



GVCs – Policy Questions and Informed Decision Making

**Friends of the Chair
Group on International Trade and Economic Globalization
November 7, 2013**

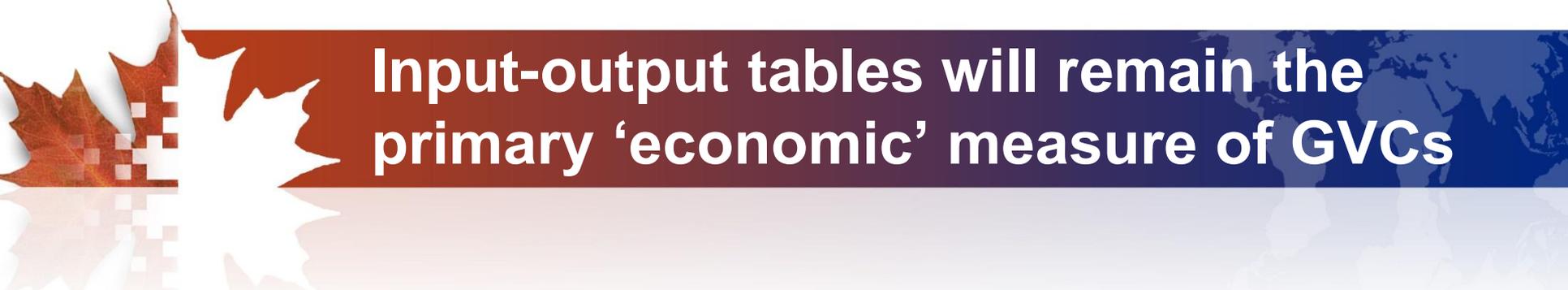
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Overview

- **Objective: To provide a user's/policy maker's perspective of data gaps.**

- **Organization:**
 - Use of I/O tables
 - Trade negotiations; CETA example from Canada
 - Looking beyond the negotiating agenda
 - Use of expanded statistics, example of Canadian SMEs
 - Concluding Remarks



Input-output tables will remain the primary 'economic' measure of GVCs

- They are well suited to the task.
- Provide 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 already been done on developing the data.



And, I-O / value-added trade approach has been useful for policy-makers

- **Shows connection between exports and imports which helps to counter protectionist tendencies.**
 - Multiplicative impact of even modest tariffs.
- **Recasts bilateral trade balances.**
- **Demonstrates that firms/industries that don't export directly are still important to exporting.**
 - Particularly, raises the profile of services in exporting.
- **Link between trade and employment and the environment.**
- **Potentially provides better measures of comparative advantage, exchange rate pass-through and real exchange rates.**
- **Transmission of shocks.**

