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Development of Foreign Affiliate Statistics in a broader context of MNE statistics: Inward FATS

Group of Experts on National Accounts:
measuring global production

Statistics Canada

July 2015



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Outline

- **Foreign affiliate statistics (FATS) and users/uses**
- **FATS variables**
- **Inward FATS concepts**
- **Inward FATS methodology and data sources**
- **Some provisional results**
- **Going forward**
- **Framework for future work on MNEs**

Foreign affiliate statistics

- Foreign affiliates established using the Foreign Direct Relationship (FDIR) – focused on, activities and other variables of majority-owned affiliates ... Or the economic effects of FDI
- APPROACHES:
 - Survey route → outward FATS at STATCAN (FDI questionnaire)
 - Record linkage route → inward FATS at STATCAN, reflecting one of the advantages of a centralized statistical system

FATS DEMAND pressures: Employment, income, growth impacts, etc. of FDI

- **Department of Foreign Affairs and International Trade**
- **Industry Canada**
- **Export Development Corporation**
- **Other Key users/uses**
 - **Bank of Canada**
 - **Natural Resources Canada**
 - **Finance Canada**
 - **OECD**
 - **IMF**
 - **Private sector uses, including Conference Board of Canada**
 - **Analytical uses**
 - **Statistical uses**

STATCAN FATS Variables framework

■ CHARACTERISTICS

- # of firms, size of firms; degree of ownership (control, influence)
- Geography-industry, s.t. confidentiality issues

■ ACTIVITIES

- Sales
 - Domestic
 - Foreign (goods versus services)
 - back to Canada ... with affiliates
- Employment

■ ASSETS-LIABILITIES (capital controlled, exposures)

- Non-financial assets; total assets; financial assets; Equity and FDI (derived based on % of ownership); Liabilities (derived); R&D, etc.

■ PERFORMANCE

- Earnings;
- Factor cost value added by component ; productivity; environmental considerations

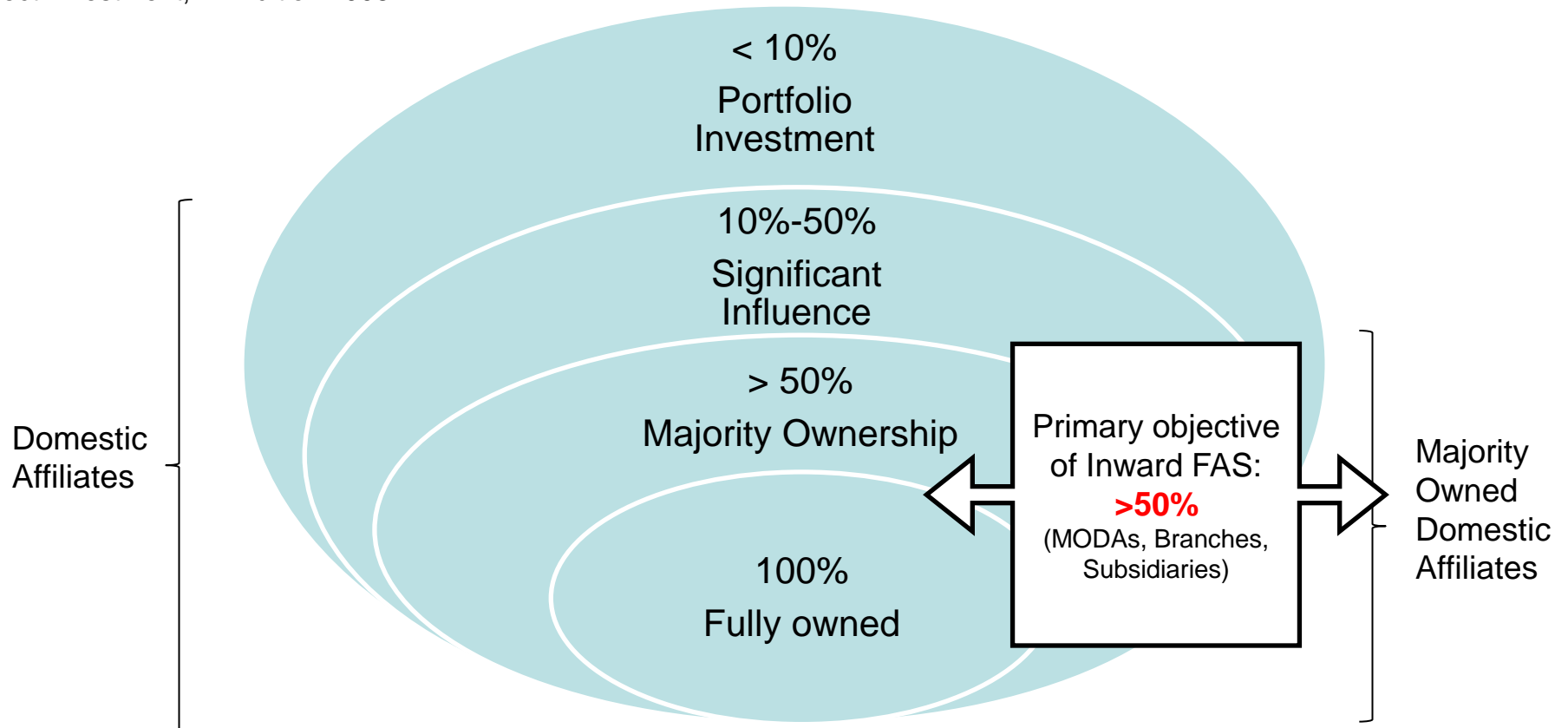
Current status: Foreign affiliate statistics (FATS)

