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Activities of Canadian majority-owned affiliates abroad, expanded measures – Provisional estimates for reference year 2012

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.. not available for a specific reference period
... not applicable
0 true zero or a value rounded to zero
0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p} preliminary
^{r} revised
x suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E} use with caution
F too unreliable to be published
* significantly different from reference category ($p < 0.05$)

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Abstract

With Canadian companies increasingly engaged in the global economy there is a growing demand for more detailed information on their international activities to better understand how Canadian businesses are expanding internationally and what the benefits and consequences are for Canada.

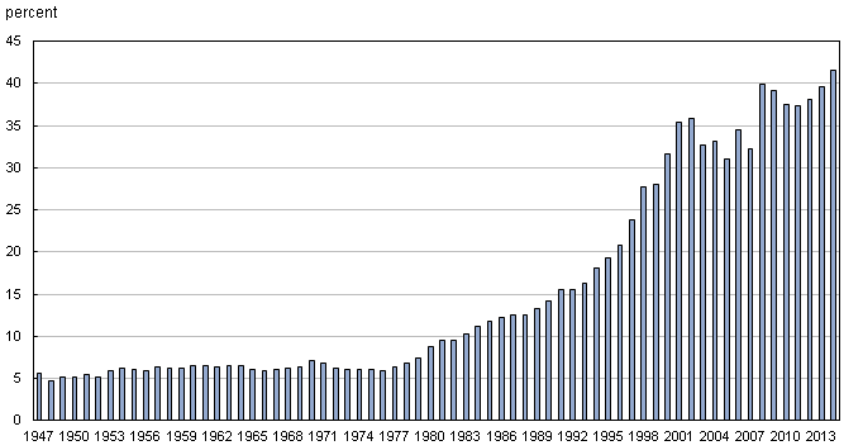
Outward Foreign Affiliate Statistics (FAS (Inward Foreign Affiliates Statistics)) that describe the activities as well as financial positions of Canadian majority-owned foreign affiliates (MOFAS) can shed light on some of these issues by going beyond the traditional realm of cross-border foreign investment statistics to articulate the activities and financial positions of Canadian enterprises that operate abroad. As an extension of statistics on foreign direct investment they can be seen as providing additional insight of the effect on economic agents in national economies in terms of earnings, productivity, employment, trade and foreign exposures resulting from an increasingly inter-connected and integrated global economy.

This paper presents some data development work on the expansion of the outward FAS (Inward Foreign Affiliates Statistics) program at Statistics Canada, the considerations and strategy for improvement, and provides a first look at the expanded details in the form of provisional estimates for reference year 2012.

1. Introduction

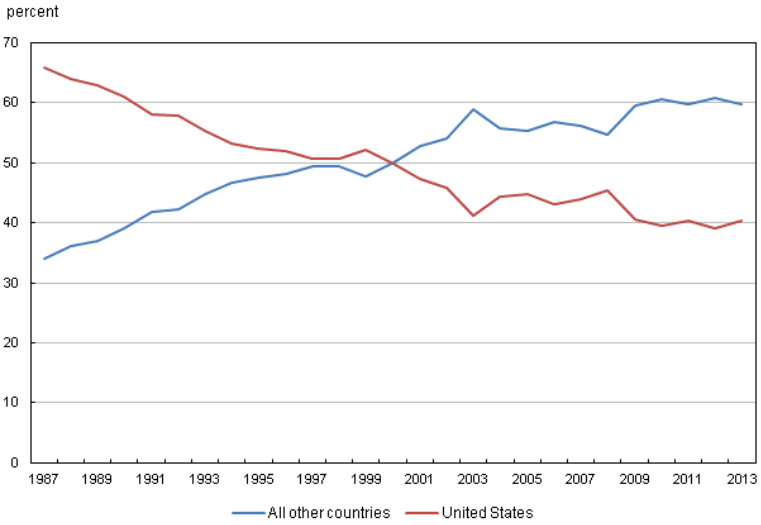
Canadian companies are increasingly engaged in the global economy as evidenced by the rapid growth of Canadian direct investment abroad over the past thirty years (Chart 1). At the same time, Canadian companies have also been investing in new markets, reducing their traditional dependence on the United States (Chart 2).