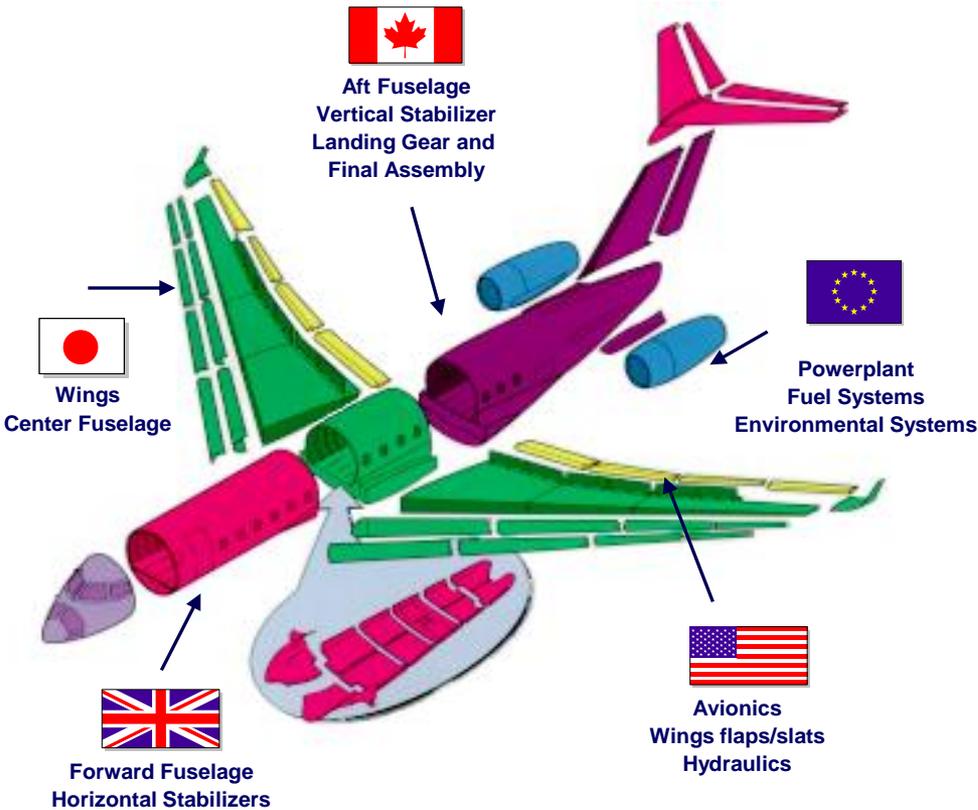


Some specific examples of use of I-O approach

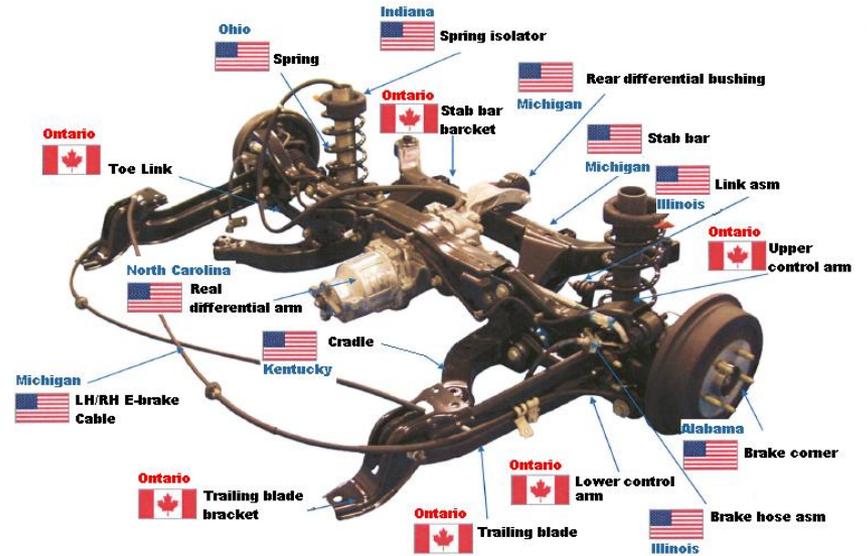
- **The impacts of a ‘thickening border’ post 9/11.**
- **“Buy American” provisions following the global financial crisis.**
- **Labelling requirements...**
 - ...inspection fees...**
 - ...etc.**
- **How to show the inter-connectedness of Canada-U.S. cross-border production?**

