



Foreign Affairs, Trade and
Development Canada

Affaires étrangères, Commerce
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Canada



Global Value Chains: Policy, Research and Data Requirements

Group of Experts on National Accounts on Global Production

July 7, 2015

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Overview

- Global Value Chains and Fragmented Production Networks
- Policy, Research and Data Requirements
 - Input-Output Tables and Value-added Trade
 - Trade Promotion
 - FDI Attraction
 - International Development
 - Trade Policy
 - Domestic Economic Policy

Global Value Chains and Fragmented Production Networks

An economic concept by many names

Fragmented Production

Vertical Specialization

Global Production Networks

Global Supply Chains

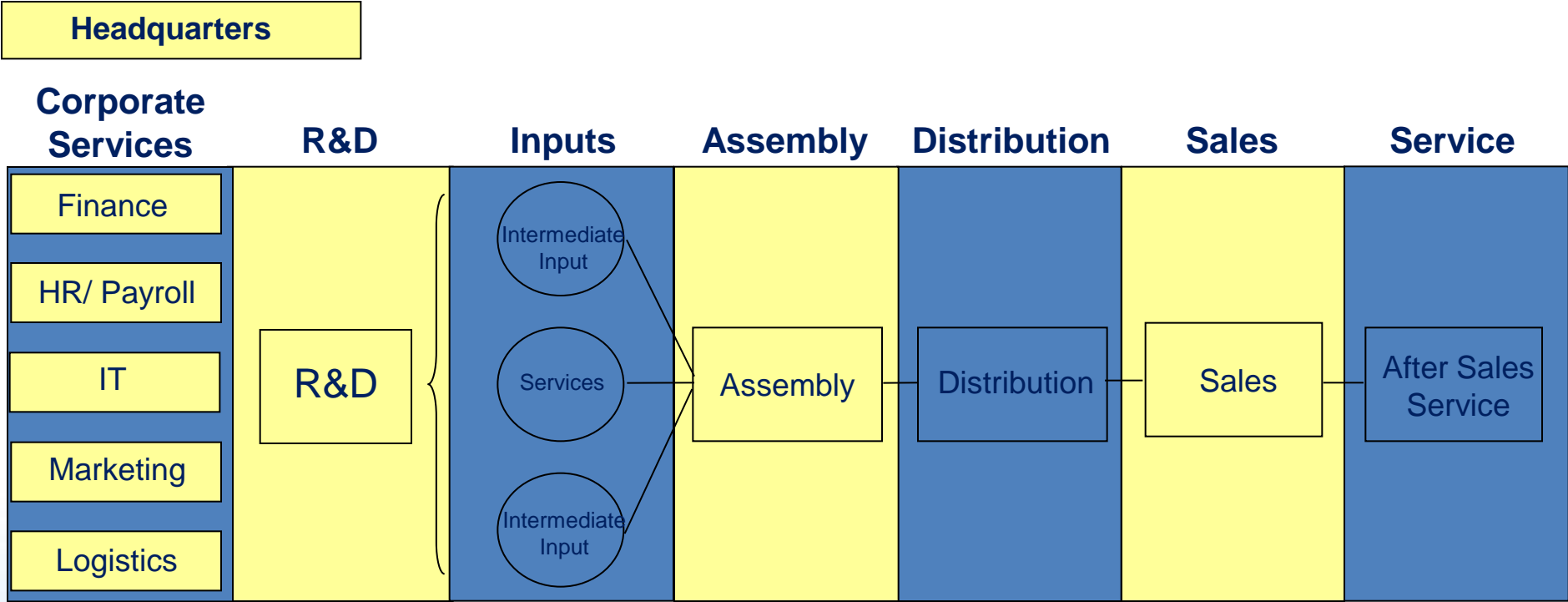
Global Value Chains

Global Production Chains

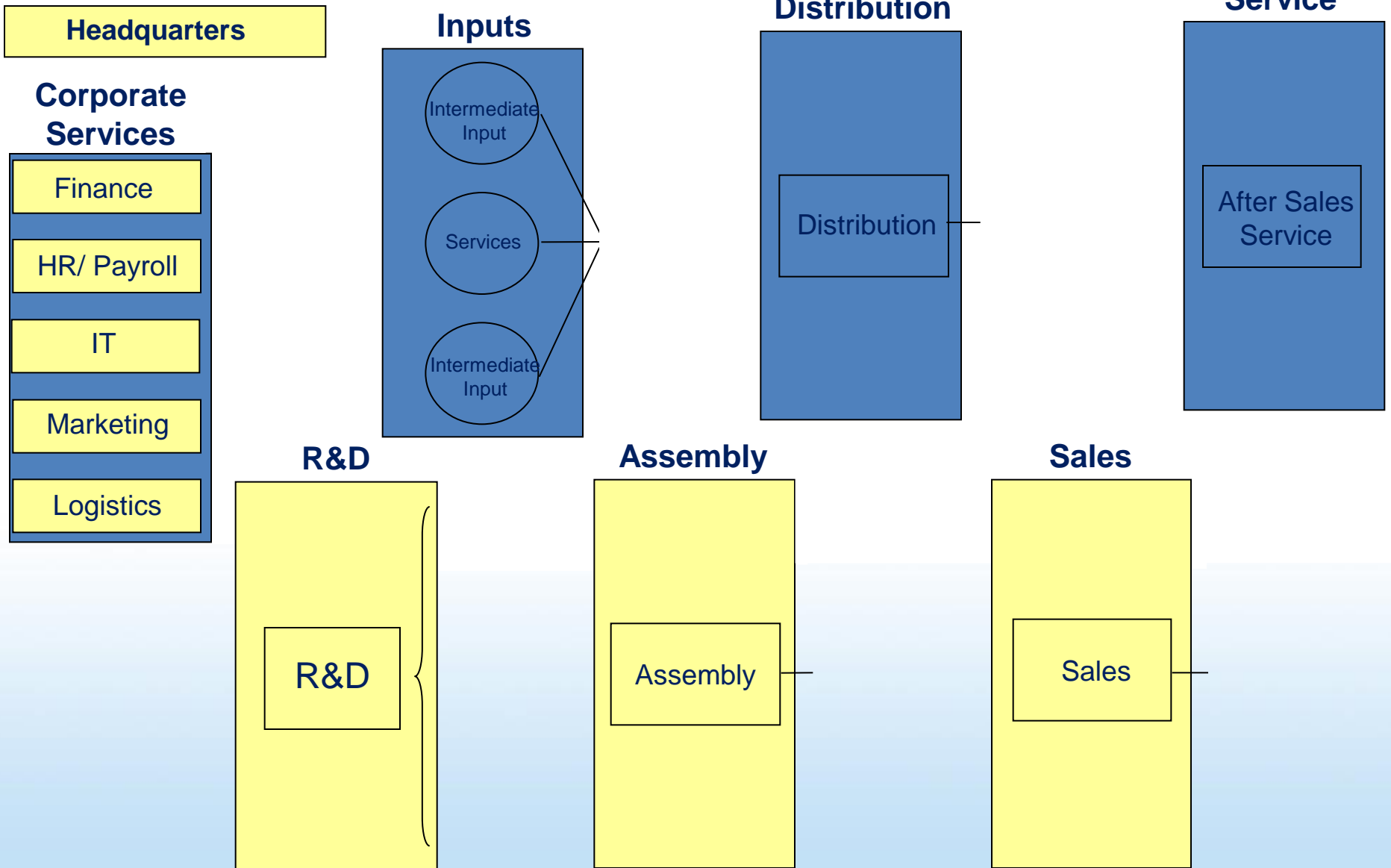
Second Unbundling

Integrative Trade

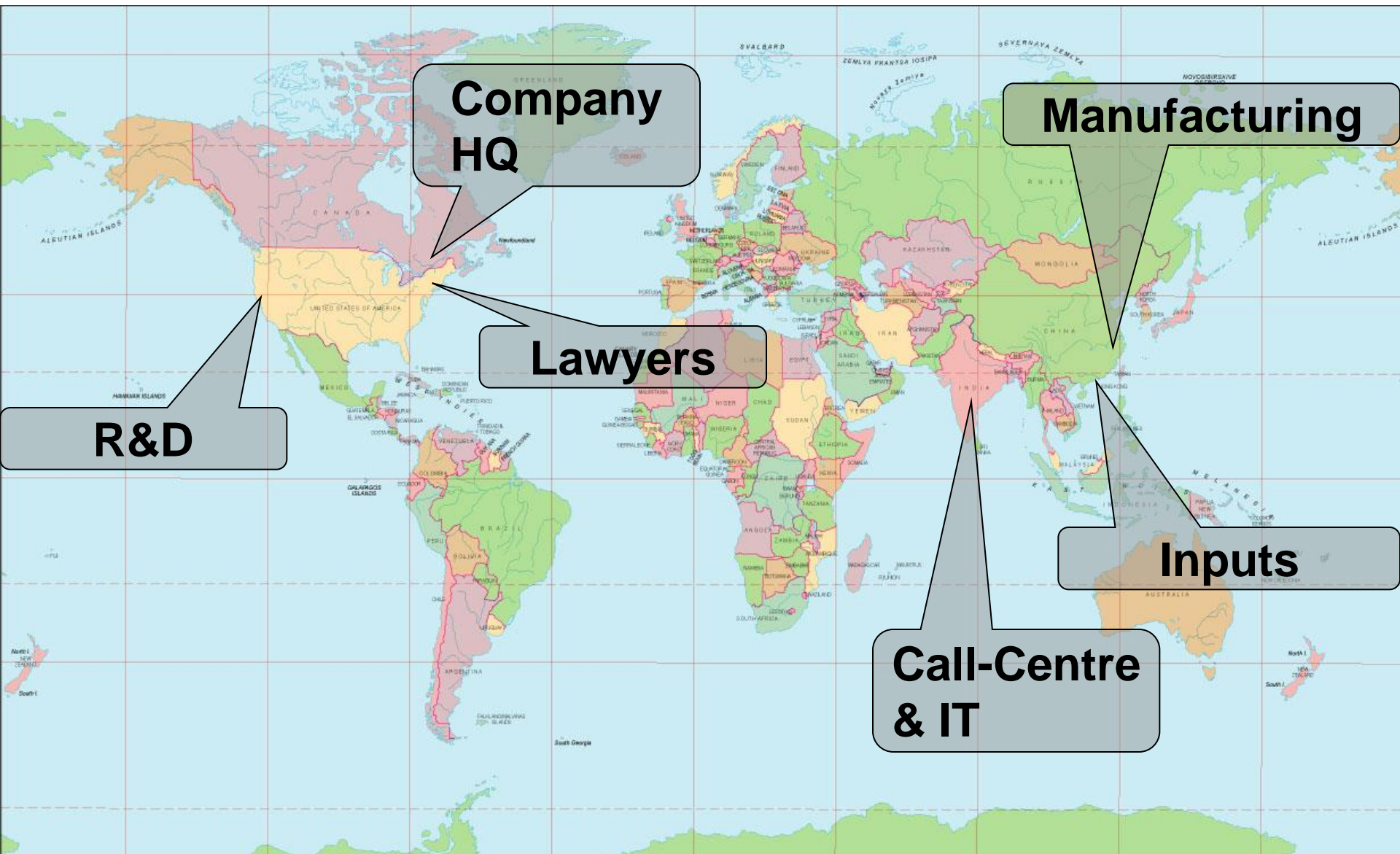
A simplified value chain...



...individual functions become separable...