Chart 1
Canadian direct investment abroad at book value as percentage of GDP



Source: Statistics Canada.
Data for 1947 to 1986, Table 376-0037.
Data for 1947 to 1980, Table 380-0501.
Data for 1987 to 2014, Table 376-0051.
Data for 1981 to 2014, Table 380-0064.

Chart 2
U.S. and non-U.S. share of Canadian direct investment abroad



Source: Statistics Canada. Table 376-0051

As Canadian businesses expand their activities across national borders through foreign direct investment, this has led to a number of policy related challenges on issues such as outsourcing jobs, competitiveness and export performance and how these relate to foreign affiliate sales. Outward foreign affiliate statistics can shed light on these issues by going beyond the traditional realm of cross-border foreign investment statistics to articulate the activities and financial positions of Canadian majority-owned foreign affiliates.

While Statistics Canada's foreign direct investment program has a long history with data series available as far back as the 1920s, it was only in more recent times that information began to be collected on the activities of Canadian MOFAs (majority-owned foreign affiliates). In 1999, the survey of Canadian direct investment abroad was expanded to collect selected information on the operations of these affiliates. Since 2000 employment and sales data for Canadian MOFAs (majority-owned foreign affiliates) have been released on an annual basis with limited geographical and industry detail.[1]

With 15 years having passed since the introduction of the outward FAS (Inward Foreign Affiliates Statistics) program, there is a growing need to provide more detailed data on MOFAs (majority-owned foreign affiliates) in order to reflect the growing demands from key users. The project to expand the outward FAS (Inward Foreign Affiliates Statistics) program is designed as a first step in expanding the scope of the program by providing more detailed geographical breakdowns, new sectoral detail as well as additional analytical variables.[2] This work also lays the groundwork for the future development and release of a broader set of data on the **Activities of Multi-National Enterprises** (AMNE).

2. Concepts and frameworks

Underlying the activities of foreign affiliates is the foreign direct investment (FDI) relationship. A conceptual framework for outward FAS (Inward Foreign Affiliates Statistics) that is grounded in FDI (foreign direct investment) assures (i) the relationship between these two datasets as well as (ii) the international comparability of outward FAS (Inward Foreign Affiliates Statistics) data.[3]

2.1. Some basics on foreign direct investment

The concept of Foreign Direct Investment is established by the Organisation for Economic Co-operation and Development Benchmark Definition of

Foreign Direct Investment, Fourth Edition (BDM4) as well as by the International Monetary Fund (IMF) Balance of Payments and International Investment Position Manual, Version Six (BPM6). Both international standards are harmonized with respect to FDI (foreign direct investment). In short, the Organisation for Economic Co-operation and Development (OECD) defines direct investment as "a category of cross-border investment made by a resident in one economy (the direct investor) with the objective of establishing a lasting interest in an enterprise (the direct investment enterprise) that is resident in an economy other than that of the direct investor. The "lasting interest" is evidenced when the direct investor owns at least 10% of the voting power of the direct investment enterprise."[4]

Statistics Canada's FDI (foreign direct investment) statistics present international investment flows and positions in accordance with the international standards noted above, covering all Canadian entities that are engaged in a direct investment relationship. FDI (foreign direct investment) measures are compiled with respect to transactions and positions with all foreign affiliates. These entities can be either a Canadian direct investor in a foreign direct investment enterprise, giving rise to **Canadian Direct Investment Abroad** (outward FDI (foreign direct investment)), or a Canadian direct investment enterprise of a foreign direct investor, giving rise to **Foreign Direct Investment in Canada** (inward FDI (foreign direct investment)). FDI (foreign direct investment) statistics include the more aggregated estimates in the quarterly balance of international payments,[5] the quarterly international investment position,[6] as well as the more detailed annual estimates in the annual foreign direct investment statistics.[7]

This paper on outward foreign affiliate statistics is based on direct investment enterprises (subsidiaries operating abroad) in relation to the **Canadian Direct Investment Abroad** estimates. Further, it ties more closely to the more detailed annual FDI (foreign direct investment) dataset, with industrial composition and geographical breakdowns by country.

