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International Data Sharing Agreements

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Summary

Data sharing agreements between domestic organizations are an effective way of reducing respondent burden and increasing efficiency. While the benefits are numerous, challenges in establishing and maintaining these agreements do exist, as the individual organizations are often constrained by their particular legislative, policy and operational requirements. These challenges multiply when cross-territory data sharing agreements are considered. The increasing interconnectedness of the global economy has led statistical organizations to explore entering into cross territory data sharing agreements where they would be able to connect the dots found in global value chains, international financial transactions and complex multi-territory organizational structures.

Since 1990, Statistics Canada and the United States Census Bureau have shared customs import transactions and used the data to compile official export statistics. This paper outlines this agreement and highlights the infrastructure needed to establish and maintain cross-territory data sharing agreements.



I. Background

1. In 1987, Statistics Canada, the customs arm of the Canada Revenue Agency, the United States Census Bureau (USCB) and the United States Customs Service began discussions on the possibility of entering into an international data sharing agreement by which import statistics between the countries would be exchanged. These import statistics would then be used in the reporting of each country's exports to each other. In that same year, a memorandum of understanding was signed by the four parties noted above and by 1990 the data exchange was in effect. This paper discusses the Memorandum of Understanding on the Exchange of Import Data between Canada and the United States and presents the factors that have contributed to its success over the last 25 years. It is hoped that this paper stimulates international discussion concerning cross-territory data sharing agreements, leading to a greater use of these types of agreements, given the increasingly global nature of the economy.

II. Structure of the Agreement

2. The strength of the Memorandum of Understanding on the Exchange of Import Data between Canada and the United States lies in its simplicity. It is five pages in length and contains five articles and two annexes. The memorandum of understanding (MOU) is structured as follows:

3. Preamble

Article 1 – Information Sharing

Article 2 – Problem Resolution and Monitoring

Article 3 – Operational Modifications

Article 4 – Costs

Article 5 – Entry into Force, Modification and Termination

4. In addition to the above noted articles, the MOU contains Annex 1, outlining the data development work each partner needed to undertake before the MOU could take effect; and Annex 2, which outlines the manner and frequency by which the data are exchanged.

A. Preamble

5. Data sharing agreements between domestic organizations are an effective way to reduce respondent burden and increase efficiency. While the benefits are numerous, challenges in establishing and maintaining these agreements do exist, as the individual organizations are often constrained by their particular legislative, policy and operational requirements. These challenges multiply when cross-territory data sharing agreements are considered.

6. For a data sharing agreement to be successfully implemented there needs to be clear motivation—an overriding benefit that is greater than the cost of developing, maintaining and administering the agreement.

7. The Memorandum of Understanding on the Exchange of Import Data between Canada and the United States includes these motivations within the agreement. Specifically, it references the facts that:

- There is a significant volume of trade between Canada and the United States: *“Considering that Canada and the United States account for the largest volume of international trade in goods of any two countries,”*
- Trade agreements, trade disputes and trade negotiations rely on accurate measures of trade: *“Considering that the management of bilateral trade relations between Canada and the United States in particular requires the accurate and complete collection and recording of statistics reflecting the trade flows between them, and that the records kept by both countries confirm rather than contradict each other”;*
- Import statistics are more accurate than export statistics: *“Recognizing that import statistics are a more accurate measure of trade flows than the counterpart export statistics and that the exchange of such statistics will serve their respective interests”;* and,
- Harmonized concepts, classifications and processing bring about greater symmetry: *“Desiring to take advantage of their geographic proximity, and the introduction of a common method of describing and classifying goods in international trade.”*

8. The first factor that has contributed to the success of the MOU is the fact that the motivation for the agreement was incorporated into the agreement itself. It forms a part of the preamble and serves as the collective international memory as to why the agreement was initially developed. Each time the MOU is reviewed, it functions as a ‘test’ of whether the original motivators still exist.

B. Article 1 - Information Sharing

9. Article 1 of the MOU identifies the information that will be exchanged between the parties to the MOU. It contains four sub-sections. The first sub-section deals with the data points to be exchanged, the second sub-section details the use of the data, the third sub-section identifies data development work that is required before the MOU can take effect, and the fourth sub-section outlines the delivery mechanism.

10. The article is purposely vague and includes the general statement that:

“Information exchanged pursuant to this Memorandum of Understanding shall include information regarding importation of goods collected by the respective Customs services that exists or may exist in data captured form and that is submitted to the respective statistical agencies of the Parties.”