- **Expanded outward FATS on majority-owned foreign affiliates (MOFAs)**
 - From FDI survey re-design. Variables beyond employment and sales by adding 4 new questions (including trade) and a possibility to derive (using FDIR and existing statistics) an additional 6 new variables (including financial variables ... key for G-20 Data Gaps)
 - Outputs: Macro data set expanded; underlying micro data set
- **NEW inward FATS estimates on majority-owned domestic affiliates (MODAs)**
 - From record linkage project that leveraged existing datasets (including FDI frame) via centralized business register to generate low-cost high quality estimates, with zero response burden
 - Outputs: Macro dataset for general public consumption; and, rich underlying micro data set for (i) research purposes and (ii) to support global production measures

FDI Concepts applied to FATS: Control

Where control is defined by % of voting power owned by a single investor

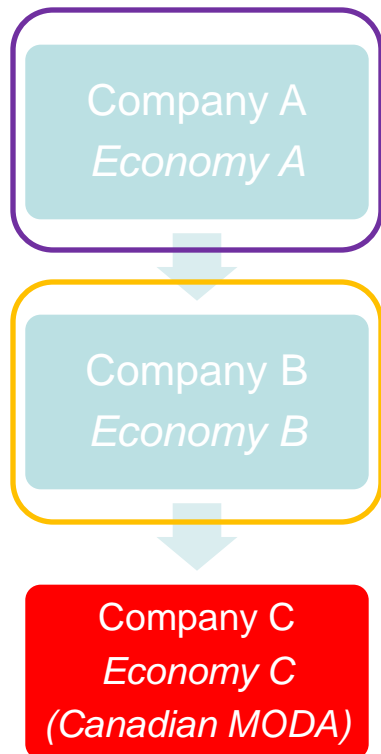
OECD Benchmark Definition of Foreign
Direct Investment, 4th Edition 2008



Inward FATS: Immediate vs. Ultimate perspective

“For direct investment, there can be chains of voting power, such as when a direct investor in Economy A has a subsidiary in Economy B, which in turn has a subsidiary in Economy C. In this case, for the direct investment in Economy C

- (a) the economy of **immediate** ownership is Economy B; and
- (b) the **ultimate** investing economy is Economy A” BPM6 pg. 77



FDI reporting recommendation:

“As a basic principle, direct investment transactions should be reported according to the **immediate** host or investing economy” BPM6 pg. 77

Priority

Important supplement

FAS reporting recommendation:

“For statistics on foreign-controlled enterprises in the compiling economy (inward AMNE statistics), the geographical attribution should be by the economy of the **ultimate** controlling investor. However, to facilitate links with DI data, compilers are encouraged also to provide some data in which attribution is based on the economy of the **immediate** investor” BPM6 pg. 270