The standard for geographical distribution of FDI (foreign direct investment) stock and flow data is based on the immediate investment, which follows the actual flows of funds and corresponding inter-company claims. Canadian FDI (foreign direct investment) estimates are largely based on immediate investment, though there are plans to work on ultimate investment estimates which would provide information on the ultimate destination of investment or ultimate host country. The ultimate investment concept takes on increased importance in foreign affiliate statistics.

2.2. The essentials of foreign affiliate statistics

Foreign Affiliate Statistics are referenced in the OECD's BD4, the OECD Manual on Globalization Indicators, as well as in the IMF's BPM6. FAS (Inward Foreign Affiliates Statistics) are generally considered as "statistics describing the overall activity of foreign affiliates" where a foreign affiliate is an enterprise resident in the compiling country over which an institutional unit not resident in the compiling country has control or an enterprise not resident in the compiling country over which an institutional unit resident in the compiling country has control".[8]

The outward FAS (Inward Foreign Affiliates Statistics) statistics are a subset of the outward FDI (foreign direct investment) frame, focusing on the threshold where Canadian majority ownership is established. The ownership of more than 50% of the voting shares as defined by FDI (foreign direct investment) concepts is used internationally to define the FAS (Inward Foreign Affiliates Statistics) universe of enterprises. This represents instances where Canadian firms have control over their foreign subsidiaries.[9] As a result, FAS (Inward Foreign Affiliates Statistics) variables, such as sales and employment, are attributed in their entirety to a single country and are not split by share ownership. For example, if a foreign entity is 51% owned by Canada, 100% of the sales and employment are attributed to Canada regardless of who owns the other 49%. This approach eliminates the possibility of double counting by countries owning a minority share of an affiliate.

The international recommendations for FAS (Inward Foreign Affiliates Statistics) estimates are that they be based on an ultimate investment basis. Following international standards, Canada largely compiles its FDI (foreign direct investment) statistics according to the immediate host or investing country. However, when investing abroad, it is common for multinational enterprises to set up intermediate or 'holding' companies to act as conduits for that investment to a third country. As a result, outward FDI (foreign direct investment) statistics compiled according to the immediate counterpart country do not always present a complete picture of the nature of cross-border investment, making it difficult to properly assess the economic impact of this investment. At present, outward FAS (Inward Foreign Affiliates Statistics) statistics for Canada are largely compiled on an immediate host country basis. This is an area that requires further research and data development.

The measurement of the operations of Canadian MOFAs (majority-owned foreign affiliates), such as a Canadian manufacturing enterprise that sets up a foreign subsidiary via direct investment, forms the basis of outward FAS (Inward Foreign Affiliates Statistics). The activities of the foreign subsidiary contribute to the earnings of the Canadian parent and thus to Canadian national income. At the same time, the foreign subsidiary's activities contribute to the gross domestic product of, as well as to employment in, the foreign economy. This relationship between the home economy of the parent and the host economy of the subsidiary gives rise to questions related to things such as performance (revenues), productivity, export-intensity, value added trade, specialization and global production measures, job creation, financial stability, etc.

3. Methodology

Statistics Canada currently collects outward FAS (Inward Foreign Affiliates Statistics) data within the framework of its annual outward foreign direct investment survey. Enterprises that receive the survey are asked to report data on each of their majority-owned affiliates and branches, including employment, sales or gross operating revenue, total assets and liabilities, sales by destination and fixed assets as a percentage of total assets. Data are compiled and published for sales or gross operating revenue and employment with separate tables for country or region and industry information.