We have many case-studies or examples of cross-border linkages

Bombardier Global Express



Rear Suspension Assembly



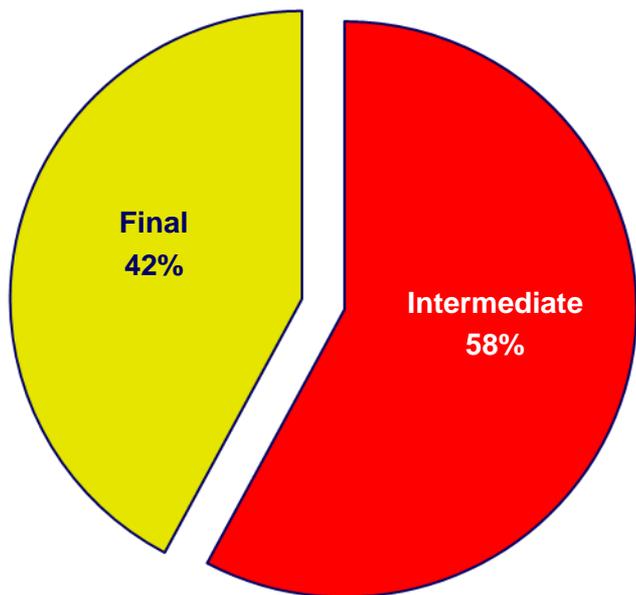
Source: ADMB, Industry Canada

Source: Martinrea International Inc

But, more systematic measures were required

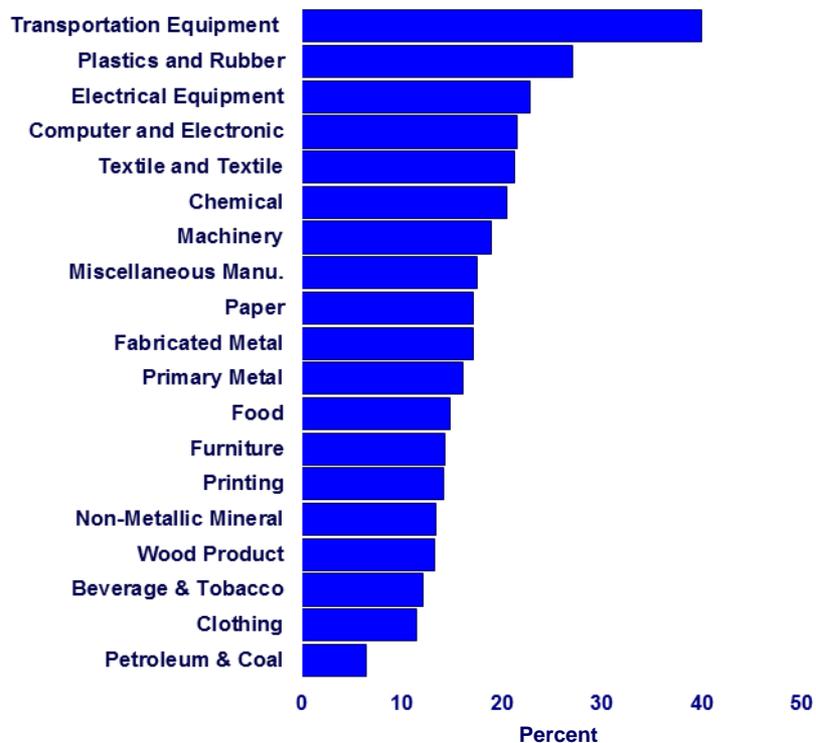
Most American manufacturing imports from Canada are intermediate inputs

Distribution of American Manufacturing Imports from Canada



Nearly one-fifth of the value of Canadian exports to the U.S. is produced in the U.S.

U.S. Content of Canadian Manufactured Exports



Note: Manufactured products excludes refined petroleum.

Data: US BEA and USITC, 2006

Source: Office of the Chief Economist, DFATD

Data: Statistics Canada, 2004

Source: Office of the Chief Economist, DFATD



Key gaps identified in I-O approach

- **Linking national I-O tables, a resulting lack of industry detail...but lots of work on-going on this issue.**
- **Proportionality:**
 - Domestic vs imported inputs
 - Country source of inputs
 - Within industry heterogeneity
 - Differences in import prices
- **Takes time to produce the data.**
- **Not available for all countries.**
- **Does not distinguish trade in intermediaries.**
- **Ownership not (currently) captured.**
- **R&D not well attributed to industries.**

Possible 'solutions' to proportionality

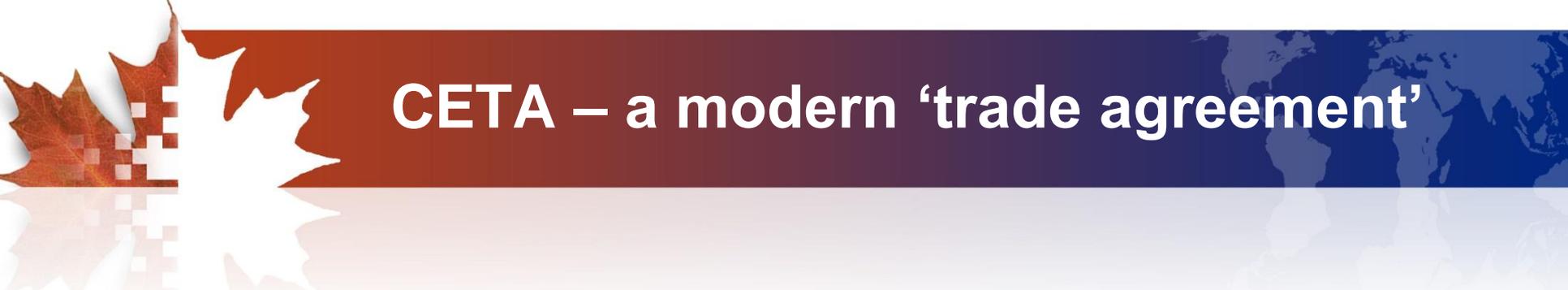
- The 'proportionality assumption' is used in nearly all work using I/O tables to describe GVCs but is widely identified as a potential issue.
- Winkler and Milberg (2009) and Feenstra and Jensen (2012) provide specific measures of the issue.