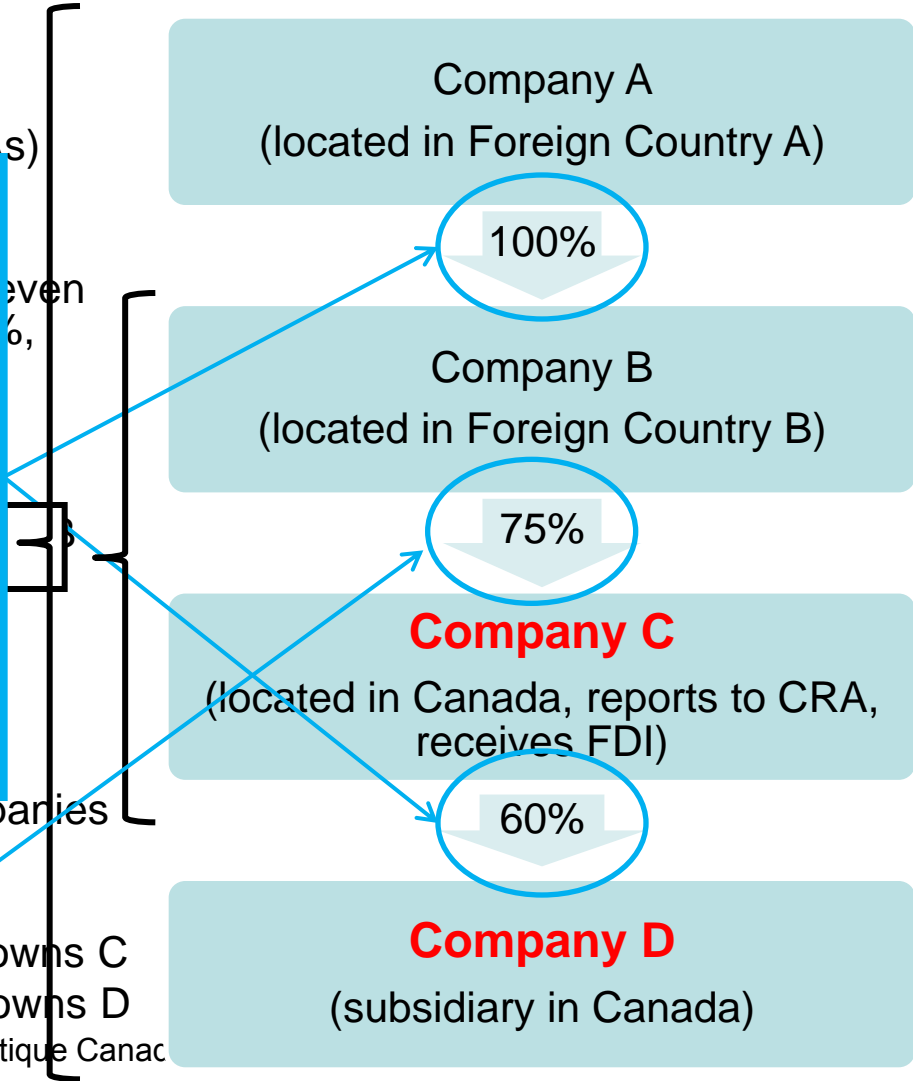
Inward FATS: Majority Ownership at Each Level

- Companies C and D
 - Majority-Owned Domestic Affiliates (MODAs)

>50% ownership at each level of investment

this is where ICO was used as an input to find control % at each ownership level as well identifying Canadian subsidiaries

Derived from FDIC



- Cor
 - this is where ICO was used as an input to find control % at each ownership level as well identifying Canadian subsidiaries
- Cor
 - Ultimate foreign investing country for Companies B, C, and D is Country A
 - It directly controls C
 - It indirectly controls C because B majority-owns C
 - It indirectly controls D because C majority-owns D

even %,

Other inward FATS concepts

- **Round-Tripping:** When majority ownership investment originates in Canada, enters a foreign economy, then returns to Canada through FDI relationships (terminology from IMF & OECD manuals)
 - Included in FATS
- **Indirect Majority Ownership:** When a foreign company may exercise control via foreign subsidiaries that individually do not have majority ownership but that together have majority ownership (difficult to attribute to country and/or industry)
 - **Grey area in FATS concepts, one that is not in line with FDI concepts**
 - Currently excluded from FATS frame because no single foreign investor owns >50% of Company D on an immediate basis
 - Can be easily included based on how FATS frame is constructed