For reference year 2013, the sample comprised approximately 1,300 enterprises. Prior to reference year 2011, the survey was a mail-out, mail-back questionnaire. In 2011, Statistics Canada introduced an electronic version of the questionnaire which was sent to selected respondents. The frame for this is built using a combination of historical data, information from tax schedules that help to identify Canadian enterprises with foreign operations as well as internal research that monitors all significant mergers and acquisitions.

Following the end of the collection period, the FAS (Inward Foreign Affiliates Statistics) estimates at the regional and industry level are reviewed and any significant changes are investigated and, where appropriate, adjusting corrections are made to the raw data. In addition, various edits with respect to large year-over-year changes in values, invalid country or North American Industry Classification System (NAICS) codes etc. are put in place and respondents are contacted to verify and correct the data. For some non-responding units that are deemed to be significant in terms of their overall contribution to the estimates (based on either previously reported data or publicly available information), FAS (Inward Foreign Affiliates Statistics) data is researched on a case by case basis and estimated largely from information contained in their annual reports, financial statements or websites.[10]

Once the microdata have been reviewed, an input file with the raw data is sent to methodology in order to generate aggregate estimates by region and industry. The estimation process examines the relationship between foreign direct investment, sales and employment to impute the missing values. If all three variables for a given record contain missing information, then that unit is considered to be a non-respondent. In this case, neither sales nor employment are imputed, but instead a re-weighting takes place in order to account for this unit in the estimates. Once the imputation process is complete, methodologists run a Generalized Estimation System (GES) to obtain estimates by domain of interest. The current standard practice is to run the estimates for the current and previous year.

A final macro data review is undertaken to ensure all the data trends and movements are in-line with those of the raw data as well as general foreign investment trends, partner-country data, etc.

4. Expanding outward Foreign Affiliate Statistics

The plan is to expand outward FAS (Inward Foreign Affiliates Statistics) published data from the current two countries and three regions to cover the top twenty or so countries, which account for around 85% of total outward FAS (Inward Foreign Affiliates Statistics) sales and employment.

In addition to expanding the amount of country detail, the expanded estimates will also, for the first time, cover the operations of affiliates in the depository credit intermediation industry (NAICS 5221) which, for operational reasons, have traditionally been excluded from the published FAS (Inward Foreign Affiliates Statistics) estimates.[11]

Another aspect of the expanded statistics is the publication of additional variables, starting with total assets with the aim to eventually add other variables such as total liabilities, destination of sales, etc. The following is an ideal classification of FAS (Inward Foreign Affiliates Statistics) variables[12] that this agency is working towards:

1. *Characteristics of MOFAs (majority-owned foreign affiliates)* – number of firms, size of firms, industry, country of immediate and ultimate investors;
2. *Activities of MOFAs (majority-owned foreign affiliates)* – sales (domestic and foreign, affiliated and non-affiliated trade), employment, etc.;
3. *Capital controlled or exposures of MOFAs (majority-owned foreign affiliates)* – non-financial assets, total assets, liabilities, etc.; and
4. *Performance of MOFAs (majority-owned foreign affiliates)* – revenues, profits, value added, productivity (return to capital), etc.