11. This somewhat vague statement is followed by a more restrictive which places specific restrictions on the information which cannot be shared:

“The information described in the preceding sentence does not include, however, data elements which identify individuals, businesses, or corporations to whom the information relates.”

12. At first glance the agreement seems contradictory in that it is both vague and prescriptive in the same section. This intentionally vague/prescriptive nature is an indication of where the parties are willing to accept risk and where they are not willing to accept risk. The parties are willing to have a more or less carte-blanche exchange, of information provided that the data does not include information which identifies individuals, businesses or corporations (i.e. the US cannot give Canada information about US firms and Canada cannot give the US information about Canadian firms). It should be noted that the countries are allowed to share information collected about individuals and corporations in the partner country. For example, the U.S. can collect information about

Canadian businesses and provide Statistics Canada and the Canada Border Service Agency with this information.

13. Another important element of Article 1 reflects the permitted use of the information that is exchanged between the parties.

“The information exchanged is to be used by the receiving party exclusively for statistical purposes, subject to the laws and regulations of the supplying party regarding the dissemination of confidential business information.”

14. This is important in two respects. The fact that it can only be used for statistical purposes is not surprising, but what may be surprising is that it cannot be used for anything else, such as monitoring, regulatory or enforcement purposes. This is an important restriction. The second, more substantial item is that each partner agrees to ‘adopt’ the laws and regulations of the supplying party regarding the dissemination of confidential business information. This means that the United States adheres to Canadian laws and regulations and Canada respects American laws and regulations regarding the dissemination of confidential business information.

15. The agreement not only directs the partners to provide existing information, it also binds them to develop additional information.

“The Parties agree that those data elements not presently available from import entry documents are described in Annex I to this Memorandum of Understanding.”

16. This clause was incorporated for two reasons. First, it ensured that the partners were no worse off (with respect to data holdings and data elements) once the agreement took effect. Secondly, an important part of any data sharing agreement is the harmonizing of concepts, methods and data elements. This sub-article ensured that once all changes were made, both Canadian imports and American imports were harmonized to as great an extent as possible with respect to classification, code sets and data elements.

17. This explains why, while the agreement was completed in 1987 it was not implemented until 1990. Annex 1 of the agreement outlines the changes each country had to implement prior to the enforcement of the agreement, as per the MOU:

“Requirements of Canadian Export Statistics (changed to be made by Canada)

- *Identification of Canadian vendors.*
- *Identification of the Province of Origin of Canadian exports.*
- *Gross shipping weight of merchandise imported from Canada regardless of mode of transport.*
- *Estimated freight charges to Canadian point of exit or to final destination.*
- *Container information for all shipments.”*

“Requirements of United States’ Export Statistics (changes to be made by the US)

- *U.S. port of export ----- The crossing point for rail and truck shipments. For air and vessel shipments, the last port of call before carrier left U.S.*
- *Air carrier/vessel manifest number or name.*
- *Identification of State of Origin of U.S. exports.*
- *Shipping weight for air and vessel shipments.*
- *Relationship of the parties to the transaction - Related/Non-related.*
- *Foreign trade zone number for exports out of zones.*

- *Identification of U.S. vendor -- Name and Address (or ZIP Code) and/or identification number.*
- *Estimated freight charges to U.S. point of exit or final destination.*
- *Date of exportation of merchandise.”*

18. Article 1 concludes by stipulating the manner and frequency which the information will be exchanged.

“The Parties agree that information is to be exchanged in a manner and at a frequency mutually agreed upon by the Parties as described in Annex II to this Memorandum of Understanding.”

19. The sub-article is somewhat vague—reserving the detail for Annex 2—which provides significant specifications with respect to data elements, record layouts, the medium to transmit the data and the parties that can receive the data.

20. The second factor that has contributed to the success of the of the MOU is that it clearly identifies the uses of the information, what can be shared, how the information is exchanged and how common classifications and concepts will be achieved and maintained.

B. Article 2 - Problem Resolution and Monitoring

21. The second article of the MOU deals with problem resolution and monitoring. Similar to other parts of the agreement, this wording is purposely vague.

“The Parties will each designate an official to be part of a committee of four persons, comprising one representative from each party, to monitor the administration and implementation of this Memorandum of Understanding. The Committee will resolve technical problems that may arise and will report to the Parties on the activities of this Memorandum of Understanding. The Committee will meet at least annually, or more frequently if necessary. The office of chairperson will rotate annually among these four Committee members.”