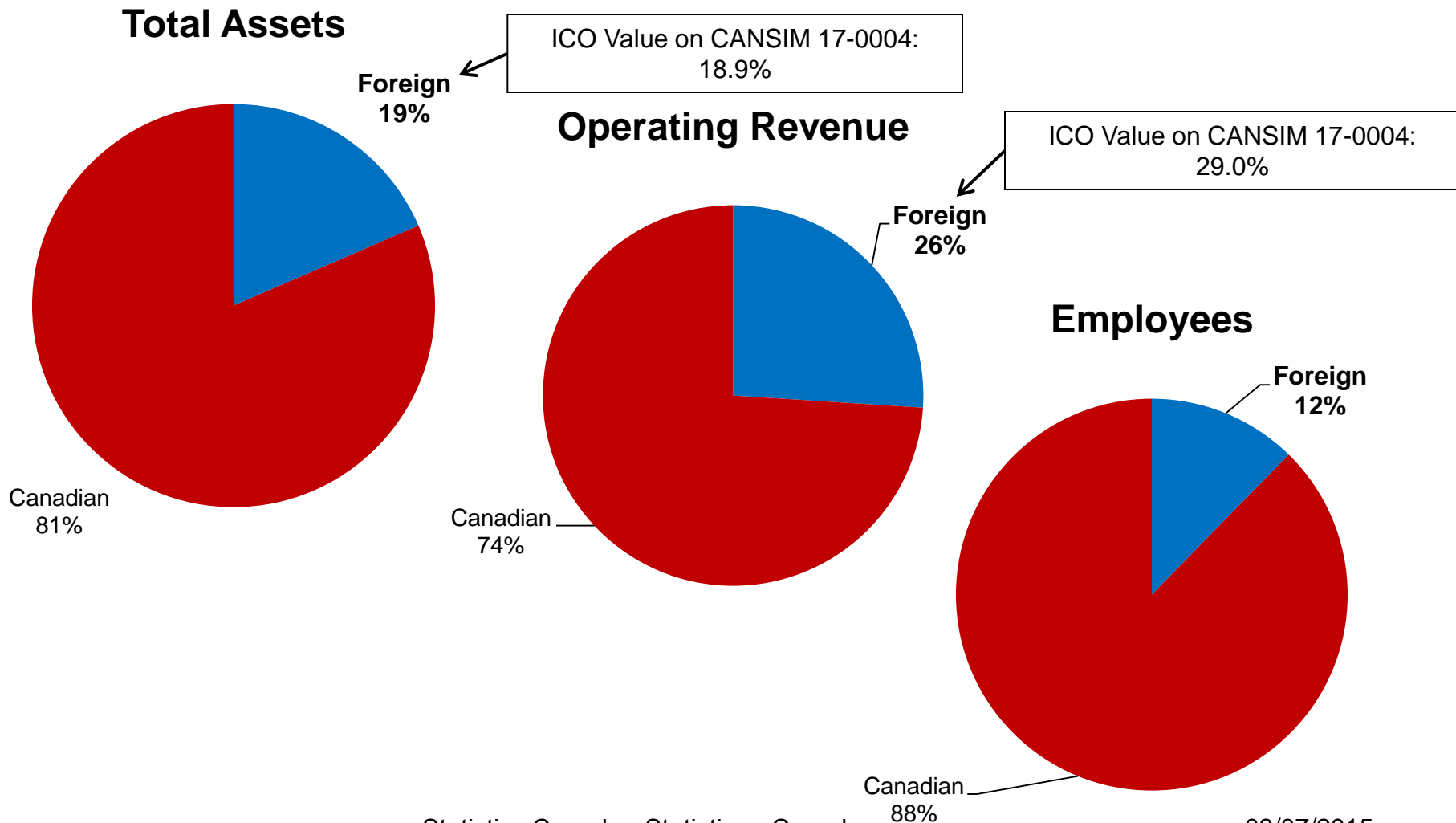
Inward FATS: Sources and methodology

- Identify companies that are majority-owned (>50%) by a single foreign investor & all majority-owned Canadian subsidiaries
- Starting point: FDIC Companies
 - International accounts surveys
- Other STC surveys related to variables
- Inter-Corporate Ownership Database (ICO)