Proportion of imported intermediaries, Canadian Manufacturing, 2004

| | I-O with Proportionality | Survey of Innovation | Micro Linked to I-O | Micro Linked to ASM | Hybrid 1 (dist excess imports) | Hybrid 2 (exclude excess imports) |
|---------------|--------------------------|----------------------|---------------------|---------------------|--------------------------------|-----------------------------------|
| Manufacturing | 41% | 29% | 25% | 25% | 41% | 36% |
| Durables | 50% | 27% | 50% | 32% | 52% | 46% |
| Non-Durables | 31% | 32% | 15% | 17% | 27% | 23% |

Source: Baldwin, Gu, Sydor, Yan (forthcoming)

- Hybrid methods that make use of micro-data, but also adjust for roll of **intermediaries** may provide a credible alternative, especially for manufacturing durables.

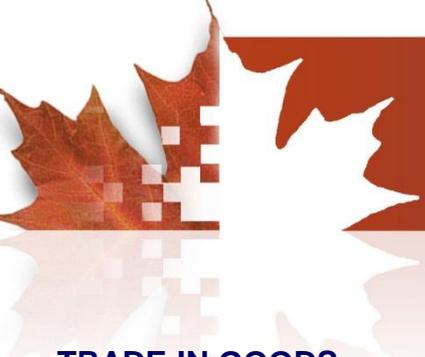


CETA – a modern ‘trade agreement’

- **Canada-EU Comprehensive Economic and Trade Agreement (CETA)**
 - Not just language, modern agreements extend well beyond the traditional ‘trade’ agenda (ie. goods and tariffs).
- **‘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.”



Coverage of CETA



TRADE IN GOODS

- Market access for goods
- Rules of origin
- Customs and trade facilitation
- Technical barriers to trade
- Regulatory cooperation
- Sanitary and phytosanitary measures
- Sector-specific provisions
- Subsidies
- Trade remedies

INVESTMENT, SERVICES AND RELATED MATTERS

- Investment
- Cross-border trade in services
- Domestic regulation
- Mutual recognition agreements
- Telecommunications
- Financial services
- Temporary entry
- Competition
- Monopolies and state enterprises
- Electronic commerce

GOVERNMENT PROCUREMENT

INTELLECTUAL PROPERTY

DISPUTE SETTLEMENT

SUSTAINABLE DEVELOPMENT, LABOUR AND ENVIRONMENT

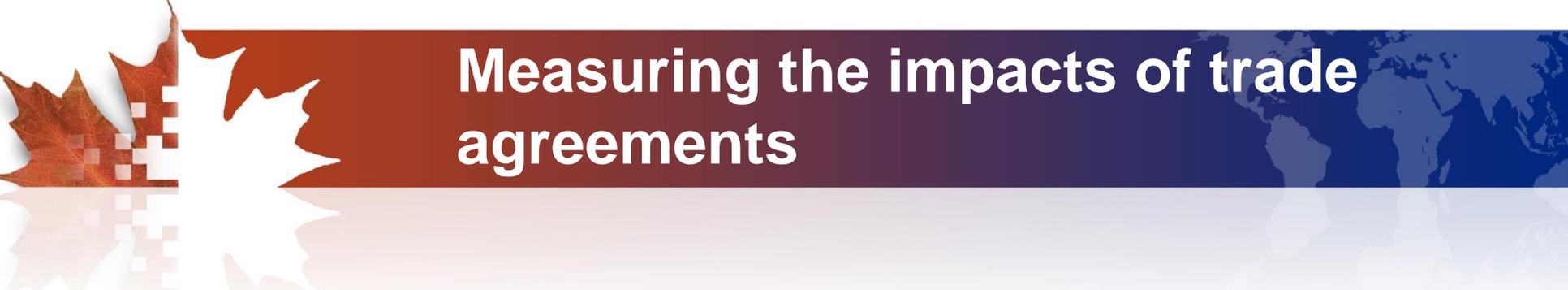
- Trade and sustainable development
- Labour
- Environment

