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Measuring Global Production

Results of questionnaire content testing with respondents

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Statistics Canada
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Background

- Primary goal: Develop and produce statistics to better capture the global activities of Canadian businesses and to meet new international accounting standards
- Measure key concepts related to global production
 1. Identify goods crossing the Canadian border without ownership change.
 - Foreign goods processed in Canada
 - Canadian goods processed abroad
 2. Identify Canadian goods that are bought/made, sold, and stored abroad without physically entering Canada;
 3. Identify the companies that are engaged in 'global production activities'.
- Statistics Canada recently tested a number of collection tools with firms engaged in global production activities to determine their ability to provide the information being requested.

Testing Strategy

■ Specific objectives

- Test respondents' understanding of specific concepts and terminology.
- Determine the availability of the information requested from the survey.
- Discuss the level of the burden on respondents of the proposed survey.
- Find out more about how respondents declare (customs) the value of goods leaving and entering Canada.
- Discuss possible alternative data sources or methods for collecting this data.

■ Survey content development: 2 collection vehicles

- Filter questionnaire: **Identify** companies engaged in global production activities
- Main questionnaire: **Measure** global production activities and compile estimates

■ Dates (testing of the filter questions)

- First round July 2015: Toronto (12), Montreal (6)
- Second round August/September 2015: Toronto (9), Montreal (9)

■ Mode of testing

- **On paper**, not online
- Cognitive interviews involving Statistics Canada questionnaire testing specialists (Questionnaire Design Resource Centre) and subject-matter analysts

Testing Strategy

■ Respondents' selection

- Selected companies most likely engaged in global production activities from the Annual Survey of Manufacturing (ASM) and Wholesale surveys and from information obtained from customs declarations
- Locations: Toronto and Montreal
- Communicate with companies by phone prior to the visit to ensure they engaged in global production activities (i.e. targeted respondents)

■ Limitations

- Companies **recruited based on their likelihood of taking part** in these global activities; they do not reflect the true population distribution
- The participants were **recruited and identified as companies already engaged in global production activities** and the respondent was the individual “best able to answer questions about global activities”
- **The questions were not tested as part a longer survey.** In other words, they were presented ‘out of context’.



Testing Strategy - Questionnaires

Category of questions tested	Filter Questionnaire	Main Questionnaire
Performing custom work for foreign clients	One question with two parts	Seven supplemental questions. Three of the questions had grids asking for product and country detail.
Paying foreign entities to perform custom work	One question with three parts	Thirteen supplementary question.
Engaging in direct trading (Buy and sell 'as-is' in foreign markets)	One question	Five supplementary questions
Holding inventories abroad	One question	One supplementary question

Filter Questionnaire – A few examples

Concept: Processing foreign goods in Canada with clients' supplied raw materials or intermediate goods

1. During the last fiscal year, did this Canadian business perform manufacturing, processing, or assembly **work for foreign (including U.S.) clients**, according to the **specifications provided by the foreign clients**?

☐ NO => go to Question 2

☐ YES



Of this work performed, did the **foreign clients maintain legal title** of at least some of the **material inputs** (raw materials or semi-finished goods) or **goods for further processing**?

Note: This business received payments for the work performed. This may be referred to as "custom work", "custom manufacturing", "tolling", or "consignment".

☐ NO

☐ YES

- It should be noted that, as an exceptional case, in Toronto, small changes were made to the screening questions each evening, in order to try to clarify confusing concepts as observed during the day. Therefore, in Toronto, not all participants saw the exact same version of the questionnaire.

Main Questionnaire – A few examples



- Respondents indicated that they could not supply the type of detail requested on the main questionnaire such as lining up the type of material input supplied with the country of the foreign client.

Material inputs charged to foreign clients for custom work

2. Of the **#{Q1ai>0}** value of material inputs charged to foreign clients for custom work done by this Canadian business, what was the percentage breakdown **by input** and corresponding **country of foreign client**?

Note: Provide a brief description of the **top five material inputs** that contributed to the largest percentage of the total cost of material inputs **by country of foreign client**.

	Material input description	Country of foreign client	Percentage of input value
a.	Material input 1	<<select country>>	_____
b.	Material input 2	<<select country>>	_____
c.	Material input 3	<<select country>>	_____
d.	Material input 4	<<select country>>	_____
e.	Material input 5	<<select country>>	_____
f.	All other material inputs		
Percentage of total amount of material inputs charged to foreign clients on custom work done by this Canadian business			Should equal to 100%

Main Questionnaire – A few examples

Helpful resources Contact us Account settings

Start of questionnaire > Logout

Global Supply, Production and Distribution Chain Activities 0%

Material inputs supplied by this Canadian business for processing or manufacturing work performed by foreign entities

11. If this Canadian business **supplied** some of the **material inputs to foreign entities free of charge** for their custom work abroad, what was the **cost of these inputs**? For more information, see the Help button.