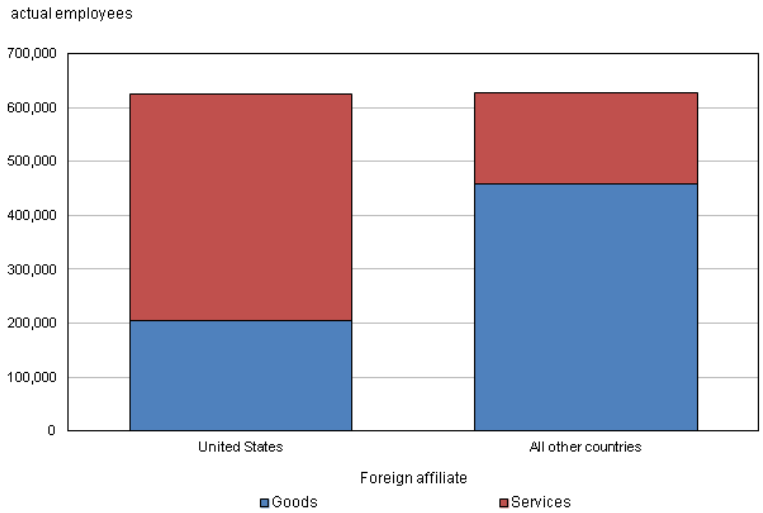
4.1. Expanded outward FAS (Inward Foreign Affiliates Statistics) – provisional results for reference year 2012[13]

In 2012, Canadian firms controlled approximately 7,000 majority-owned foreign affiliates employing 1.25 million staff worldwide and generated global sales of $519 billion. This activity was fairly concentrated, with the top 100 affiliates accounting for around 60% of sales. Foreign affiliate sales could be further disaggregated between those made in the host country of the foreign affiliate and export sales. In 2012, approximately 77% was sales in the domestic economy of the affiliates and 23% was exported to other countries. This suggests that the foreign affiliates of Canadian enterprises are established primarily to service the domestic market where the affiliate is located.

4.2. Total sales and employment by major country

The United States remains the primary destination for Canadian foreign investment. As of 2012, half of all of the employees working at Canadian majority-owned foreign affiliates were located in the United States, with the majority of these working in the service sector. This was in contrast to the rest of the world, where most employees of Canadian majority-owned foreign affiliates were employed in the goods sector (primarily mining and manufacturing) (Chart 3).

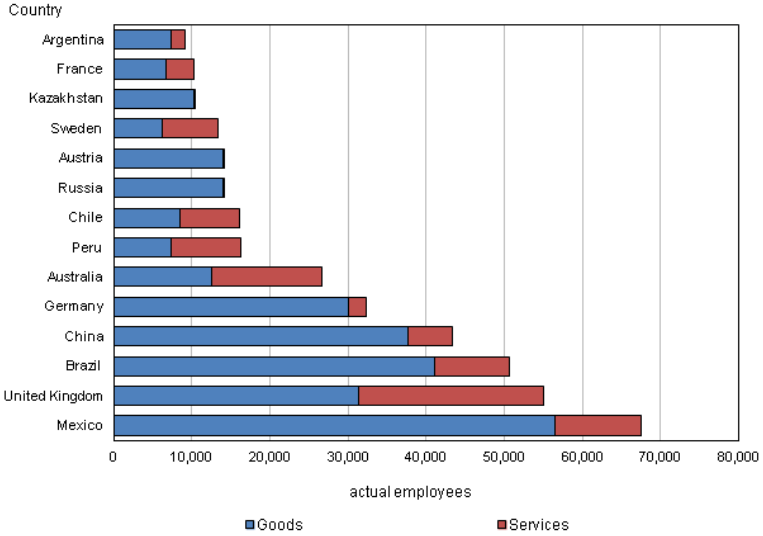
Chart 3
Foreign affiliate employment, 2012



Source: Statistics Canada

While Canadian firms have established foreign affiliates in over 100 countries, foreign affiliate activity in most of these countries is still fairly limited. As of 2012, only a dozen or so countries had more than 10,000 employees working for Canadian-owned foreign affiliates, the most significant of which were Mexico, the United Kingdom, Brazil, China, Germany and Australia (Chart 4). With the exception of the United Kingdom and Australia, where employment was fairly evenly divided between the service and goods sectors, employment in all other major countries was heavily concentrated in the goods sector, most notably in manufacturing and mining.