INSTITUTIONAL AND HORIZONTAL PROVISIONS



Trade negotiators most common requests and issues

- **More...more...more, now...now...now**
- **Merchandise trade**
 - Transshipments
 - Related party Trade
 - Tariffs/duties Collected and Import Programs
- **Services**
 - More Countries
 - More Sectors
 - Mode of Delivery
 - Comparable Definitions Across Countries
 - Link to Domestic Economy (eg. employment)
- **“Foreign Direct Investment”**
 - “Actual value of investment” in partner country
 - More countries
 - More Industries



Measuring the impacts of trade agreements

■ **CETA impact:**

“20-percent boost in bilateral trade and a \$12-billion annual increase to Canada’s economy. Put another way, that’s the economic equivalent of adding \$1,000 to the average Canadian family’s income or almost 80,000 new jobs to the Canadian economy.”

■ **Measuring economic impacts of agreements**

- See section on I-O...CGE modeling based on I-O tables
- Measuring barriers to trade (especially, NTMs for goods and anything for services).
- Linking trade to jobs and environment.
- Especially difficult for trade in services and investment.

■ **General support for trade and exporter performance**

- Link between international activity and economic wellbeing and growth

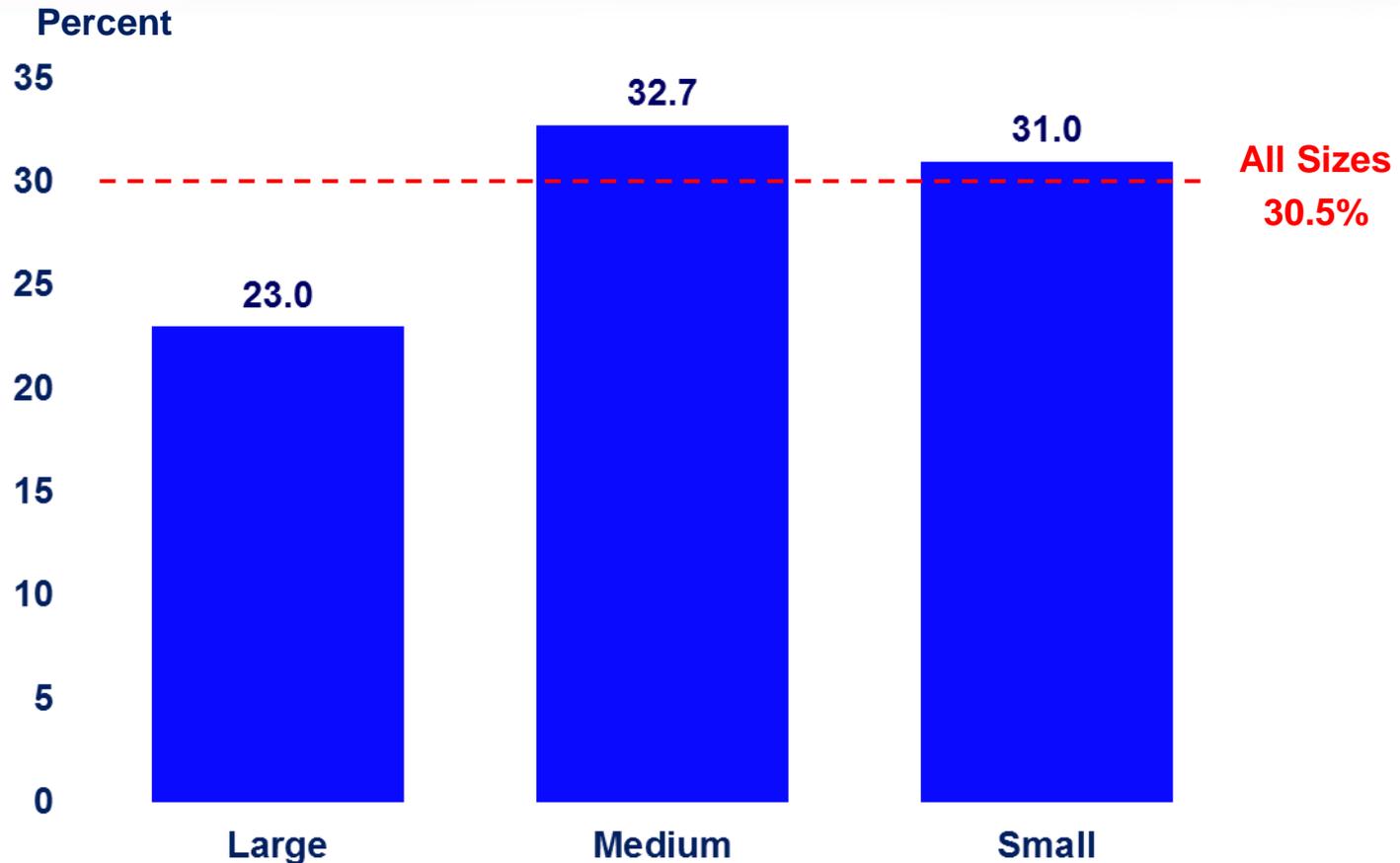


Beyond trade negotiations

- **The need for better measures of internationalization may be strongest outside of trade negotiations (although line blurring between domestic and international):**
 - **Trade promotion agencies:** building case for support, type of support given, to support offshoring/outsourcing, inward FDI, outward FDI, franchising, licensing, joint R&D.
 - **Industrial development departments:** SMEs, infrastructure, industrial policy, domestic regulation.
 - **Development agencies:** Aid for trade, private-sector led growth, GVCs.
 - **Trade Facilitation:** For example APEC work on trade facilitation, customs procedure vs infrastructure.

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”*



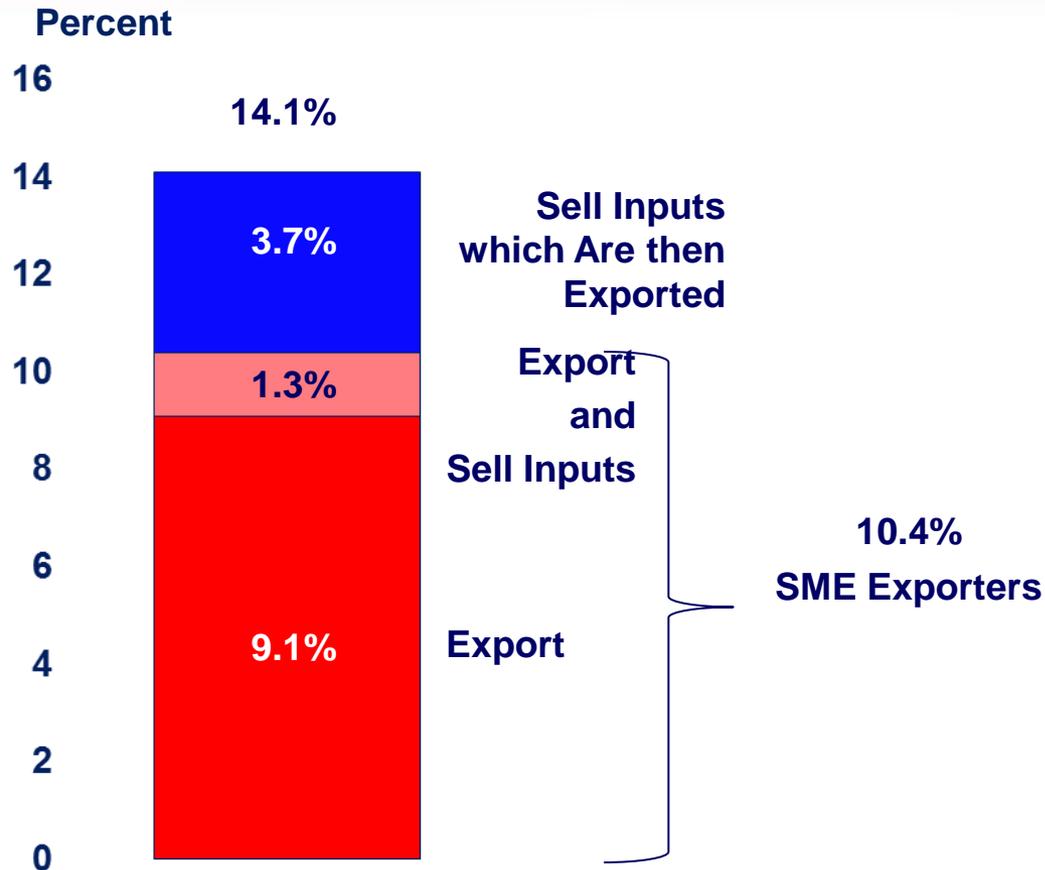
* Excludes firms that could not respond to the question.