 - Allows for identification of the immediate investing country, ultimate investing country and links to FDI frame
- Supplementary administrative data sources (tax and customs data)
- Other Sources:
 - Full list of foreign bank and insurance branches operating in Canada found on website of the Office of the Superintendent of Financial Institutions (OSFI)

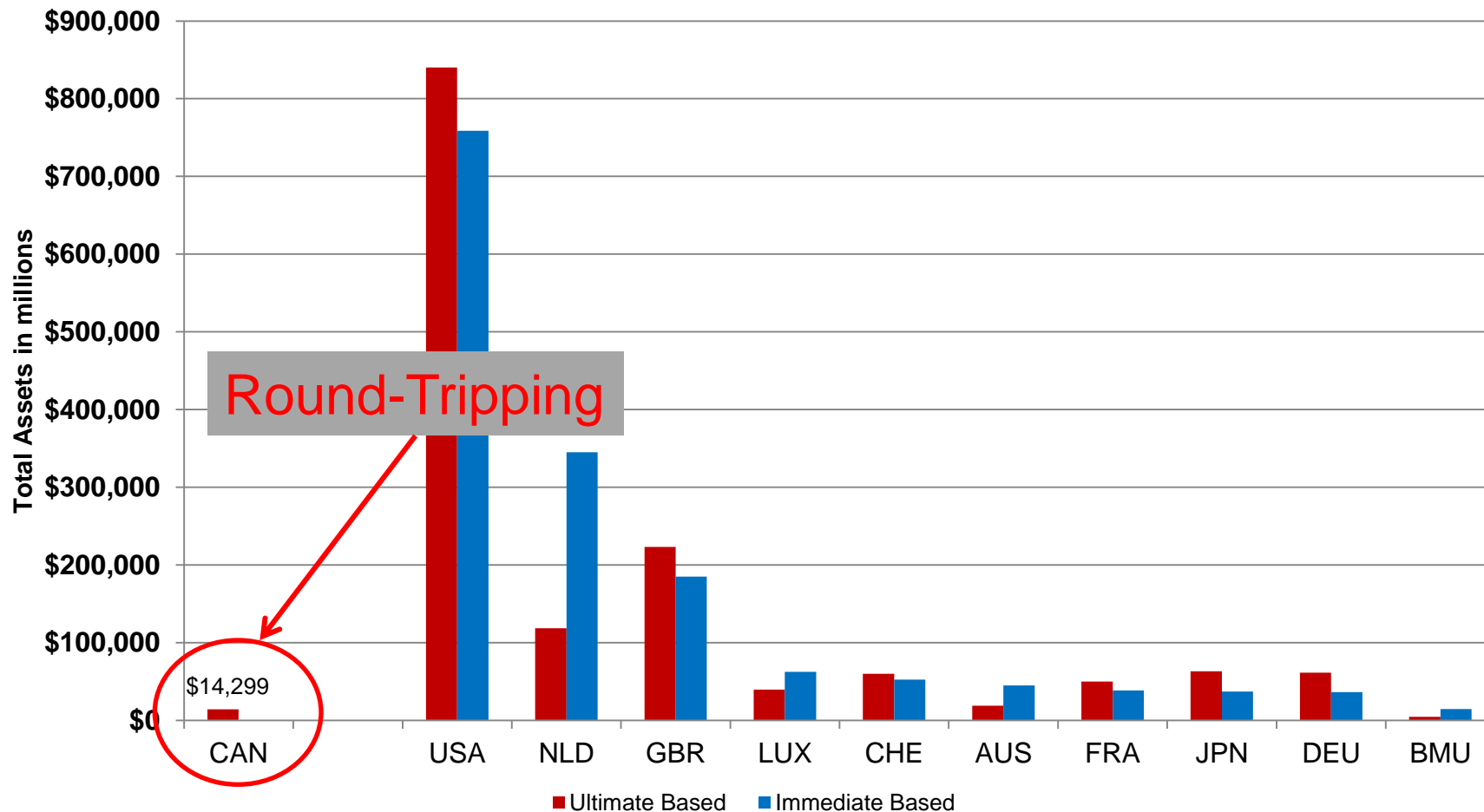
Inward FATS: Sources and methodology (cont'd)