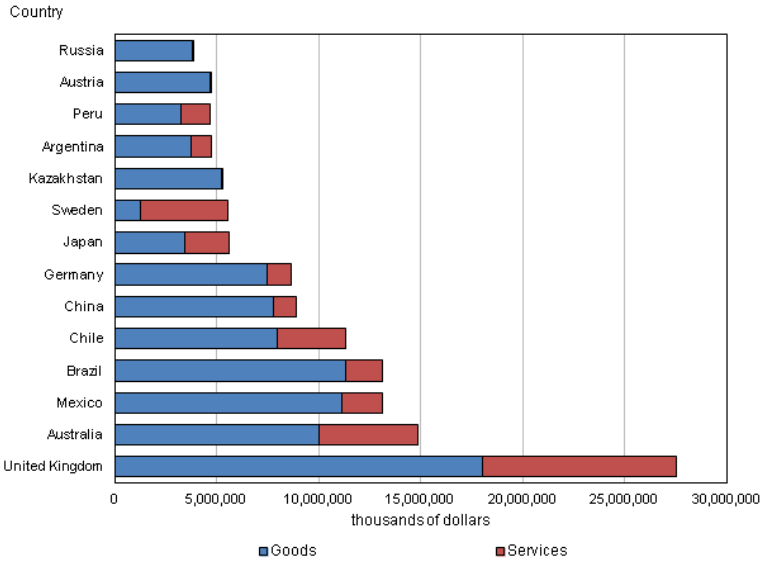
Chart 4
Foreign affiliate employment for selected major countries, excluding U.S., 2012



Source: Statistics Canada

The sales data paints a similar picture, with activity in the United States focused on the service sector and activity in the rest of the world mostly in the goods sector. Outside of the United States, only five countries had total Canadian-owned foreign affiliate sales over 10 billion a year, namely the United Kingdom, Australia, Mexico, Brazil and Chile. (Chart 5).

Chart 5
Foreign affiliates sales for selected major countries, excluding U.S., 2012



Source: Statistics Canada

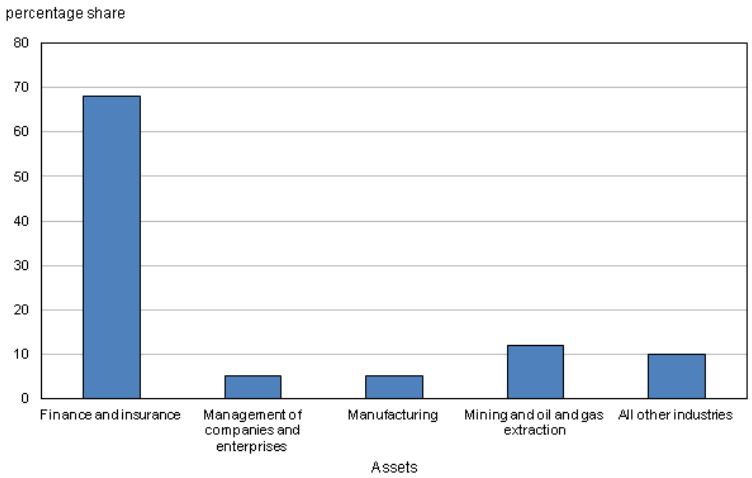
4.3. Banking sector sales and employment

Provisional data for Canadian banking operations abroad[14] show they employed around 69,000 employees as of 2012 and generated sales of 17 billion dollars. The United States was the primary destination for investment in the banking sector with employment of just under 40,000 and sales of 9 billion dollars. With the inclusion of banking data, overall employment of Canadian majority-owned foreign affiliates in the finance and insurance sector doubled to around 145,000, with total sales in the sector rising to approximately 85 billion dollars.

4.4. Total assets by industry

Total assets of Canadian majority-owned foreign affiliates were $2.8 trillion dollars in 2012. These assets were heavily concentrated in the finance and insurance sector, which accounted for around 68% of total assets, with the mining and oil and gas sector having the next largest share with 12% and the management and manufacturing sectors each accounting for another 5% (Chart 6).

