

Manufacturing services on physical inputs owned by others

- Statistics Canada adopted the 2008 SNA and BPM6 in 2012 but did not fully implement the **change in ownership concept** related to imports and exports.
- Our current data sources (customs declarations) for imports and exports do not capture **manufacturing services on physical inputs owned by others**. Before we can implement this concept we need to develop new collection instruments / models.
- Over the last number of years Statistics Canada has been experimenting with different methods to collect this information. This presentation highlights the work to date and some of the remaining challenges.



In theory all we have to do...

Product (Goods in billions)	X	M	B	Owned Materials Exported	Owned Finished Goods Imported	Processed Finished Goods Exported	Owned Materials of others Imported	X	M	B
Primary	290	175					5	290	170	
Secondary	182	265		20			5	162	260	
Tertiary	67	124			40	20		47	84	
Other BoP	11	11						11	11	
Total	549	579	-30					509	529	-20

...is move goods trade to services trade.

Product (Service)	Exports	Imports	Balance
Manufacturing services on the physical inputs owned by others	10	20	-10



Data Requirements – Customs Perspective

B13 – Customs Export Declaration

Exporter (B13)	Product (Goods)	Country of Destination	Value	Are you retaining ownership of these goods? (1=Yes, 0=No)	Are these processed goods you are returning to the owner?	What was the value of the processing fees charged?
ABC Company	Tertiary	CN	10	1		
XYZ Company	Tertiary	CN	10	1		
MNO Company	Secondary	US	20	0	1	10



Data Requirements – Customs Perspective

B3 – Customs Import Declaration

Importer (B13)	Product (Goods)	Country of Origin	Value	Do you own these goods? (1=Yes, 0=No)	Are these goods that you own, for which your materials were used as inputs and for which you paid a processing fee? (1=Yes, 0=No)	What was the value of the processing fees that you paid?
ABC Company	Primary	CN	5	0		
XYZ Company	Secondary	CN	5	0		
MNO Company	Tertiary	US	40	1	1	20



Data Requirements – Business Survey Perspective

Annual Survey of Manufacture

Collection Entity (Establishment?)	Account	Product	Value
ABC Company	Total Revenue – Domestic Clients		
	Total Revenue – International Clients		
	Custom Work Revenue – Domestic Clients		
	Custom Work Revenue – International Clients		5
	Materials owned by and received from international clients used when undertaking the custom work	Primary	5
	Value of custom work goods exported to the foreign client	Tertiary	10

Data Requirements – Business Survey Perspective

Annual Survey of Manufacture

Collection Entity (Establishment?)	Account	Product	Value
MNO Company	Total Expenses		
	Subcontracting Expense – Domestic Clients		
	Subcontracting Expense – International Clients		20
	Materials owned by this firm and provided (free of charge) to the foreign subcontractor to undertake the subcontracting work.	Secondary	20
	Value of imported goods received from foreign subcontractor	Tertiary	40



What we have been able to obtain to date...

Annual Survey of Manufacture

- In 2016, establishments reporting to the annual survey of manufactures reported \$17 in custom work revenue of which \$6 billion was for foreign clients.

	CANS '000
Sales of goods manufactured	
Sales of goods purchased for resale, as is	
Revenue from repair work	
Revenue from manufacturing service fees and/or custom work	
Other	
Total sales of goods and services	

4. Of the [amount] reported in Revenue from manufacturing service fees and/or custom work, please provide the percentage breakdown for the following.

	Percentage
From Canadian clients	
From clients in other countries	
Total breakdown	





What we have been able to obtain to date...

Annual Survey of Manufacture

- In 2016, establishments responding to the annual survey of manufactures reported 10b in contracting expenses, of which 1 billion was paid to foreign contractors.

c. Subcontracts

Subcontract expense refers to the purchasing of services from outside of the company rather than providing them in-house. In such cases, business units provide materials to other business units or individuals for the production of outputs on a so-called 'custom basis'. Subcontract expense only refers to work hired out for production towards the company's outputs.

2. Of the [amount] reported in Subcontracts, please provide the percentage breakdown for the following.

	Percentage
From Canadian sources	
From sources in other countries	
Total breakdown	



How far does this get us...

Product (Goods in billions)	X	M	B	Owned Materials Exported	Owned Finished Goods Imported	Processed Finished Goods Exported	Owned Materials of others Imported	X	M	B
Primary	290	175						290	175	
Secondary	182	265						182	265	
Tertiary	67	124						67	124	
Other BoP	11	11						11	11	
Total	549	579	-30					549	579	-30

Assuming all foreign subcontractors use Canadian materials freely supplied and all custom work revenue use materials from foreign clients freely supplied...