22. The MOU calls for the establishment of a committee of four persons who will be responsible for the overall implementation and monitoring of the MOU. This committee is empowered to handle the day-to-day operations and any technical problems that may arise. This section does not outline how unresolved problems are to be dealt with. It is implied that if there are items that cannot be resolved at the committee level they will be brought forward to the signatories for resolution. It is important to note that this committee has been operating since 1990 and has yet to bring an unresolved issue forward to the signatories of the MOU.

C. Article 3 - Operational Modifications

23. From time to time the production systems, processes and timelines for any one of the participants may change—either on a permanent basis or on a temporary basis. The MOU includes the following statement to deal with these instances:

“The Committee members will provide to each other reasonable prior notification of any intended changes regarding the production and availability of the data exchanged between the two countries.”

24. The intent of this article is to ensure that consultation takes place; with changes being implemented only after all parties have had sufficient time to adapt. A recent example of the use of this article was when the USCB was requested to increase the timeliness of the

release of their international merchandise trade estimates, from roughly 45 days to 35 days following the reference period. The implementation of this change had to be coordinated with both Statistics Canada and the Canada Border Service Agency (CBSA). Not only did Statistics Canada and the CBSA need to ensure that the USCB received the data in time to meet the new timeline, but Statistics Canada also had to commit to moving up its release date, since the two agencies have an operational constraint requiring both parties to release their monthly international merchandise trade statistical release at the same time.

25. In addition to operational modifications, the MOU also directs the parties to put in place certain controls to ensure the accuracy of the data being exchanged. The Annex to the MOU outlines a number of control totals that Statistics Canada must provide to the USCB in the transmission of Canadian data to the United States, and that the USCB needs to provide to Statistics Canada on the transmission of the American data to Canada. These include:

CANADA TO U.S.

- *Total number and value of transactions by entry type.*
- *Total number and value of transactions by clearance port.*
- *Total number and value of transactions by entry month.*
- *Total number of amendments processed during the reference month and their associated values by two-digit Harmonized System categories.*

U.S. TO CANADA

- *Total number and value of transactions included in general imports from Canada and consumption imports from Canada.*
- *Total number and value of transactions by date of export month for each import type.*
- *Total value of imports from Canada by two-digit Harmonized System category.*
- *Total number of amendments processed during the reference month and their associated values by two-digit Harmonized System categories.*

26. Each time Statistics Canada receives the import data, tabulations are generated and the results of these tabulations are compared to the control total supplied by the USCB. The same procedure is undertaken by the USCB when it receives data from Statistics Canada.

27. The third significant factor contributing to the success of the MOU is that the agreement stresses the importance of consultation when one of the partners is considering a change to its program.

28. A fourth factor contributing to the success is that quality control measures are embedded into the MOU, which ensures data accuracy. One of the risks associated with international data sharing agreements is that they add a layer of complexity, and with every layer of complexity comes an associated data quality risk. This MOU recognizes this and addresses it by stipulating that each partner engage in certain quality control measures.

D. Article 4 – Costs

29. An important part of the MOU relates to the cost of implementing, administering and monitoring the agreement. Given that, as already determined, the benefits outweigh the costs of the agreement, it only stands to reason that each agency absorbs all expenses related to the agreement.

“All expenses incurred in the provision of import data under this Memorandum of Understanding or its annexes will be paid by the country supplying such data.”

30. The fifth success factor is that the partners not only agree to the implementation costs but also the ongoing costs associated with administering the agreement. This is important because at the time the agreement was signed, the on-going costs were unknown—in some respect each agency was writing a blank cheque to the other, indicating that they were prepared to make substantial investments to ensure the agreement remains in effect.

E. Article 5 - Entry into Force, Modification and Termination

31. The final article of the MOU lays out the framework for modifying or terminating the agreement. This section notes that any change must be on a consensus basis and that termination is possible but each party must be given at least one year to adapt their systems and processes to deal with any change.

“This Memorandum of Understanding shall enter into force upon signature by authorized representatives of Statistics Canada; the Department of National Revenue, Canada Customs and Excise; the Bureau of the Census of the United States, Department of Commerce; and the U.S. Customs Service of the United States, Department of Treasury.

Any Parties to this Memorandum of Understanding may at any time propose modifications to it; such modifications as are adopted shall be in writing signed by all Parties. The respective Parties of each country may withdraw from this Memorandum of Understanding one year after notifying in writing to each of the other Parties of the other country of such intent.”