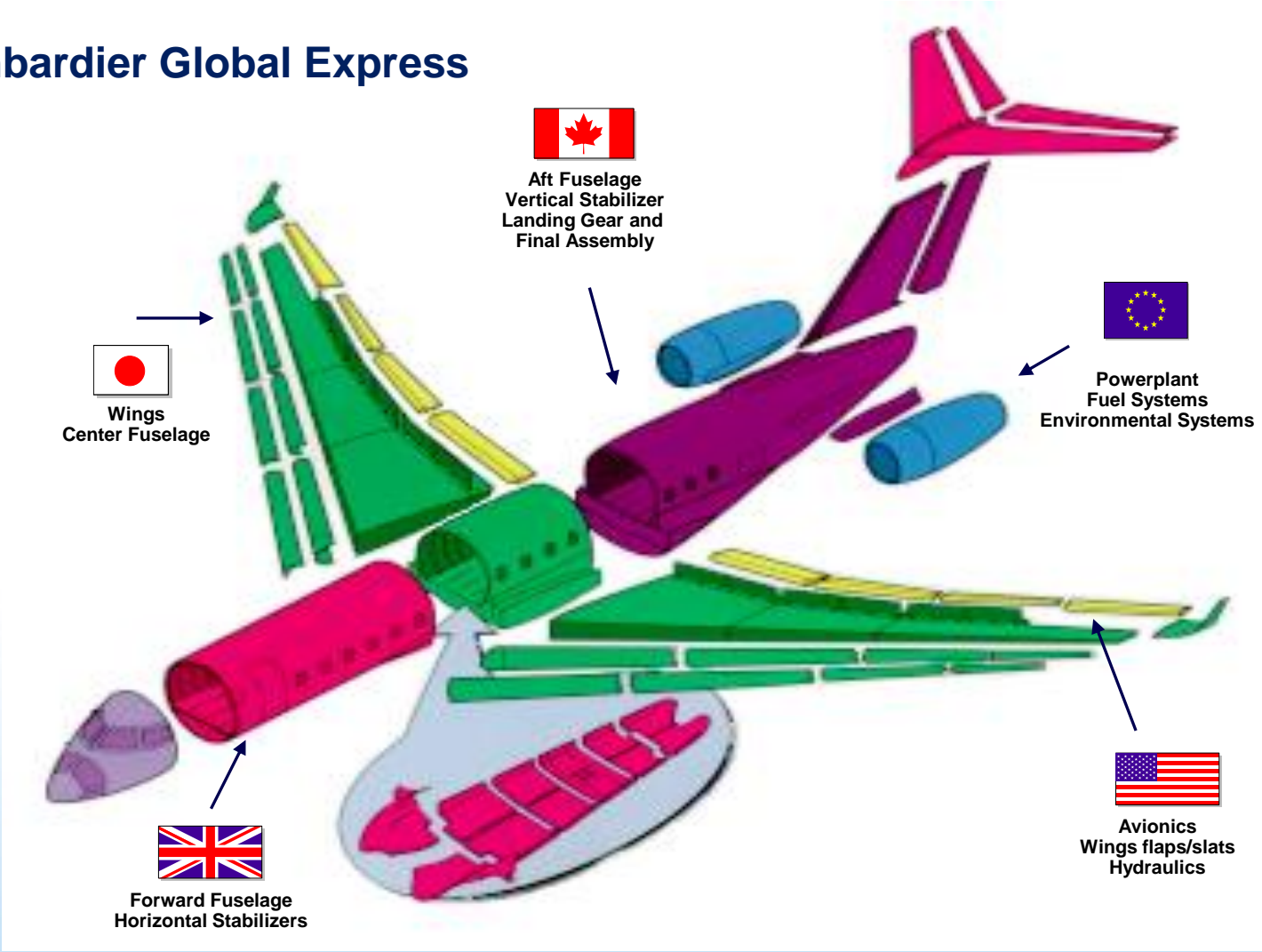


...which can then be located anywhere in the world



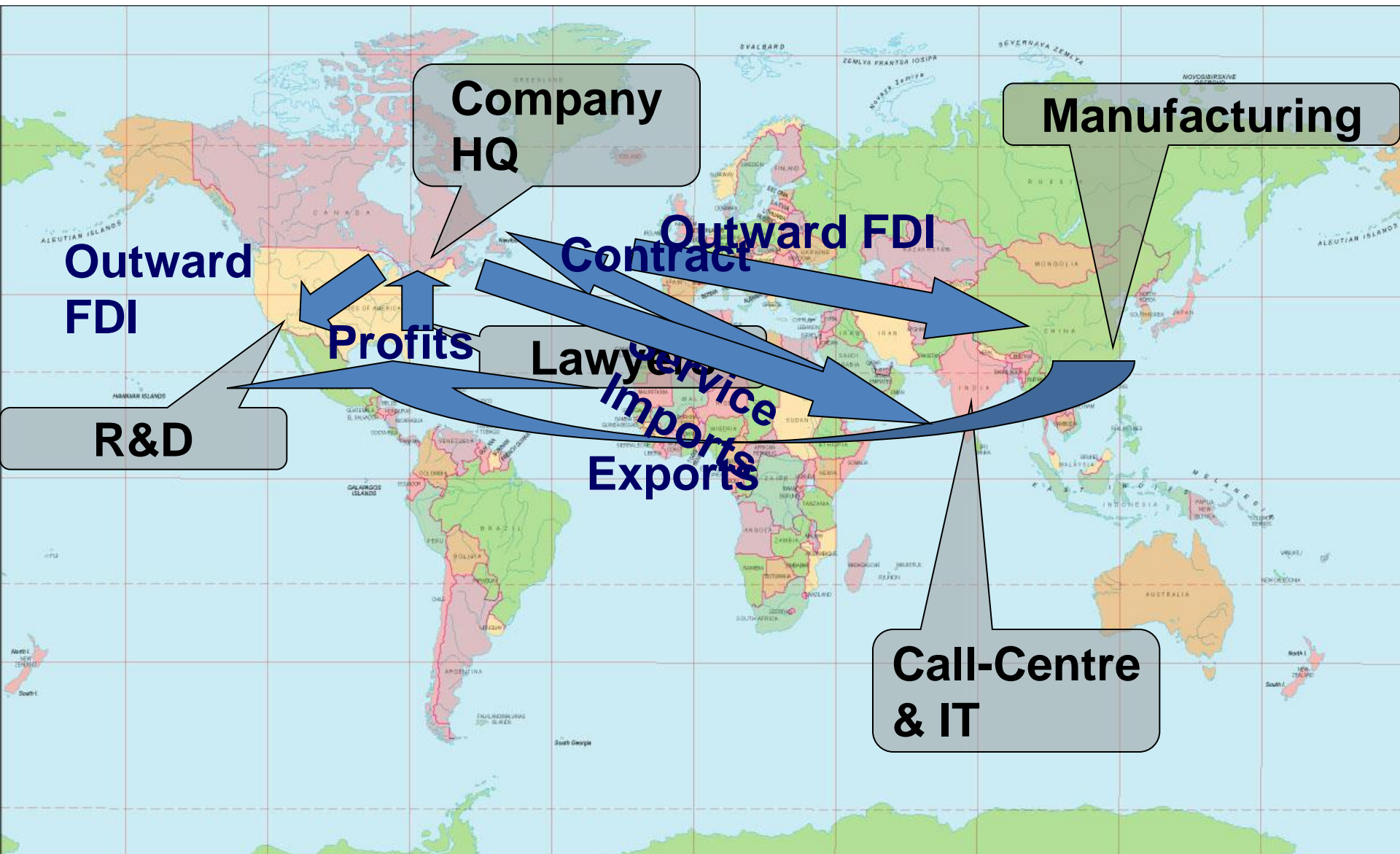
We have many examples of cross-border linkages

Bombardier Global Express



Source: ADMB, Industry Canada

Existing measures provide a limited perspective



Policy, Research and Data Requirements

Input-output tables are a natural fit to measuring GVCs...

- **Provides consistent measures of where value-added is created and linkages between industries.**
- **A more generalized and whole-of-economy perspective than case-studies.**
- **A significant amount of work has been done on developing the data.**

...and, have been useful for policy-makers

Generally:

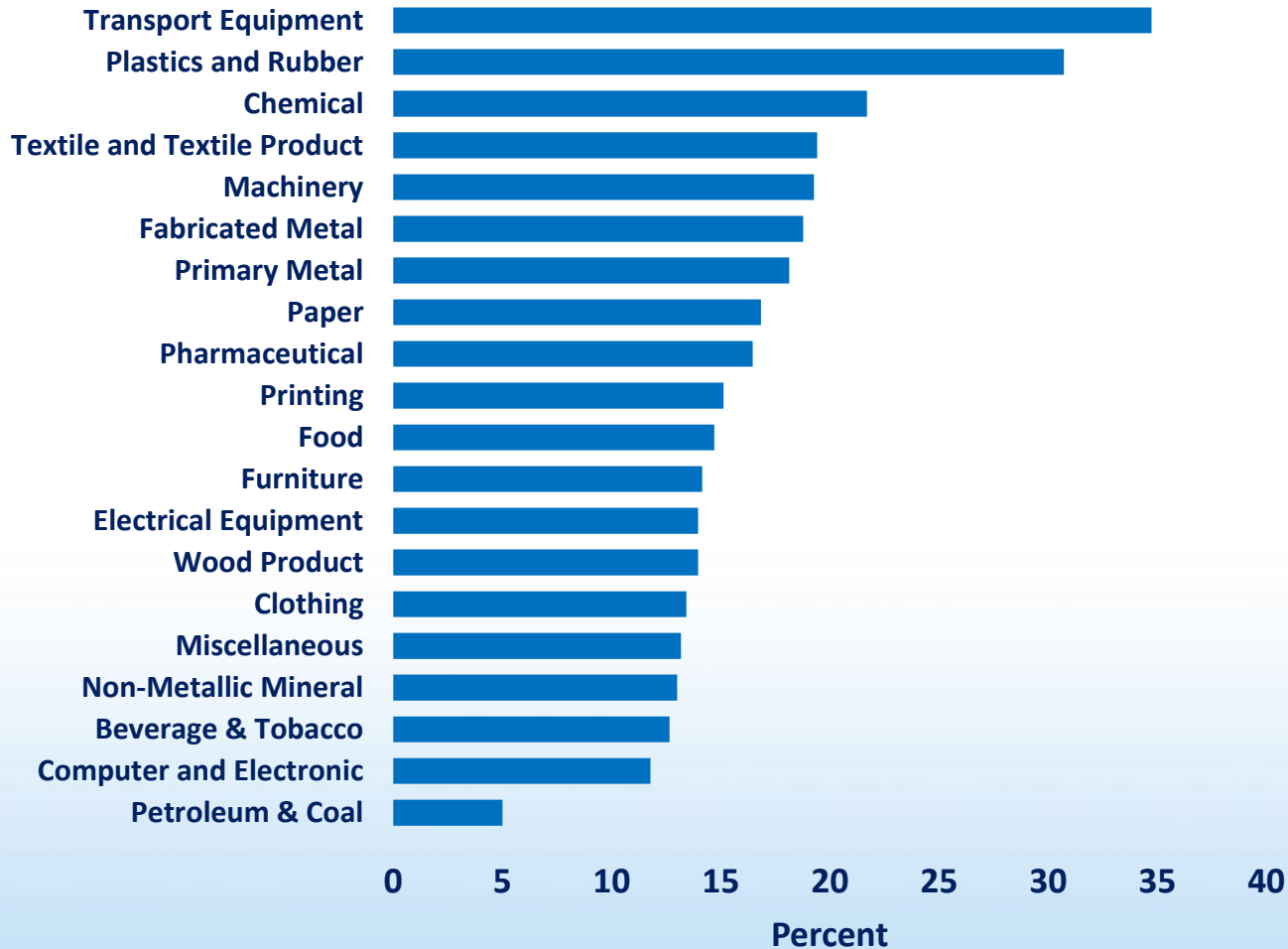
- **Shows connection between exports and imports.**
 - Multiplicative impact of even modest tariffs.
- **Recasts bilateral trade balances.**
- **Highlights the importance of service inputs to goods exports.**
- **Potentially provides better measures of comparative advantage, exchange rate pass-through, and real exchange rates.**
- **Transmission of shocks.**

For Canada:

- **The impacts of a ‘thickening border’ post 9/11.**
- **“Buy American” provisions following the global financial crisis.**
- **Labelling requirements, inspection fees, etc.**
- **Demonstrates the inter-connectedness of Canada-U.S. cross-border production.**

One-fifth of the value of Canadian manufacturing exports to the U.S. originates in the U.S.

U.S. Content of Canadian Manufactured Exports to the U.S.



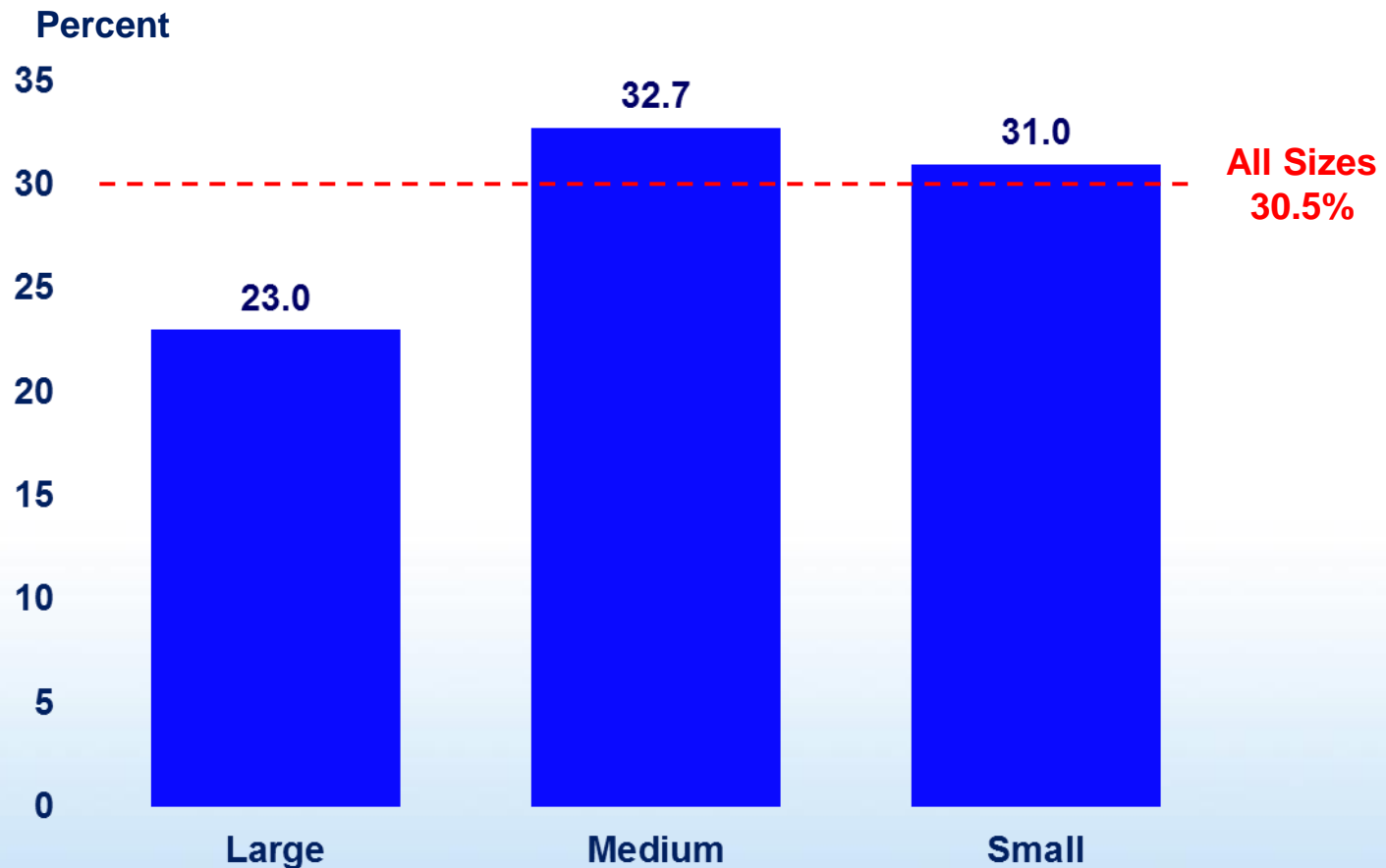
Data: Statistics Canada, 2011
Source: Office of the Chief Economist, DFATD

Trade Promotion

- **Traditional view of trade promotion is of a manufacturer exporting abroad.**
- **GVC view extends beyond manufacturing.**
- **As well as beyond exporting to “international commerce” which includes:**
 - Exporting
 - Importing
 - Investing abroad / sales by foreign affiliates
 - Licensing
- **GVC connectedness (connecting to supply chains) and lead firms.**
- **Indirect exporting and exporting through intermediaries.**

Use of intermediaries is quite pervasive, especially for SMEs...

