and government negotiators and analysts need to focus on the areas in which Canadians are likeliest to reap the greatest integrative trade rewards. Trade and investment agreements are for the long term.

Use Integrative Trade Lens to Educate the Public

Policy-makers should use the language of integrative trade to educate the public about these sweeping changes and the change of mindset this requires for Canada's success in such a world. In the current Canada–EU negotiations, rather than framing elimination of Canadian tariffs as a necessary "concession" to gain access to other markets, policy-makers should explain that it helps Canadian value chains succeed. Rather than focusing on defensive and offensive interests, Canada can frame its position more constructively in light of integrative trade—our defensive interests are, in fact, offensive ones. We have much to gain and little to lose from two-way investment, two-way services trade, two-way digital trade, two-way value chain activity, and other partnerships with the EU over the long term.

Put Safeguards in Place

Integrative trade will boost productivity and therefore living standards over the long run. But it may impose short-term pain for some, and it may put at risk other policy objectives. Policy-makers should therefore put safeguards in place to protect other objectives, as well as help individuals who are harmed in the short run as they adjust to these global realities. This includes these steps:

- Help to transition individuals out of sectors that lose their long-standing protection.
- Protect intellectual property. This may become even more important as knowledge spreads rapidly and widely.
- Combine liberalization or facilitation of trade with adequate regulation to meet public policy goals. These include privacy, health, safety, and security.
- Support smaller businesses to help them participate fully in the gains from integrative trade.

CONCLUSIONS

Canada is ramping up its trade negotiations with the European Union. In light of this major negotiation, this report examines Canada's trade with the EU through an integrative trade lens. Such an approach is more aligned with international business realities than are conventional measures.

The BlackBerry example shows that the broad set of Canadian, European, and global activities that enable RIM to be globally competitive, more productive, and to better contribute to Canada's economy are underappreciated in conventional trade analysis. An integrative trade approach attempts to better reflect the roles of services trade; global and regional value chains; investment and sales by foreign affiliates; flows of people, knowledge, and technologies; electronic trade in goods and services; and the linkages between goods and services.

Our method builds on existing data to create estimates of integrative trade. We estimate conventional trade data where they do not exist, improve conventional data, add trade that takes place in non-traditional ways, and provide several complementary measures of Canada–EU value chain activity. This results in measures of Canada–EU integrative trade.

Integrative trade is a complex concept. It is also difficult to measure well, and there are few precedents. Therefore, none of our measures are perfect. But our aim is relevance rather than perfection. We illustrate visually, and through language and numbers, the importance of a broader range of activities that make up—or have the potential to make up—the Canada–EU relationship. We hope that, by putting such measures together in one picture and analysis, we will get closer to the true picture of Canada's integrative trade with the EU.

Our measures show that the Canada–EU relationship is about much more than traditional cross-border goods trade. It is also about sales by foreign affiliates, sales of services, investment, value chain linkages, digital trade, trade via movements of people, and no doubt countless other types of activities that we are unable to capture in our measures.

Trade policy has historically focused on opening markets for Canada to sell its goods exports. But our findings show that Canada benefits, and could further benefit, from a broad range of interactions with the EU. This calls for an integrative trade policy approach.

Such an approach requires a change in mindset: viewing services, imported inputs and technologies, people movements, digital trade, and investment as integral to Canada's EU and global trade. It means rethinking what trade barriers are, since, for example, barriers to services trade are different than those that affect goods trade. And it means eliminating barriers on goods, services, and investment in both directions.

Given the size of Canada–EU integrative trade activity—and the potential to build on it—Canada should continue to prioritize Canada–EU negotiations. The federal government should also prioritize other regions with which Canada has significant integrative trade interaction and more potential for growth, such as emerging markets. And Canada should continue to advocate for advances in global trade talks, which are largely stalled at present.

Our findings show that Canada benefits, and could further benefit, from a broad range of interactions with the EU. This calls for an integrative trade policy approach.

As already envisioned in the negotiations, Canada should aim for improved access to the EU market across a broad variety of activities. Rather than only playing defence on access to Canada's market, however, negotiators should also aim for an agreement that allows Canadians to take advantage of the best the EU has to offer in the form of inputs, partnerships, collaboration, technologies, people, and investment. Ottawa needs to accompany this with appropriate safeguards to protect Canadians' health and safety, as well as to transition those negatively affected in the short run. And, as part of Canada's broader trade and economic policies, Ottawa and the provinces should ramp up investments in communications infrastructure to be able to take advantage of opportunities in digital trade.

Taken together, such integrative trade policies could unleash the full potential of Canada's integrative trade with the EU and the world. This could boost value chain activity, services trade, and foreign affiliate trade, particularly in terms of Canada's presence in the EU—which seems underdeveloped at present. And it could turn Canada into a model for integrative trade thinking and for seizing the benefits from integrative trade. As a result, Canada would both improve its living standards and have a more coherent and influential position in future trade talks.

APPENDIX A

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APPENDIX B

Method

The data presented in this report come from official statistics and methodologies developed by The Conference Board of Canada. This appendix provides an overview of the concepts and methodologies used to produce the data.