III. Some challenges over its history

32. Throughout the 25 year history of the MOU, the partners have faced and overcome a host of challenges. The majority of the challenges pertained to operational matters that were generally outside of the control of the various partners.

33. In both 1996 and 2013, the United States government shut down operations for short periods, with staff from all departments, including the USCB, locked out of their workplace. USCB staff were not able to transmit the import data to Canada, nor were they available to receive transmissions from Canada. In both cases, while the lockout was short-lived, both the USCB and Statistics Canada had to delay their release of the international merchandise trade statistics.

34. As noted earlier, another challenge was the decision by the United States government to increase the timeliness of their international merchandise trade statistics program. Prior to January 1, 2013, these statistics were released with a 45 day lag. As of reference period January 1, 2013, the timeliness of the release was increased from 45 days to 35 days from the reference period. This was an operational challenge for Statistics Canada, since it had to adjust internal operations, not only with respect to the processing of exports to the U.S. but also the process of exports to non-American destinations and the processing of import transactions. Release schedules needed to be modified and revision policies revised.

35. The majority of the challenges over the years have been of an operational nature. Each time the agencies have been able to adjust and adapt to the situation. The overriding success factor was a highly collaborative approach, intensive consultations and a common understanding of the challenges.

IV. Possible Extensions

36. Both Canada and the United States have been well served by the Memorandum of Understanding on the Exchange of Import Data between Canada and the United States. Not only has the agreement enhanced the quality of the trade statistics and reduced respondent burden in each country, it has also resulted in a number of additional benefits.

37. One additional advantage is a general openness between Canada and the United States with respect to data confrontation and joint analysis. Each month, Statistics Canada and US Census Bureau highlight export transactions for review, which are then discussed by subject matter experts on both sides of the border. A second good example of an extension of this MOU is the bi-annual Canada-U.S. Balance of Payments reconciliation. Every second year, Statistics Canada and the Bureau of Economic Analysis meet to discuss and reconcile components of each country's Balance of Payments. This includes trade in services, investment flows and income flows. During these meetings both Statistics Canada and the Bureau of Economic Analysis are able to investigate – on site – discrepancies between the two sets of statistics. While these bilateral meetings do not constitute an exchange of the microdata used to compile official statistics, they represent another avenue for the exchange of information between national statistical offices.

38. Another example of where the MOU has provided a launch pad for future data exchange is in the area of foreign affiliate statistics. The United States Department of Commerce has asked Statistics Canada to look into the possibility of exchanging Canada and U.S. microdata pertaining to the operations of foreign affiliates in each country's economic territory. Not only would this result in an improvement of each country's outward foreign affiliate statistics program, it would also enhance the amount of detail available to each national statistical office.

39. A third example of where this work may be extended is in the area of regional supply-use tables. Recently, a proposal was put forward by the United States International Trade Commission to build a North American supply-use table to better analyze global value chains operating in the North American market. In order to strengthen the quality of these tables it would be beneficial to access certain suppressed or company level data. Memorandums of understanding are being established to facilitate this work.

40. A fourth example leveraging international statistical conferences to engage in data confrontation activities. A major step forward in this regard is the recently initiated efforts at the OECD to facilitate bilateral data confrontation as a supplement to the OECD Working Party on Trade in Goods (WPTGS) and Services at its March 2015 meeting. This lowers the cost of bilateral data confrontation and links it to ongoing data development work. This initiative was judged to be a success, and is intended to become a regular extension to the annual WPTGS meeting. In addition, the OECD Working Party on International Investment is considering a similar exercise.

V. Conclusion

41. The Memorandum of Understanding on the Exchange of Import Data between Canada and the United States has been a success and is entrenched in the programs of both Statistics Canada and the United States Census Bureau. This paper has provided an overview of the agreement and identified seven key factors that have made the MOU a success. These include:

- A clearly identified net benefit

- A willingness to harmonize concepts and data requirements (NAICS, NAPS, coordination of HS8 and HS10, transaction review protocols between subject matter experts, regular meetings and near-daily correspondence).
- A willingness to coordinate statistical programs
- A willingness for each partner to adapt
- A willingness to consult
- A willingness to implement quality control measures
- A willingness to incur costs

42. It is also clear that data sharing agreements like the Memorandum of Understanding on the Exchange of Import Data between Canada and the United States can be a launching pad for the establishment of additional data sharing work, improving the quality and relevance of official statistics.