Share of Canadian Manufactures which Sold a Good to Another Firm which then Exported it “as is”*



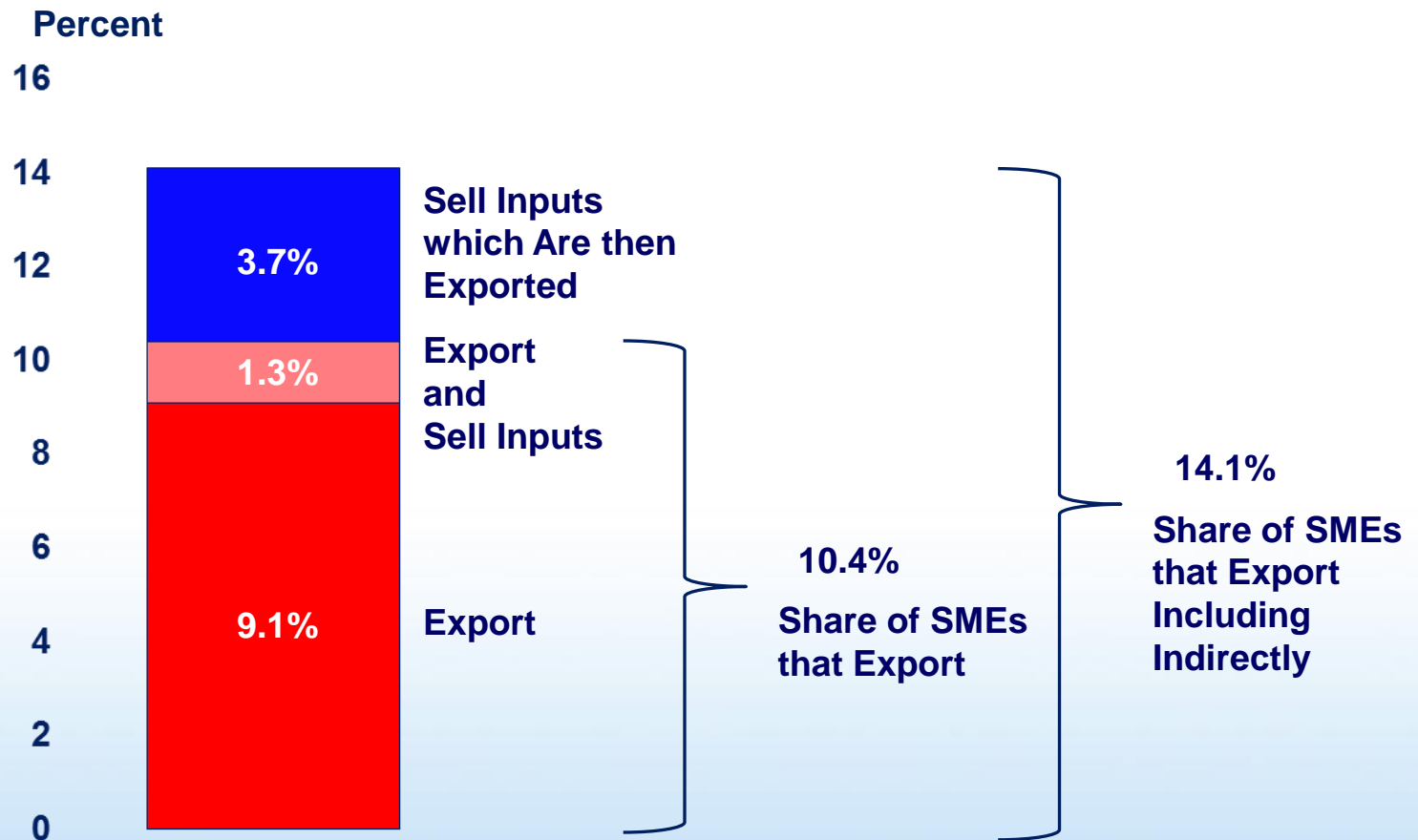
* Excludes firms that could not respond to the question.

Data: Survey of Innovation and Business Strategy, data for 2009

Source: Office of the Chief Economist, DFATD

...and, many SMEs export indirectly by selling inputs to an exporter

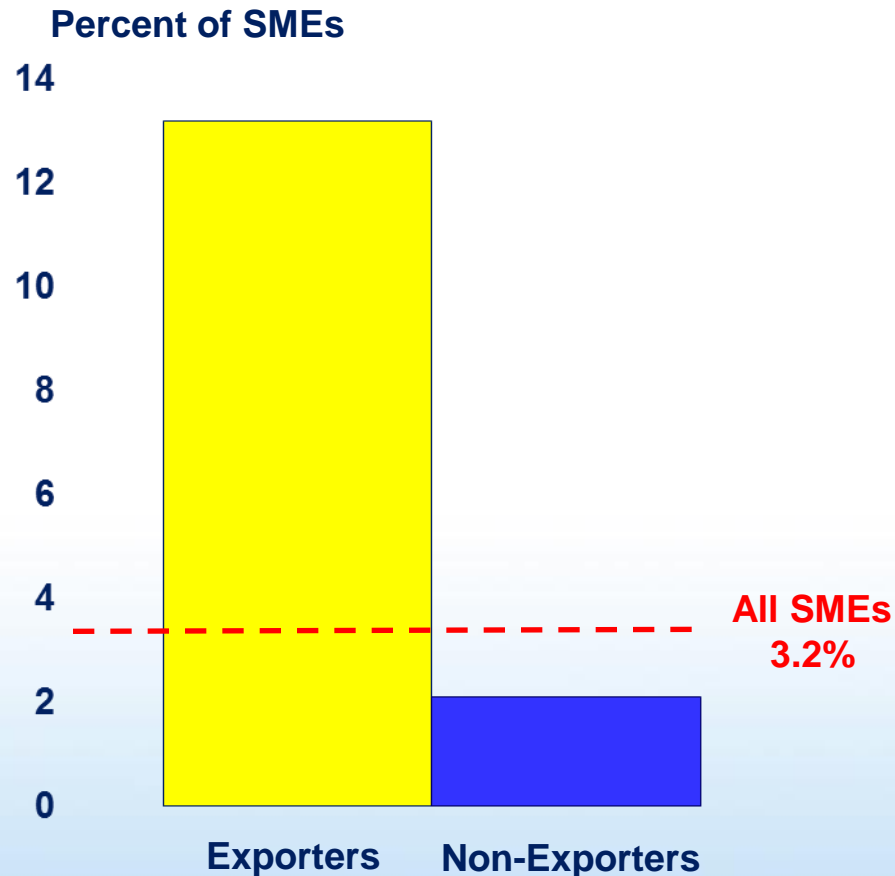
Direct and Indirect SME Exporters



Data: Survey of SME Financing and Growth, data for 2011.
Source: Office of the Chief Economist, DFATD

Outsourcing appears to be an important business strategy for exporters, including SMEs