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

Source: Office of the Chief Economist, DFAIT

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

Direct and Indirect SME Exporters

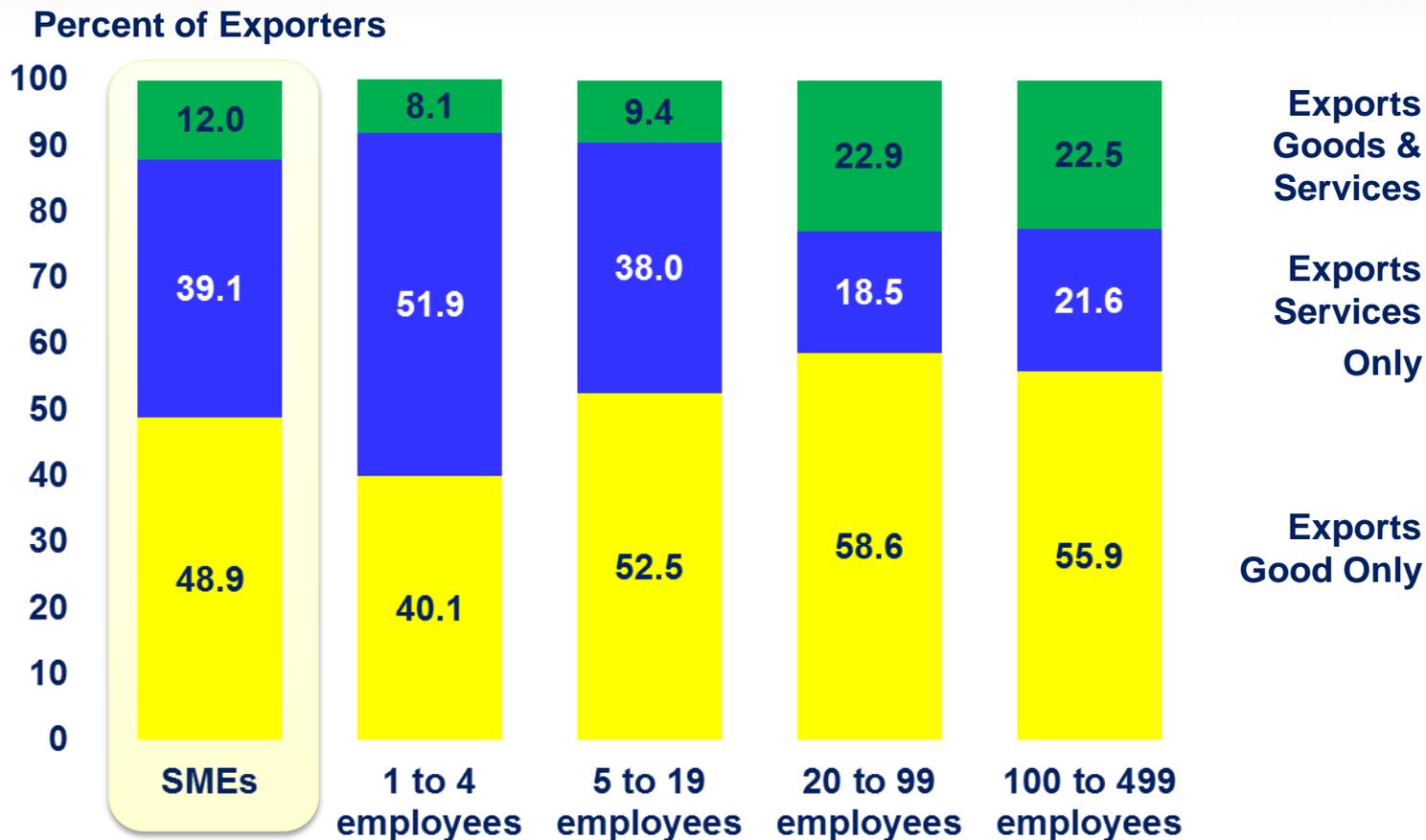


Data: Survey on Financing and Growth of SMEs, data for 2011.