Product (Service)	Exports	Imports	Balance
Manufacturing services on the physical inputs owned by others	6	1	5

What have we been able to obtain to date....**B13 Non-US exports**

- The Canadian B13 customs export declaration form asks exporters to report the '**reason**' for exports – one of which is processing.
- In 2017, the total value of exports for processing was 430.4 million. These goods were mainly primary and secondary goods.

Product	Number of Firms	Value of Goods sent abroad to be processed
Primary		
Secondary		.4 + 1.2
Tertiary		

What have we been able to obtain to date....

Exporter of Processing Services Program (EOPS)

- This program allows for the tax free import of goods by Canadian firms for the purpose of processing the goods in Canada and for which the goods are subsequently exported.
 - In order to qualify for this program the firm can have no ownership interest in the good.
 - The firm can not be closely related to the non-resident person / entity on whose behalf the Canadian firm is doing the processing.

Product	Number of Firms	Value of imported material to be processed and returned
Primary		5
Secondary		
Tertiary		



How far does this get us...

Product (Goods in billions)	X	M	B	Owned Materials Exported	Owned Finished Goods Imported	Processed Finished Goods Exported	Owned Materials of others Imported	X	M	B
Primary	290	175						290	175	
Secondary	182	265						182	265	
Tertiary	67	124						67	124	
Other BoP	11	11		1.6	2.6	11	5	-1.6	3.4	
Total	549	579	-25	1.6	2.6	11	5	537	572	-35

Aggregate adjustments can be made to align the trade flows to a change in ownership concept.

Product (Service)	Exports	Imports	Balance
Manufacturing services on the physical inputs owned by others	6	1	5

What have we been able to obtain to date.... **Survey on Global Supply, Production and Distribution Chain activities.**

- Survey of 300 enterprises that have been pre-identified as having some form of global production or supply activities.
- Utilized various existing annual business survey's and administrative data files in the pre-identification process.
 - Annual Survey of Manufacture
 - Annual Wholesale Trade Survey
 - B3 and B13 Customs Declaration forms

What have we been able to obtain to date.... **Survey on Global Supply, Production and Distribution Chain activities.**

Production scenarios	Entities involved	Industry classification	Economic ownership				Drop shipments (without entering Canada)	Evidence found	
			Raw materials			Intellectual properties			Output
			None	Some	All				
1. Processing work done for foreign clients	Canadian	Most manufacturing and some wholesale	yes (very few)	yes (most often)	yes (very few)	yes (mixed, can belong to either Canadian or foreign)		yes	
	Foreign						yes		yes
2. Merchanting	Canadian	Most wholesale and some manufacturing					yes	yes	yes
	Foreign								
3. Goods sent abroad for processing	Canadian	Most manufacturing and some wholesale		yes (most often)	yes (very few)	yes (mixed, can belong to either Canadian or foreign)	yes	yes	yes
	Foreign			yes (most often)			yes		
4. Factoryless goods production	Canadian	Some manufacturing and some wholesale		yes (at least testing materials)		yes (sometimes)	yes	yes	yes
	Foreign								

Exports of manufacturing services...

- 20% of the firms who performed manufacturing services received material inputs from foreign clients without charge.

Shares:

Of the selected Canadian businesses **who performed** manufacturing, processing, or assembly work for foreign clients (84),

- nearly one-third (13%+19%) received at least some of the material inputs from non-Canadian clients
- more than one-fifth (18/84) received material inputs from non-Canadian clients **without charge** (didn't pay)

Imports of manufacturing services

- 25% of the firms who hired foreign contractors supplied material inputs without charge

Shares :

Of the selected Canadian businesses **who hired** foreign entities to perform manufacturing, processing, or assembly work (49),

- nearly half (27%+22%) supplied at least some of the material inputs for production abroad
- more than one-quarter (13/49) supplied material inputs to production abroad **without charge**



How far does this get us...

Product (Goods in billions)	X	M	B	Owned Materials Exported	Owned Finished Goods Imported	Processed Finished Goods Exported	Owned Materials of others Imported	X	M	B
Primary	290	175						290	170	
Secondary	182	265						162	260	
Tertiary	67	124						47	84	
Other BoP	11	11		1.6	1.8	6.5	5	2.8	4.2	
Total	549	579	-30	1.6	1.8	6.5	5	540	573	-31.3

Information from the global production survey provides information on the ownership of material inputs.

Product (Service)	Exports	Imports	Balance
Manufacturing services on the physical inputs owned by others	1.5	.15	1.3

Conclusions and Assessment

- While the results are interesting, it is uncertain that firms are able to provide the required information.
- The results indicate that global production arrangements are not that significant in Canada.
- Is this the case or is it due to the vehicle we are using to collect the information?
- Is this a case where the true value is closer to our estimate than it is to zero and therefore publishing these values is desirable?