Outsourcing by Canadian SMEs



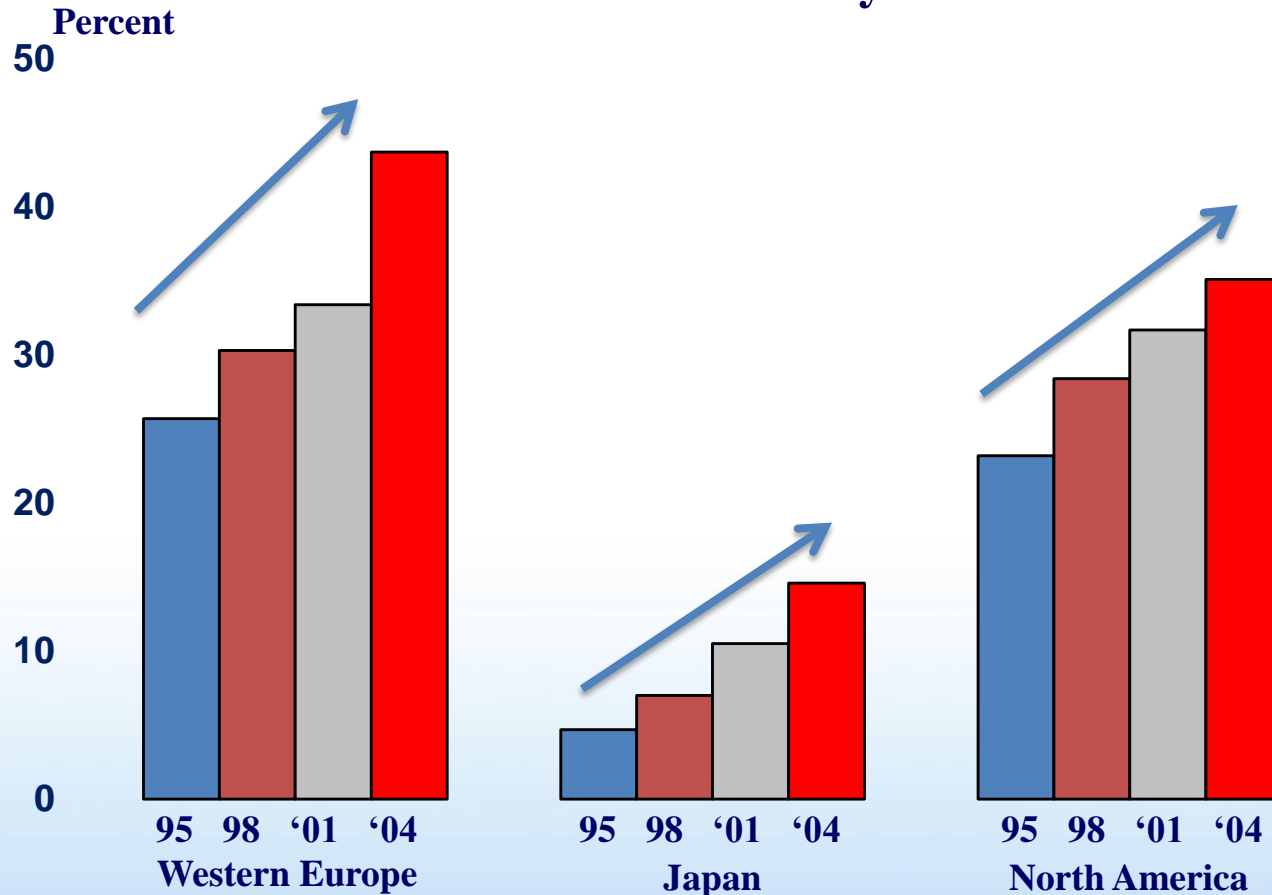
Data: Survey on Financing and Growth of SMEs, data for 2011.
Source: Office of the Chief Economist, DFAIT

Investment attraction

- **Many high-valued activities have become unstuck....more high valued activities to attract, but also to retain.**
- **The motivations for investing have changed:**
 - Less important is tariff jumping and market access investment (i.e. shift from horizontal to vertical FDI).
 - Increasingly investment decisions are made to gain access to a value chain (upstream or downstream linkages) or to access specific resources (such as skilled workforce).
- **The nature of the investments has changed:**
 - Investments can be in smaller increments as only a specific portion of the chain is being located.
 - This implies a more narrow set of factors become important for the decision to locate...but each matters more.
- **Linkages: Downstream suppliers and Upstream customers/markets**