Note: The cost of material inputs (raw materials, components, or semi-finished goods) that were **shipped from Canada** should be “**value F.O.B. place of exit**” as reported in Customs declarations when these goods crossed the border.

- a. Cost of material inputs that were **shipped from Canada** to foreign entities \$_____,000
- b. Cost of material inputs that were **shipped from outside of Canada** to foreign entities **directly without** the material inputs **physically enter Canada** \$_____,000

Total cost of material inputs supplied by this Canadian business to foreign entities for custom work done abroad (a+b) \$_____,000

- Respondents indicated that they could not supply the type of detail requested on the main questionnaire such as the cost of material inputs shipped to foreign entities – especially if those inputs were sourced from a foreign location.

Performing custom work for foreign clients

Original Questions

1.1 During the last fiscal year, did this Canadian business perform custom manufacturing, processing, or assembly work for clients outside of Canada, according to the requirements specified by the foreign clients?

1.2 Of this work performed, did the foreign clients supply at least some of the inputs (raw materials or semi-finished goods) and own the end product?

Respondent Feedback

“What do you mean by clients outside of Canada”, “Define inputs”, “What do you mean by requirements?”, “We always own the intellectual property embedded in the end product?”, “What do you mean by supply?”

Modified Questions

1. During the fiscal year 2014, did your business perform manufacturing, processing, or assembly work for other clients, according to the specifications provided by these clients? Please note: this work may be referred to as “custom work”, “custom manufacturing”, “tolling”, or “consignment”.

1.1 Of the work performed by your business, where were the clients located?

1.2 Of the work performed for clients outside of Canada by your business, did the clients supply and maintain ownership of at least some of the material inputs or goods for processing? Please note material inputs include raw materials, components, or semi-finished goods that are used for production towards the clients' outputs.

Direct Trading (Buy and sell 'as-is' in foreign markets)

Original Question

2. During the last fiscal year, did this business purchase goods (raw materials, semi-finished, finished goods) outside of Canada and sell them “as-is” in foreign markets without altering the goods, nor having the goods physically enter Canada?

Respondent Feedback

“Do you mean “off the shelf?”, “Does foreign markets in the US”, “What do you mean not having the goods physically enter Canada?”, “Does this Canadian business include affiliates”, “We do some branding – how should we treat that?”

Modified Question

2. During the fiscal year 2014, did your business purchase goods outside of Canada “off the shelf” and sell them “as-is” in foreign markets (including the U.S.) without altering the goods, and without having the goods enter Canada before the sales?

Paying foreign entities to perform work

Original Question

3.1 During the last fiscal year, did this Canadian business **pay foreign entities** to perform custom manufacturing, processing or assembly **work outside of Canada**, according to the **requirements specified by this Canadian business**?

3.2 Of this work performed, please indicate **the provider of the material inputs** (raw materials, components, or semi-finished goods) and the **destination of end products** (semi-finished or finished goods)

Problem Terminology

“How do you treat requirements specified by this Canadian business in the case of sub-contracting”, “What do you mean by sell the products in a foreign country directly”, “What do you mean by maintain the legal title”

Modified Questions

3. During the fiscal year 2014, did your business pay **other business entities** to perform manufacturing, processing or assembly work, **according to the specifications provided by your business or on behalf of your clients**? Please note that this may be referred to as “outsourcing”, “custom manufacturing”, “custom work”, “external manufacturing”, “subcontract”, or “tolling”

3.1 Of the work performed by other business entities, where were those business entities located?

3.2 Of the work performed by other business entities located outside of Canada, **did your business supply and maintain ownership of at least some of the material inputs, or goods for processing?**

3.3 Of the work performed by **other business entities located outside of Canada**, were any of the semi-finished or finished goods sold to clients outside of Canada by your business?

Inventories held abroad

Original Question

4. On the **last day** of the fiscal year, did this business **hold inventories abroad**, including inventories in transit? **Include:** Raw materials, work in process, and finished goods recorded in this business's accounting books, but physically located outside of Canada. Also include goods purchased abroad for resale "as-is" in foreign markets.

Respondent Feedback

Does 'abroad' refer to outside the company or outside of Canada? Respondent noted detailed product information would be very difficult to obtain.