Source: Office of the Chief Economist, DFAIT

Service exports are more important for smaller firms

Canadian SME Exports by Type

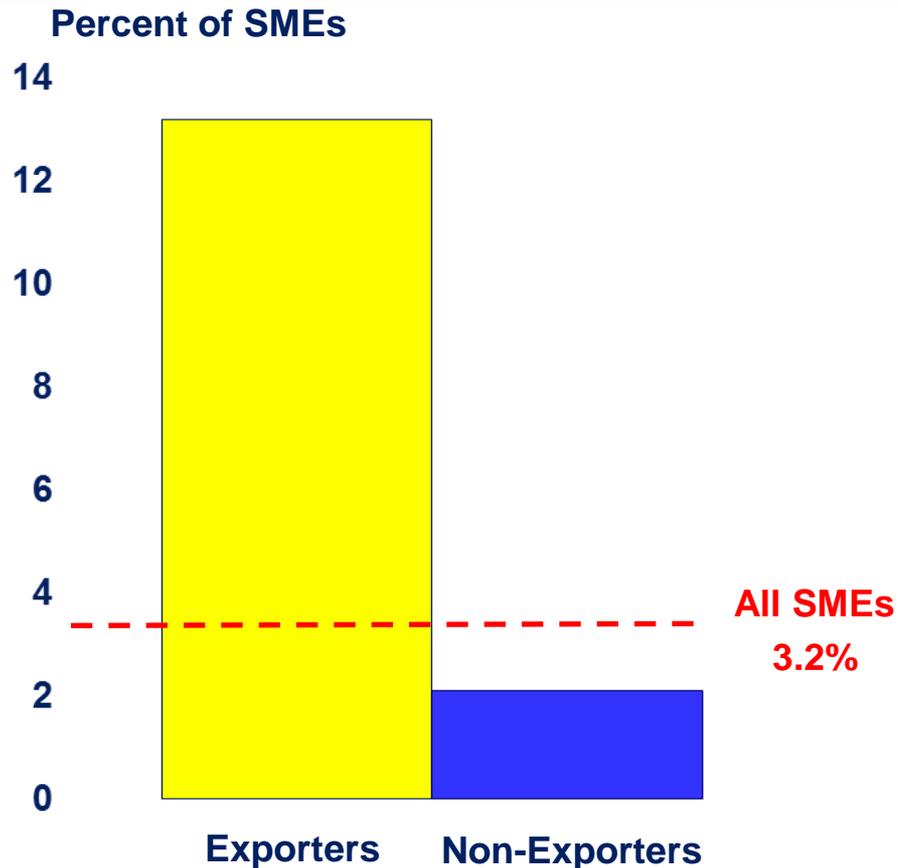


Data: Survey on Financing and Growth of SMEs, data for 2011.

Source: Office of the Chief Economist, DFAIT

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



Concluding Remarks

- **The data needs have been well captured.**
- **Focus on maximizing the use of existing data due to cost and response burden is well placed.**
 - Small additions or changes to existing tools can also be extremely fruitful.
- **Modern ‘trade agenda’ is increasingly moving beyond traditional definitions of trade and will require new data.**
 - This is easier to track as there are a limited number of big negotiations and there is an international structure in place.
 - Modern ‘trade agenda’ is widening and moving behind the border.
- **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.



Merchandise Trade Issues

- **Linking of trade and business statistics**
- **Better utilization of customs procedure codes (processing trade)**
- **Separate recording of special transactions**
- **Recording of mode of transport**
- **Recording of second partner for imports and exports**
- **Compilation of imports on FOB basis, in addition to CIF.**
- **Tariffs/duties collected and import programs**
- **Related party trade**



Services Trade Issues

- Further breakdown of services and partner detail
 - i.e. more countries, more sectors
- Inward and outward FATS !!!!
- Modes of supply
- Relation between purchaser and supplier (contract, ownership)
 - I.e. offshoring/outsourcing
- Comparable definitions across countries
- Link to domestic economic indicators including employment



GVC specific

- Goods for processing (???)
- Value-added trade
- Trade in tasks/import content of exports
- **Trade in Business Activities**
- **Changing Activities within the Firm**