R&D is globalizing extremely quickly

Share of R&D Budget Spent Outside of the Home Country*



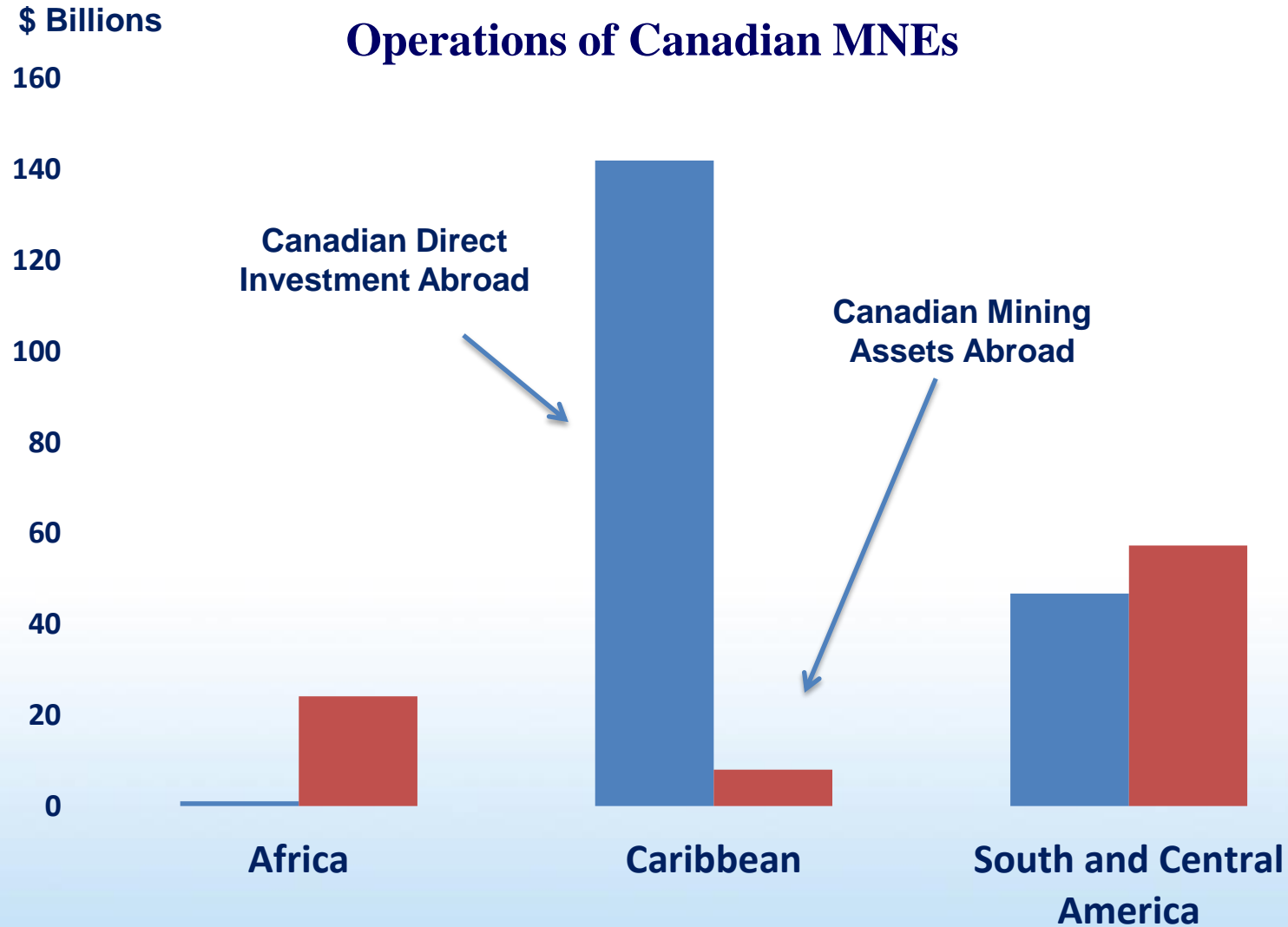
* 209 MNEs, estimate for 2004

Source: Reger (2002) as reported in Hall (2011)

International Development

- **More activities have become tradable.**
- **Less need to have capabilities in all stages of production.**
- **Potentially more dependant on regional capabilities.**
- **Greater role for multinational enterprises.**
- **Connecting suppliers to GVCs.**

Operational requirements can be very different than what data is measuring



Trade Policy

- **Tariff eliminations on goods trade now a relatively modest component of many “trade” agreements.**
- **Non-tariff measures have grown in importance.**
- **As have non-traditional forms of commerce such as services and FDI.**
- **Many issues are now “behind the border” or domestic, such as procurement and regulatory issues.**
- **Some issues have undertaken renewed importance such as trade facilitation and rules of origin.**
- **Change in support for trade:**
 - Services vs manufacturing
 - Firms in same industry

Recent trade initiatives

Canada-EU Comprehensive Economic and Trade Agreement (CETA)

- **'Traditional trade issues' reflect modern reality:**

“CETA’s rules of origin reflect today’s global value chains and the reality that goods are made from parts or ingredients (“inputs”) sourced from many countries”

- **But, also new dimension to such agreements:**

“Beyond imports and exports, the word “trade” itself is now shorthand for a vast number of international business connections.”

Canada soon to have FTAs with three main regional trading blocs:

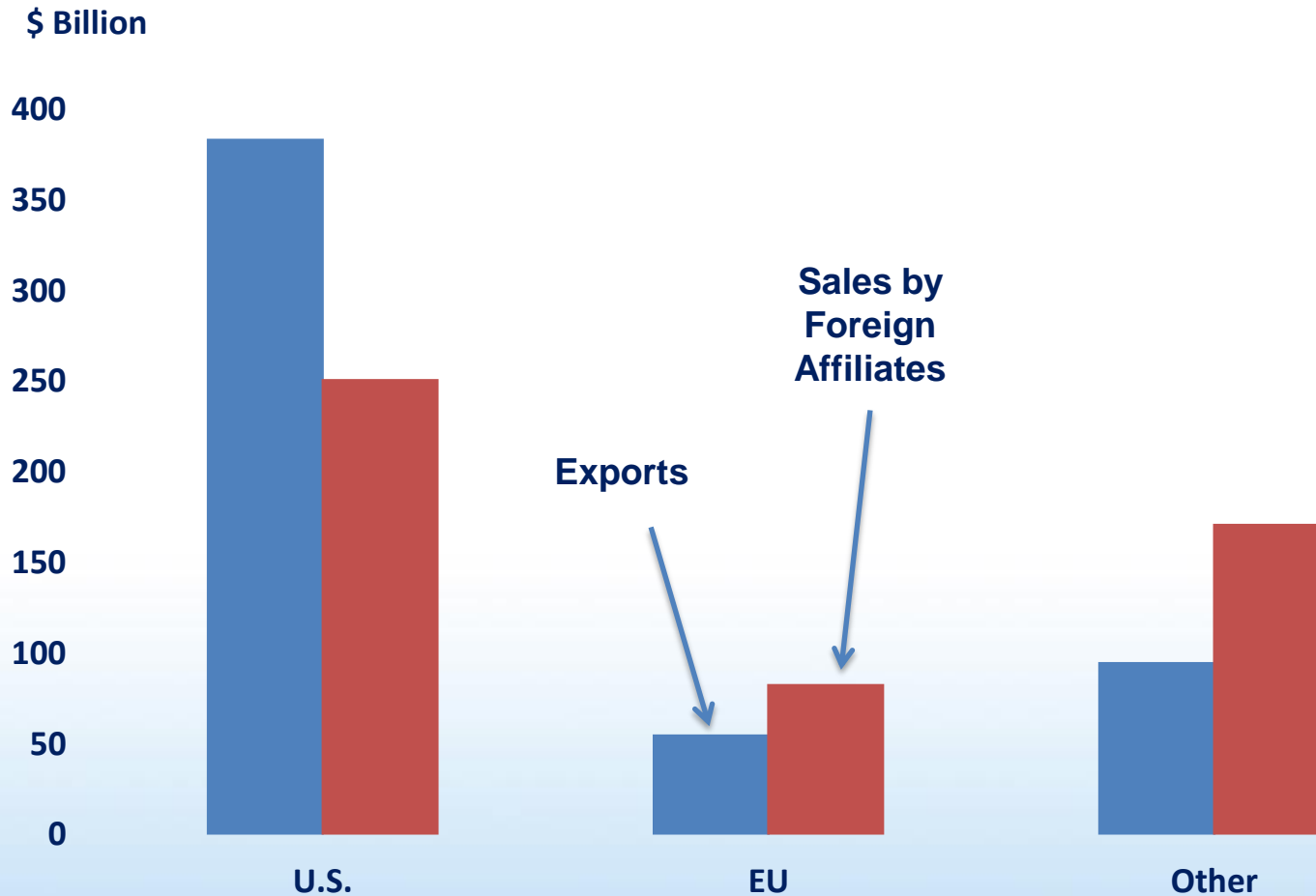
- **US/Mexico (NAFTA), EU (CETA), Asia (TPP)**

Canada’s unilateral tariff elimination

- **In budgets 2009 and 2010, Canada unilaterally eliminated tariffs on all intermediate manufactured products and machinery and equipment.**