Modified Question

4. On the last day of the fiscal year 2014, did your business hold inventories abroad, including inventories in transit? Note, please include any raw materials, **components**, semi-finished, finished goods, and **goods purchased abroad for resale that were recorded in your business's Canadian accounting books**, but physically located outside of Canada?



Overall Recommendations and the way forward following testing

- Overall Recommendations
 - Consider asking these questions as a stand-alone survey rather than integrating them into an existing survey.
 - Consider alternative data sources to measure questions posed on the main questionnaire (e.g. customs documentation)
- Following the testing the following next steps were determined:
 - A pilot test of the modified filter questionnaire will be administered to large and complex enterprises via face to face or phone interviews.
 - Add a 'global production' flag on Statistics Canada's business register to identify companies engaged in this type of activities;
 - Improve the content of the main questionnaire and conduct a pilot in the summer/fall of 2016
 - Continue to share knowledge with our international counterparts



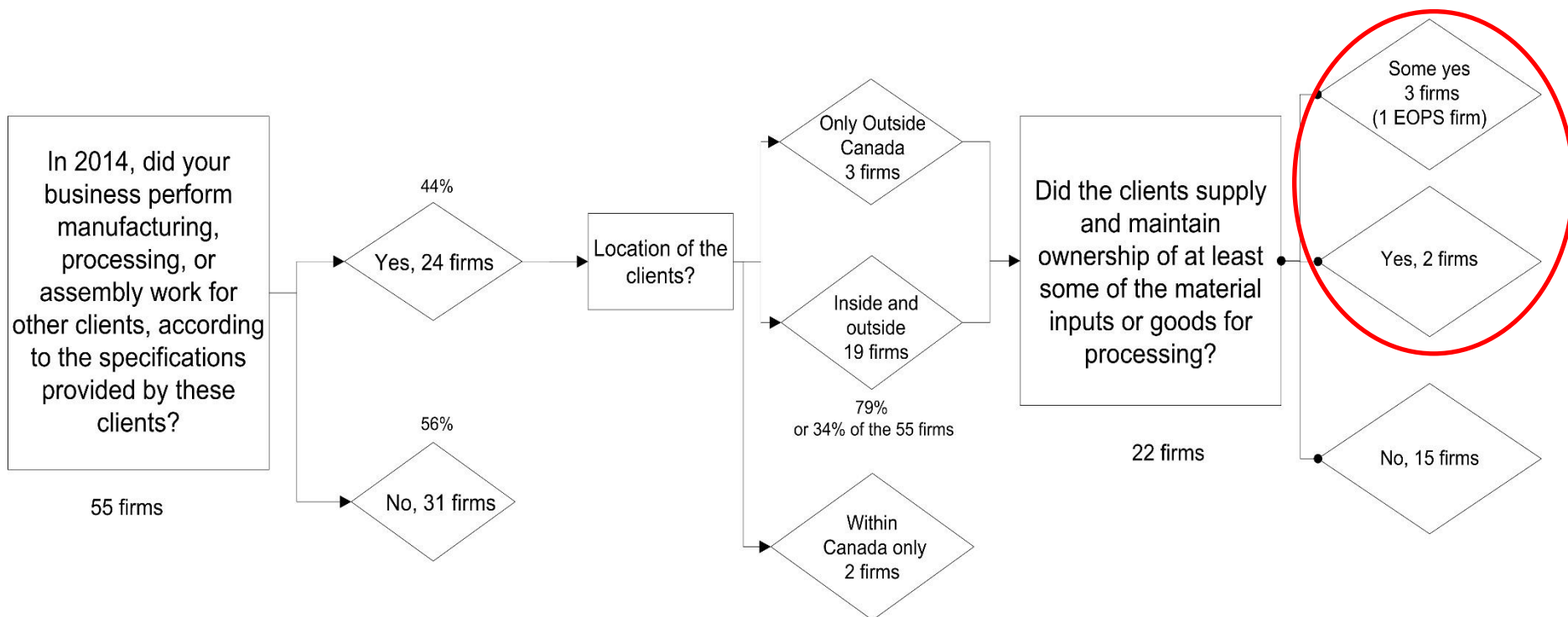
Results from the Pilot Survey

Results from pilot survey

- Reference period (2014)
 - 71 firms selected for interview, 55 completed questionnaires
 - Respondent selection: half random, half pre-selected with 'sent goods abroad for processing' on non-US export form
- Collection period: January – March 2016 (completed with yes to at least one of the questions)
 - EPM – 25 units
 - BR – 30 units
- Respondent profile (answered yes to at least one question)
 - Corporate structure
 - 6 simple single unit (5)
 - 5 simple complex unit (4)
 - 21 multi legal structure (20)
 - 23 multi legal structure consolidation (18)
 - NAICS
 - 36 manufacturing (20 BR and 16 EPM cases)
 - Wholesaling (10 BR and 4 EPM cases)
 - Oilfield Services (1 EPM case)
 - Unknown (4 unit EPM cases)