Chart 6
Industry share of foreign affiliate assets, 2012



Source: Statistics Canada

At the same time, Canadian firms were exposed to the liabilities of their majority-owned foreign affiliates to the tune of $1.95 trillion dollars at the end of 2012.

Nevertheless, Canadian parent enterprises benefitted from $41.9 billion of their majority-owned foreign firms income in 2012. Roughly 32% of this was remitted income in the form of dividends, while the balance was un-remitted income representing a claim on those earnings in the amount of the share of ownership.

5. Ongoing and future work

5.1. Release of expanded outward FAS (Inward Foreign Affiliates Statistics) statistics

The expanded geographical and industry detail of outward FAS (Inward Foreign Affiliates Statistics) is planned for official release in December 2015. Research is currently ongoing to determine the level of detail that will be available and will be dependent on a number of factors, the most important of which will be data quality and confidentiality provisions.

The methodology applied to the 2012 data could theoretically be applied to past years' data in order to generate a time series for selected details. The success of this process will depend on the results of an in-depth data quality analysis of data from previous years. Considerations must be made in terms of survey operations, methodology coherence and other factors in order to determine whether past data can reliably be compared to the 2012 data as well as subsequent years' data.

5.2. Challenges and mitigation strategies of expanding outward FAS (Inward Foreign Affiliates Statistics)

There are at least three challenges in expanding the outward FAS (Inward Foreign Affiliates Statistics) program. These are (i) the need for a largely common international framework to ensure relevance and comparability of statistics; (ii) the issue of balancing the increased reporting demands on

respondents against the need for new data; and (iii) confidentiality issues.

An example of the first challenge is the treatment of foreign affiliates controlled by Canadian enterprise which are in turn under the control of a foreign parent company. The current practice of Statistics Canada is to compile data for all foreign affiliates controlled by Canadian enterprises, including those enterprises that may be ultimately controlled by another country. In 2012, Canadian enterprises that were ultimately controlled by foreign parents accounted for approximately 10 to 15% of total MOFA sales and employment.

With respect to the issue of response burden, Canada currently uses a survey process to collect FAS (Inward Foreign Affiliates Statistics) statistics; and, in this context, response burden is an important consideration when deciding whether or not to request additional FAS (Inward Foreign Affiliates Statistics) data. To help mitigate this challenge one strategy would be to make use of counterparty country data to produce additional details, but this is limited by the fact that there is currently little if any published FAS (Inward Foreign Affiliates Statistics) data available outside of the United States and Europe. Another option is to reduce response burden and increase reliance on statistical methodology by only collecting data for foreign affiliates above certain sales/employment thresholds or reducing the sample size to cover only the largest FDI (foreign direct investment) units.

The issue of confidentiality also has to be taken into account when discussing the expansion of the outward FAS (Inward Foreign Affiliates Statistics) program. While the country totals for most major countries can likely be released, industry detail by country presents more of a confidentiality challenge. This also applies to new variables, and the inclusion of additional variables will be dependent on the results of further investigation.

5.3. Future work: FAS (Inward Foreign Affiliates Statistics) in a broader conceptual framework

Foreign affiliate statistics represent part of a work in progress. Over the coming years, it is intended to continue work in the expansion of FAS (Inward Foreign Affiliates Statistics) variables, while ensuring their quality and conforming to confidentiality restrictions.

In addition, FAS (Inward Foreign Affiliates Statistics) statistics are part of, and lay the groundwork for, the development of a broader set of **Activities of Multi-National Enterprises** (AMNE) statistics. AMNE (Activities of Multi-National Enterprises) statistics are comprised of similar variables to FAS (Inward Foreign Affiliates Statistics), but “reflect the overall operations of MNEs (Multi-National Enterprises)” operating in the domestic economy, “whether or not financed by the direct investor.”[15]