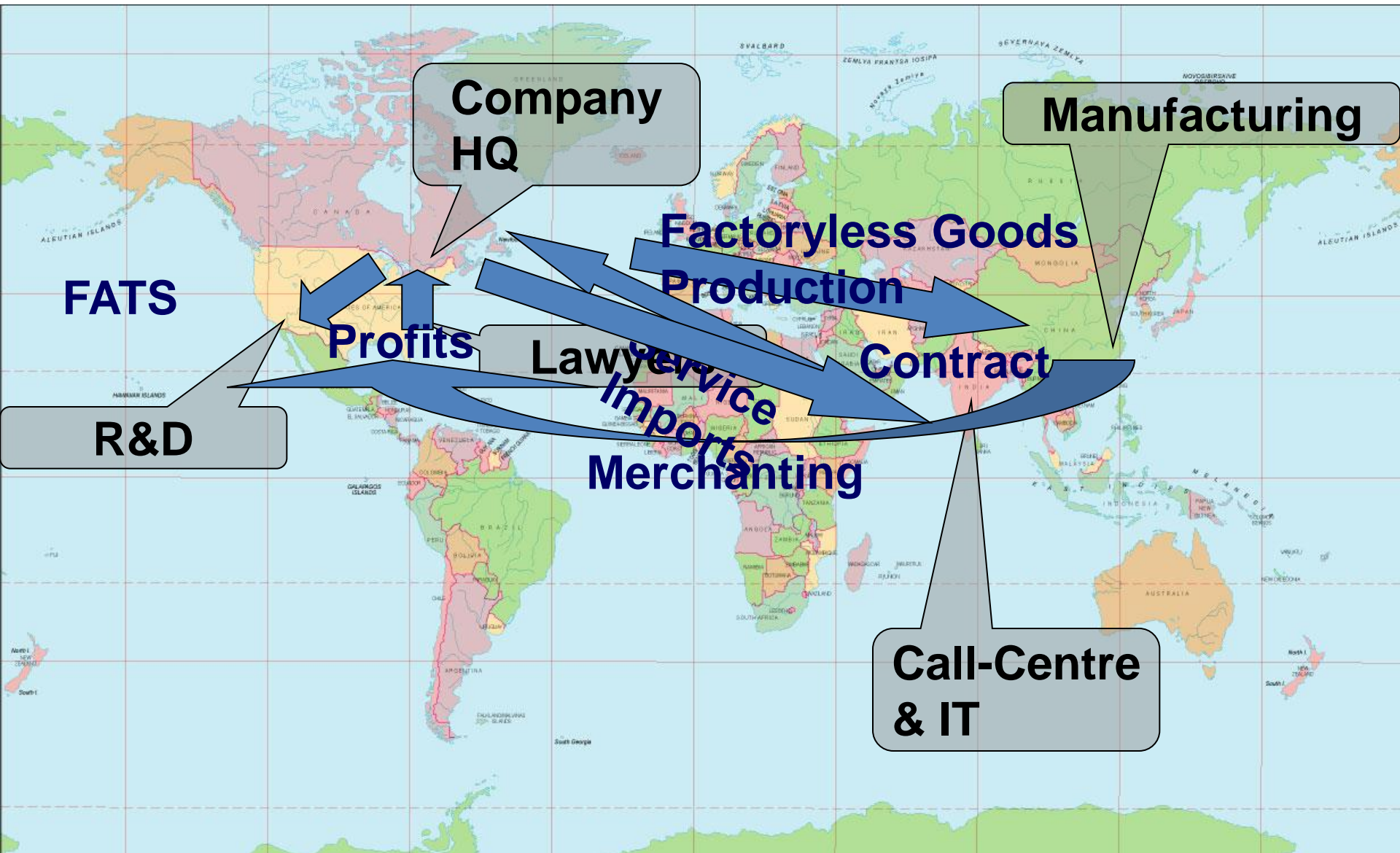
Sales by foreign affiliates are more important than exports for most markets

Canadian Exports and Foreign Affiliate Sales



Data: Statistics Canada , 2012
Source: Office of the Chief Economist, DFATD

Better statistics can provide a more complete view

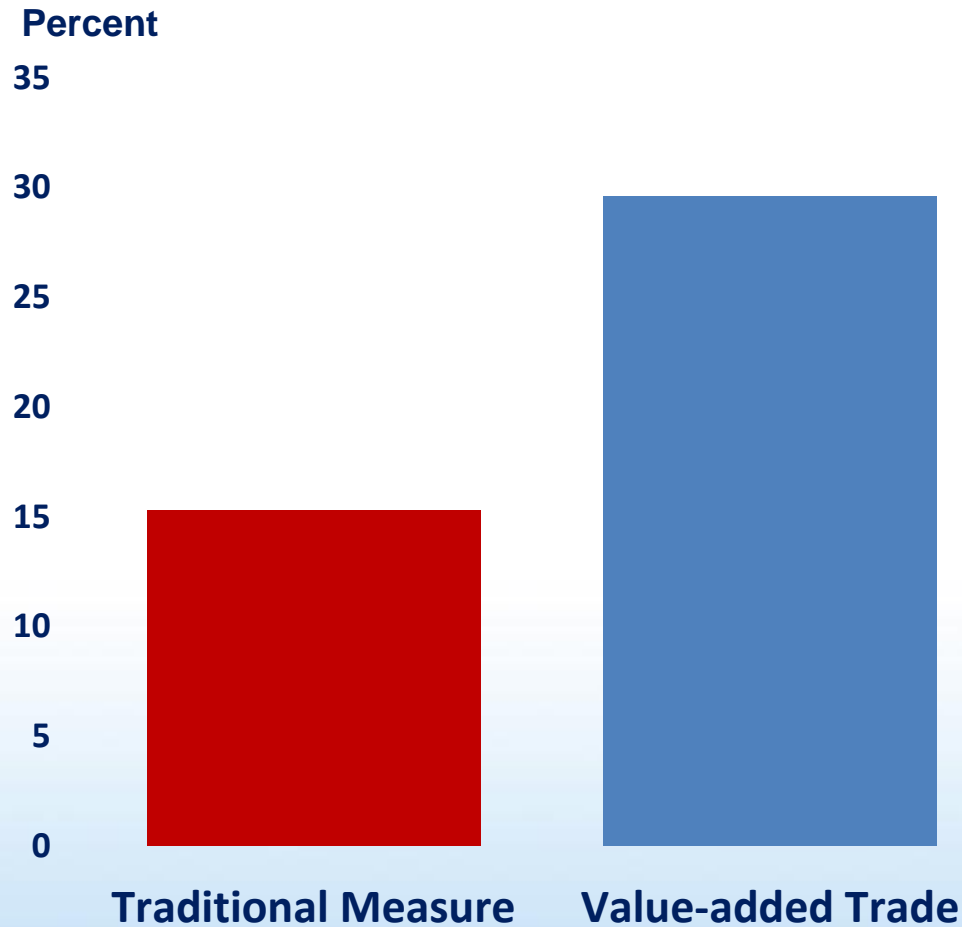


“Domestic” Economic Environment

- **Blurring of the line between domestic and international.**
- **Firms must compete not just in foreign markets but in domestic markets as well.**
- **“Domestic” economic environment is the most important factor for international competitiveness and to attract foreign investment.**
- **Most “domestic value-added” in exports is from supporting industries.**

Services contribute a significant share of the value of goods exports

Services Share of Exports



Data: Statistics Canada , 2013
Source: Office of the Chief Economist, DFATD

Concluding Remarks

- **Trade promotion and investment attraction increasingly need to take a GVC perspective.**
- **Modern 'trade agenda' is moving beyond traditional notions of trade and will require new data.**
- **Policymakers in other spheres may be even more important clients:**
 - More difficult to identify and have less experience with international data, but may be more important.
 - Modern 'domestic agenda' is increasingly internationalizing.
- **Different types of data and approaches will be required:**
 - Build on existing data and concepts.
 - Better exploit new sources such as firm-level or administrative data.
 - Specialized surveys.