Given that our measures of broad trade activities do not represent standard trade metrics, we unpack the data construction process for each of the trade activities by describing:

- **Conventional Trade,** which includes
  - official trade data.
- **Missing Trade,** which includes one or all of
  - adjusted official trade data
  - estimated foreign affiliate sales.
- **Integrative Trade,** which is the sum of
  - Conventional Trade and
  - Missing Trade.

OUTWARD INTEGRATIVE GOODS TRADE

CONVENTIONAL EXPORTS

- **Official Exports:** We started with Canada's official domestic goods exports to the European Union, using data from the United Nations Commodity Trade Statistics (Comtrade) database. Trade figures in that database are collected directly from each country's statistical agency.

MISSING

- **Adjusted Official Exports:** Since goods import data are generally more reliable than goods export data (customs officials are more vigilant at checking imports than exports), we added, to the official export figure, the amount by which recorded imports from Canada exceed Canadian exports. Note that the import statistics reported by each country are also not perfect. They may vary in quality, since each is from a different statistical agency. Still, they are likely to be more accurate than Canadian export statistics.
- **Estimated Foreign Affiliate Sales:** Given the role played by foreign affiliate sales in trade and investment activities, we estimated the amount of foreign affiliate goods trade.
  - Statistics Canada does not publish the share of goods and services sales attributable to the European Union, although it does provide some breakdown for goods versus services for the world total.
  - We used these data and apportioned them out by country using foreign direct investment data for goods by country to estimate foreign affiliate sales attributable to Canadian companies. FDI data is a valid driver of foreign sales activity, given the strong correlation between the two vectors. This explains why Statistics Canada compiles FDI and foreign affiliate sales using the same questionnaire.[1]

1 www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=1539&lang=en&db=imdb&adm=8&dis=2.

OUTWARD INTEGRATIVE GOODS TRADE

- We added the estimate of missing Canadian trade to the conventional export figures to arrive at a Canadian integrative trade estimate.

INWARD INTEGRATIVE GOODS TRADE

CONVENTIONAL IMPORTS

- **Official Imports:** We started with Canada's official goods imports from the European Union using Statistics Canada data. Since Canadian import data are likely to be relatively more accurate than export data, we did not need to make the same adjustments as we did for exports.

MISSING

- **Estimated Foreign Affiliate Sales:** We estimated sales of goods by Canadian-based foreign affiliates. These foreign affiliate sales need to be estimated, since Canada does not collect data on sales by Canadian-based foreign affiliates.
  - To assess these sales, we used data on operating revenues of European companies in Canada in the goods sector from Statistics Canada.

INWARD INTEGRATIVE GOODS TRADE

- We added the estimate of missing Canadian trade to the conventional imports figures to arrive at a Canadian integrative trade estimate.

OUTWARD INTEGRATIVE SERVICES TRADE

CONVENTIONAL EXPORTS

- **Official Exports:** We started with Statistics Canada's Canadian services exports.

MISSING

- **Adjusted Conventional Exports:** We assessed the degree to which official exports are under-represented, given that official statistics are based on a small sample and do not capture many services exports as described in the main text. We assume that exports of services and outward direct investment in services are likely to have a strong positive correlation.
  - We also assume that because of Canada's larger sample and history of trade and investment with Group of Seven countries, Canada's trade statistics with the G7 are likely to be more accurate than statistics for Canada's overall services trade.
  - If Canada's services exports to non-traditional partners were measured as accurately as services exports to traditional partners, we would expect Canada's ratio of total services exports to outward direct investment, relative to the ratio of G7 services exports to investment, to be equal to one.
  - We found this ratio to be systematically below one, which strongly suggests that official statistics undercount Canada's services trade outside the G7 relative to services trade with members of the G7.
  - We used this ratio to calculate the amount of the under-representation, and we added this to official services exports.
- **Official Foreign Affiliate Sales:** Given the key role played by foreign affiliate sales, we estimated the amount of foreign affiliate services trade.
  - Statistics Canada does not publish the share of such sales attributable to the services sector in the European Union, although it does have a breakdown for goods versus services for the world total.
  - We used these data and apportioned them out by country, using foreign direct investment data for services by country to estimate foreign affiliate sales attributable to Canadian companies. As mentioned, FDI data is a valid driver of foreign sales activity, given the strong correlation between the two vectors.

OUTWARD INTEGRATIVE SERVICES TRADE

- We add the estimate of missing Canadian trade to the conventional export figures to get a Canadian integrative trade estimate.

INWARD INTEGRATIVE SERVICES TRADE

CONVENTIONAL IMPORTS

- **Official Imports:** We started with Statistics Canada's Canadian services imports.
  - We assessed the degree to which official services imports are under-represented in a similar manner to exports.

– We did not find evidence of any under-representation, so we did not add a similar component to services imports.

MISSING

- **Estimated Foreign Affiliate Sales:** Given the role played by foreign affiliate sales, we estimated sales of services by inward foreign affiliates. As mentioned earlier, we need to estimate these foreign affiliate sales, since Canada does not collect data on sales by Canadian-based foreign affiliates.
  – To assess these sales, we used Statistics Canada data on operating revenues of foreign companies in Canada in the services sector.

INWARD INTEGRATIVE GOODS TRADE

- We added the estimate of missing Canadian trade to the conventional import figures to arrive at a Canadian integrative trade estimate.

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