Q1 – Processing work for foreign clients

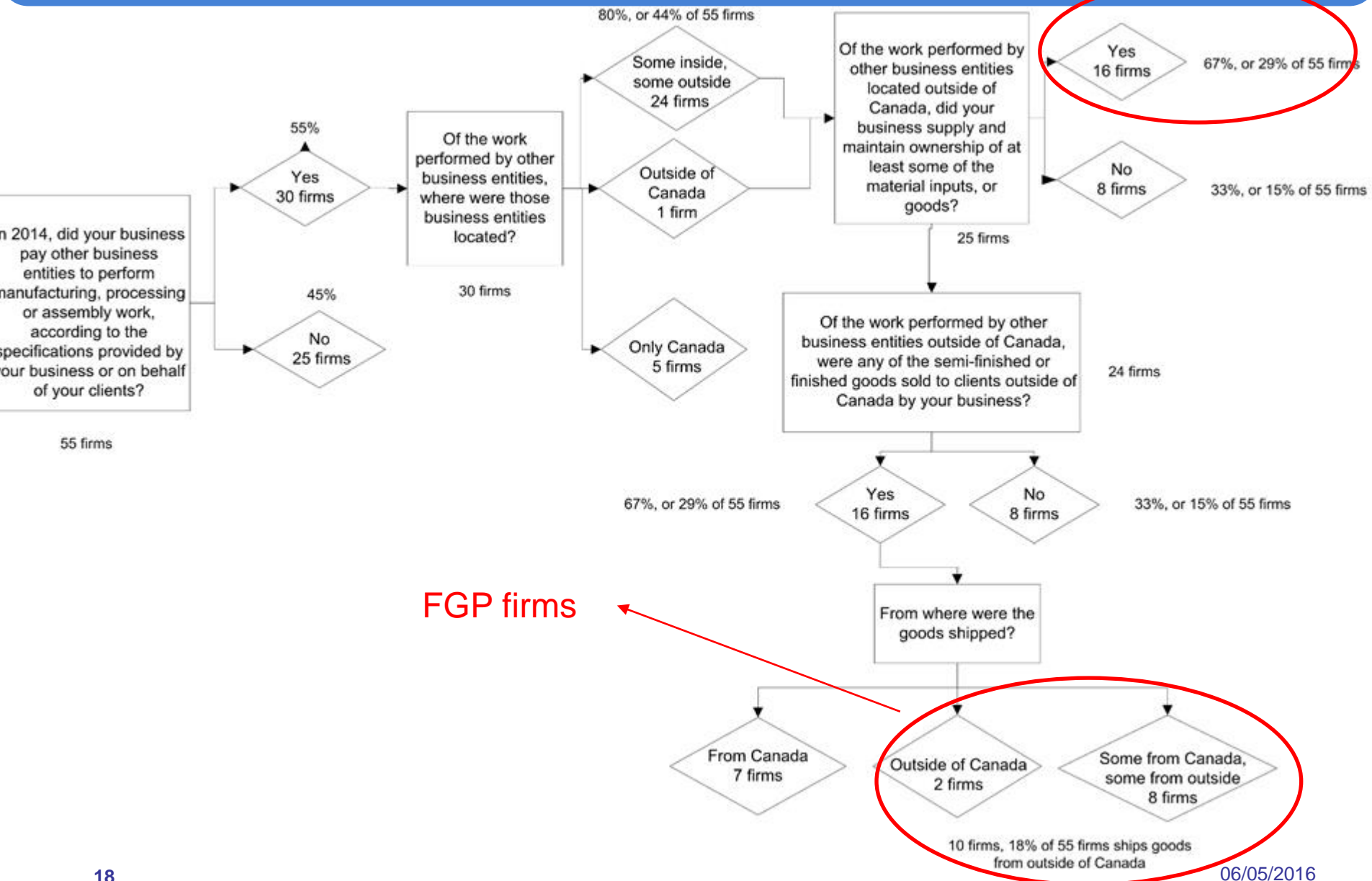
9% of 55 firms import goods whose ownership remained foreign



Q2 – Merchanting (buy & sell without crossing border)



Q3 – Pay foreign entities to do processing work & FGP



Q4 – Inventory holding abroad