- Link these companies to ICO and FDI to identify cases with a *single controlling* foreign investor
- Business register consolidations' file provided an advantage when dealing with consolidated companies
 - Enterprise
 - Legal entity
 - Establishments
- Need to drill down to the Canadian subsidiaries in order to get the appropriate totals for certain FATS activities ... Such as, the total level of employment created in the Canadian economy by foreign investment in an enterprise (which may be a special purpose entity (such as a holding company))
- Confidentiality testing

Provisional estimates 2011: Foreign control in the Canadian economy



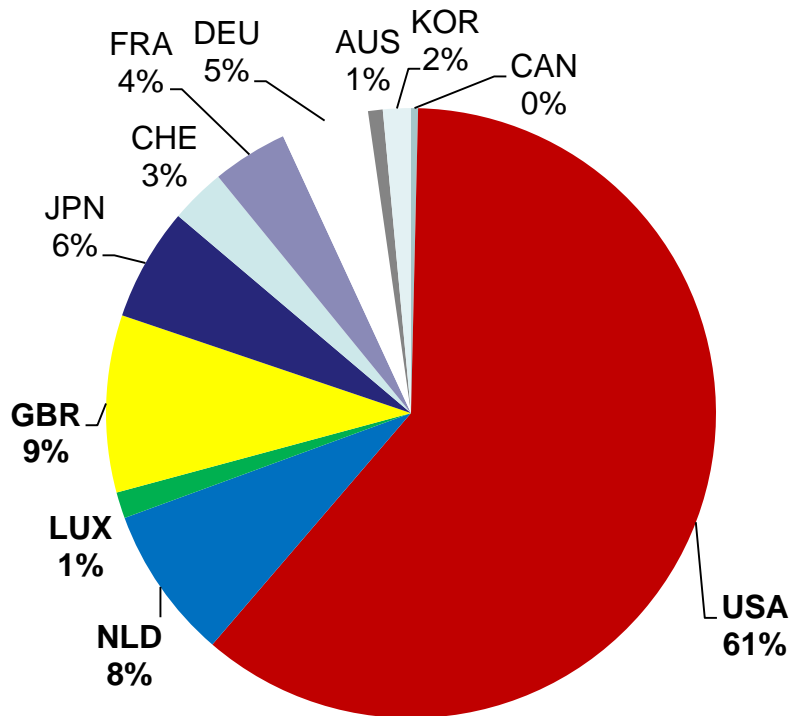
Provisional estimates 2011: Total assets under foreign control



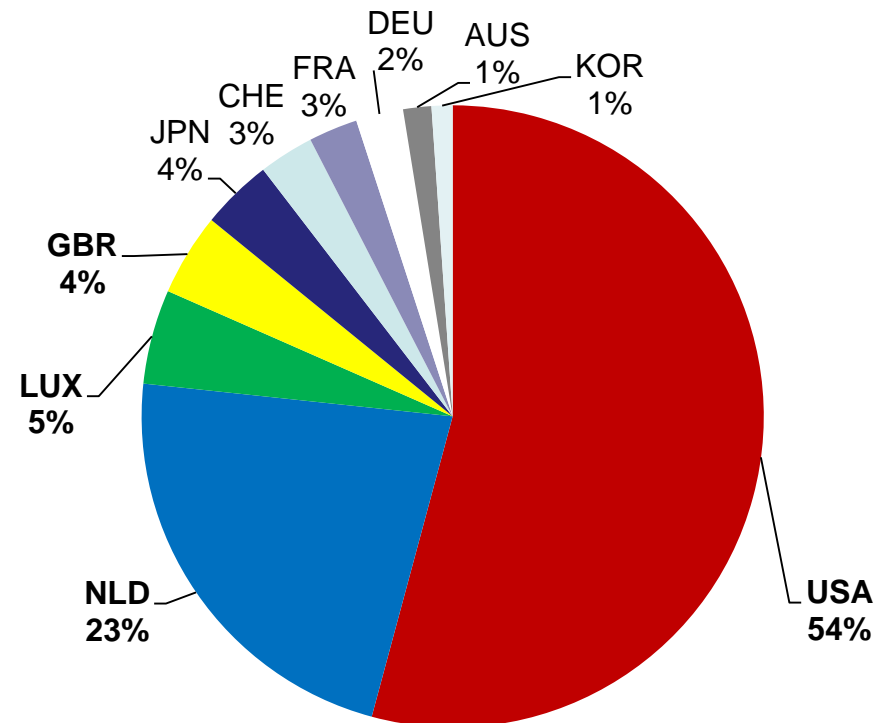
Provisional estimates 2011: Total Revenues under Foreign Control