In terms of scope, AMNE (Activities of Multi-National Enterprises) statistics cover the enterprises studied by both inward and outward FAS (Inward Foreign Affiliates Statistics) programs. AMNE (Activities of Multi-National Enterprises) output could also include a presentation of Canadian MNEs (Multi-National Enterprises) consolidated with respect to their foreign operations. The construction of these statistics is currently being planned as the next phase of the FAS (Inward Foreign Affiliates Statistics) work. AMNE (Activities of Multi-National Enterprises) can be combined with the trade by enterprise characteristics databases (indeed the current work has established that link), and contrasted with economy-wide totals by industry. The need to understand internationalization of operations and the related performance of foreign affiliates mean that FAS (Inward Foreign Affiliates Statistics) and the broader AMNE (Activities of Multi-National Enterprises) statistics are important analytical tools.[16]

To this end, Statistics Canada is working on an overall enterprise globalization framework built from microdata. Such a framework can provide a more comprehensive depiction of Canada’s engagement in the global economy.

6. Conclusions

It is a well established fact that Canada is an open economy, as demonstrated by the share of trade in gross domestic product, the trend toward stronger Canadian direct investment abroad since the mid-1990s as well as the reliance on foreign direct investment in Canada. Direct investment activity tends to alter production functions, and global production has become increasingly fragmented across economies. This paper has shed new insight on some of the impacts Canadian foreign direct investment abroad.

The main conclusion to be drawn from the estimates presented in this paper is that Canadian majority-owned foreign affiliates are an important component of Canadian enterprises’ overall business with respect to employment, sales and ownership of assets. Future developmental work will add to the analytical capacity of the outward FAS (Inward Foreign Affiliates Statistics) estimates.

Notes

1 Table 376-0060 – Foreign affiliate trade statistics, North American Industry Classification System (NAICS), Table 376-0061 – Foreign affiliate trade statistics, Canadian operations abroad, by countries.

2 This work is closely related to estimates of inward FAS (Inward Foreign Affiliates Statistics), described in a separate paper.

3 The point on international comparability cannot be understated. In the majority of countries, outward FAS (Inward Foreign Affiliates Statistics) estimates (and any underlying micro-data research) are based on the foreign direct investment concepts and frame. In the same fashion that Canada's trade, and FDI (foreign direct investment) statistics are internationally comparable, so is it desirable for FAS (Inward Foreign Affiliates Statistics) estimates.

4 *OECD Benchmark Definition of Foreign Direct Investment, Fourth Edition,* p. 17.

5 Tables 376-0102, 376-0104, 376-0121, 376-0122, 376-0012, 376-0013.

6 Tables 376-0141, 376-0142.

7 Tables 376-0051, 376-0052.

8 *Recommendations Manual on the Production of Foreign Affiliates Statistics,* p. 13.

9 The FDI (foreign direct investment) concept of influence includes ownership of 10 to 50% of the voting shares, but this is outside of the FAS (Inward Foreign Affiliates Statistics) frame.

10 One reason for partial or non-response is that the level of detail requested on the survey may not always be readily available through an enterprise's standard internal financial reports. Therefore, in order to complete the survey a respondent may need to contact their foreign affiliates directly, which for companies with significant overseas operations can lead to a significant response burden.

11 This was in line with the United States' Bureau of Economic Analysis which, prior to 2009, excluded banking affiliate data from its FAS (Inward Foreign Affiliates Statistics) series.

12 These apply to both outward and inward FAS (Inward Foreign Affiliates Statistics).

13 The following results are provisional and subject to revision.

14 Another area where FAS (Inward Foreign Affiliates Statistics) is being expanded is in the finance and insurance sector. Due to operational considerations, banking data (specifically NAICS 5221 - depository credit intermediation) has traditionally been excluded from FAS (Inward Foreign Affiliates Statistics) data, but going forward the plan is to include the activities of Canadian foreign banking affiliates as part of the total for the finance and insurance sector.

15 *Measuring Globalization: OECD Handbook on Economic Globalization Indicators,* p. 76.

16 *Manual on Statistics of International Trade in Services,* p. 91.