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Ultimate Investing Country



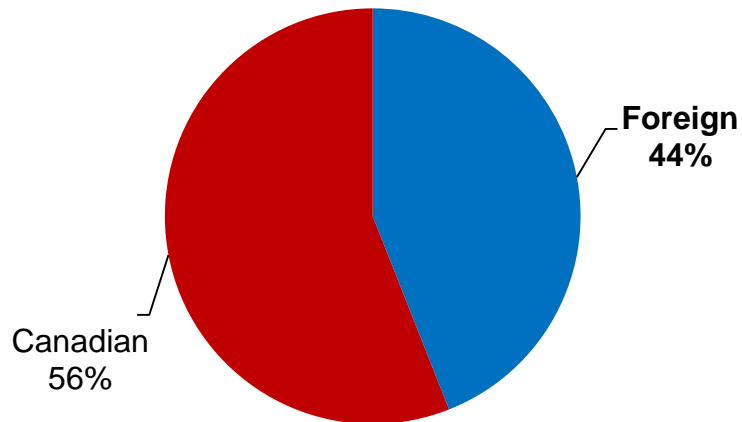
Immediate Investing Country



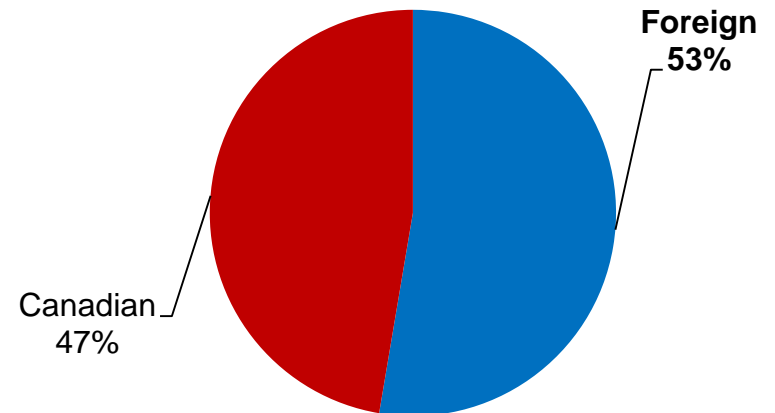
Provisional estimates 2011: Trade flows under foreign control

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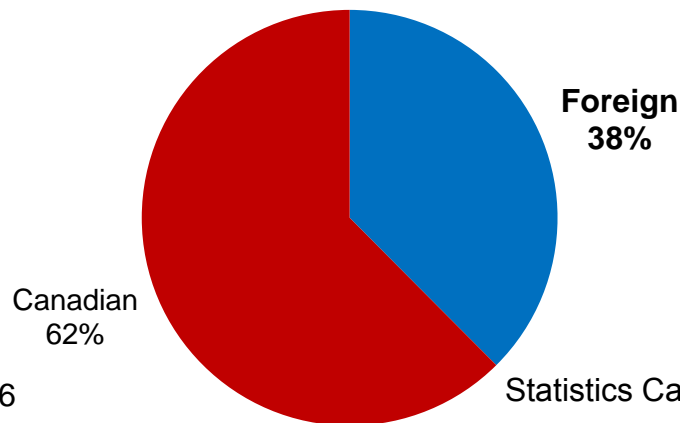
Goods Exports



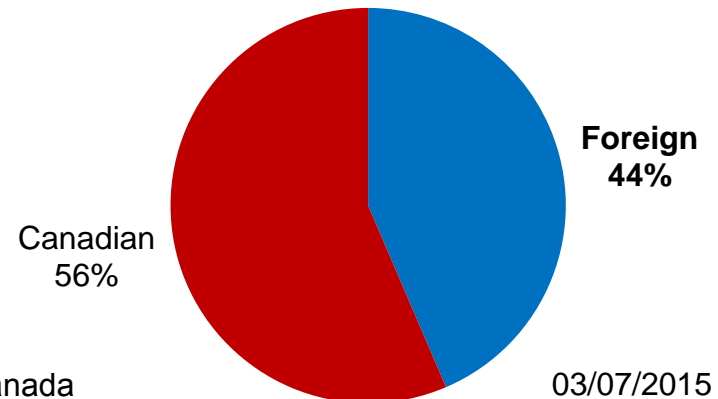
Goods Imports



Commercial Services Exports



Commercial Services Imports



Going Forward on inward FATS: Short-term ... Long-term

SHORT-term

- Ongoing user consultations and release of technical paper
- Consultations with data suppliers
 - Universe, methodology, data source, data availability
 - Confidentiality requirements- BSMD & EAD
- Ongoing data quality assurance testing of new variables; time series generation
- Official release estimates late in 2015 i(n the form of CANSIM tables)

LONG-TERM

- Variables expansion following the framework

Proposed framework for future work on MNEs

- **Need for a broader statistical framework for multi-national enterprises (MNEs): Activities and financial positions of Canadian Multinational enterprises (including both inward and outward FDI firms),**
 - **FATS statistics**
 - **AMNE statistics**
 - **Integration of Trade by Enterprise Characteristics,**
 - **Etc.**

- **Globalization and global production measures increasingly dependant on micro-data. Inward FATS, Canadian parents (under development), outward FATs, Trade by Enterprise Characteristics under the broader MNE statistics banner ... supplement to the National Accounts (micro-data)**
Longitudinal file

Draft framework for future work on MNEs (cont'd)

ENTERPRISES/ Characteristics (by size, industry & geography (countries and, for selected items, provinces), activities, assets-liabilities, performance	ALL FIRMS											
	Globally Consolidated Totals for CDIA ultimate parents	ALL CANADIAN FIRMS						FOREIGN AFFILIATES				
		Canadian Consolidate d Totals	OTHER FIRMS	OTHER TRADING FIRMS	AMNE STATISTICS FOR FDI FIRMS (CDIA and FDIC)							
					FDIC MODA	FDIC NON MODA	ADJUSTME NT	CDIA MOFA		CDIA NON MOFA		ADJUSTMEN T
Parent Activity	Sub Activity	Parent Activity	Affiliate Activity									
# of firms											N/A	
FDI Balance			N/A	N/A							N/A	
FDI Income			N/A	N/A							N/A	
Portfolio Investment Balance											N/A	
Portfolio Investment Income											N/A	
Assets Of which: FDI											N/A	
Liabilities Of which: FDI											N/A	
Equity (A-L)											N/A	
Employment											N/A	
Total Revenues											N/A	
Trade (TEC):			N/A								N/A	
Imports of Goods			N/A								N/A	
Imports of Services			N/A								N/A	
Exports of Goods			N/A								N/A	
Exports of Services			N/A								N/A	
R&D											N/A	
other variables ...											N/A	

MNE framework links to global production and globalization

- **Global production measures links to survey and customs (trade) micro data**
 - Estimation process
 - Quality assurance

- **Applying FDI influence and control concepts to help determine economic ownership in the case of affiliated party transactions**

- **MNE and FATS links to the Trade by Enterprise Characteristics' database**

- **Providing increased granularity (sub-industry details by key variables) to supply-use tables for improved TiVA measures**

Summary ... questions ...



- This presentation highlighted some recent work and future directions for new macro products built from micro-data. The underlying micro data can also be used in its own right for analysis and statistical purposes ... including the measurement of global production and other globalization measures
- Comments, questions?