Twenty-First Meeting of the
IMF Committee on Balance of Payments Statistics

Allocation of Merchandise Trade Data to Partner Country:
Challenges Facing Canada

Prepared by Statistics Canada
Introduction

The Canadian Balance of Payments has for many years published data by counterparty regions for six regions – the United States, the United Kingdom, Japan, Other EU Countries, Other OECD Countries, and Other Countries1. There has been for some time demands to expand the number of regions for which at least some of the series within the BOP framework are published. In particular, users want trade data, both goods and services, for an expanded list of countries/regions including Mexico and the BRIC (Brazil, Russia, India and China). While there are some operational hurdles that must still be overcome to meet these demands, this paper will focus on some of the methodological and communication challenges that must be addressed before the publication of additional regional data.

Current Practice and Guidance

Merchandise trade data are published on a monthly basis by the International Trade Division of Statistics Canada. Data are released for thousands of commodities and a large number of countries. The export data are on a country of destination basis and the import data are based on country of origin basis2. These data are published at a much finer level of detail than the BOP data for merchandise trade. This release also includes aggregate data on a BOP basis.

The regional allocation of the merchandise trade data in the Canadian Balance of Payments is based on the country of destination of exports and the country of consignment for imports. This is documented in the notes in our BOP publication as follows:

Another instance of adjustment for ownership change lies with the allocation of country of import. Imports on a customs basis are allocated to the country of origin (this treatment was adopted in 1988 with the introduction of the international Harmonized Commodity Description and Coding System, or HS). For BOP purposes, however, the country of last shipment is believed to better reflect the notion of ownership change.

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1 These groupings were created when all EU members were also members of the OECD. Expansion of the EU has made these groupings strictly speaking undefinable. While this is recognized, a completely satisfactory solution must await redevelopment of some systems. This paper does not address this issue.

2 Merchandise import data for Canada are based on the Canadian Border Service Agency’s B3 form. For each transaction, the importer must indicate the country of origin of the product and the place of export (consignment).
This allocation is based on the recommendations in BPM5 and the BPM Compilation Guide, see references below:

**Balance of Payments Manual 1993**

Regional Allocation Principles

481. As for major components of the classifications noted in previous paragraphs, trade in goods generally shows—as a reflection of the change of ownership principle associated with coverage of this item—exports allocated to the region of residence of the new owner and imports allocated to the region of residence of the former owner.15

15 See the Guide for a full discussion of the allocation aspects of trade in goods—in particular those aspects related to country of shipment versus country of origin for imports and country shipped to versus country of ultimate destination for exports.

**Balance of payments compilation guide 1995.**

824. The guidelines state:

The system of attribution by country of origin is more in line with the present preoccupations in world trade, that is, the Generalized System of Preferences, the GATT multi fibers agreement, etc. However, virtually all customs documents now require that the country of consignment be given. Consequently, the following is recommended. In the case of imports, the country of origin should be recorded. However, the country of consignment should be collected as additional information. In the case of exports, the country of last known destination is recommended. It is not recommended that the country of attribution according to the concept of country of purchase and sale be collected.

825. The consignment/destination concept, which is a close proxy to the change-of-ownership principle preferred for the BOP, achieves a symmetry that the origin/consumption concept cannot. In fact, apart from transactions that involve merchanting and are recorded in goods, the concept of consignment/destination is the same as the change-of-ownership principle required for use in the BOP. This Guide recommends that the ITS compiler produce ITS on a consignment/destination basis and that the BOP compiler use these data to compile partner country statistics on goods.

The updated guidance in the March edition of BPM6 for data by partner country is found under the discussion of residency in Chapter 4, with additional guidance later for regional arrangements and is reproduced below:

**BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION MANUAL, Sixth Edition (BPM6)**

(DRAFT)

March 2008

**Goods**

4.141. In line with the change of ownership principle, the residence of the seller/purchaser of the good is the preferred concept for identification of the partner. In practice, available data may be based on the economy of origin,5 consignment, destination, or other criteria that differ from the economy of the seller/purchaser in some cases. In general, the economy of final destination (for
the partner to exports) is considered to be more likely to correspond with the party taking ownership of the goods. Similarly, the economy of origin (for the partner to imports) is considered to be more likely to correspond with the party conveying ownership of the goods. However, economy of origin, destination, and consignment can be misleading as to ownership in cases of merchanting and goods processed on a fee basis. In those cases, adjustments should be considered to accord with the change of ownership principle as much as possible.

5 Economy of origin is defined in *International Merchandise Trade Statistics: Concepts and Definitions* paragraph 139 as where the goods were wholly produced, or where there was “substantial transformation” in cases of production taking place in two or more economies.

**REGIONAL ARRANGEMENTS: CURRENCY UNIONS, ECONOMIC UNIONS, AND OTHER REGIONAL STATEMENTS**

A3.27 For the recording of goods in customs data, three concepts are usually used: the economy of origin, the economy of final destination, and the economy of consignment (see paragraph 4.141). The concepts of “economy of origin” (imports) and “economy of last destination” (exports) are generally acceptable approximations to the change of ownership principle. However, in the context of a CU or EcUn, where customs declarations are in many cases completed in a third economy (economy of consignment) that does not obtain itself ownership of the goods, double recording of “extra” trade flows is likely; first at the port of entry into the CU or EcUn, second at the economy of final destination. In these circumstances, a combination of the three concepts is necessary to arrive at a proper recording of both “extra” and “intra” union trade. Box A3.1 provides a numerical example.

A3.28 From a recording perspective, in CUs and EcUns that still have internal customs border, reliance on customs data, with economy of consignment data as supplementary, is feasible. In CUs and EcUns without national customs borders (the most likely situation), data on economy of origin, the economy of last known destination and the economy of consignment are required from reporters.

As can be seen from the references cited above, the guidance has moved from favouring the country of consignment to the country of origin for imports. Implementing the new guidance will cause significant changes in the partner country data for some of our key trading partners. It would be interesting to know if other countries face such a change in practice and how it might affect the data for those countries.

The UN Statistics Division reported to the Expert Group on International Merchandise Trade in December 2007 the results of a survey on country practices. There were 121 countries that participated in the survey. The presentation reported that 90% of the countries compile import data on the basis of the country of origin. At the same time 50% compiled imports on the basis of country of consignment.
Unfortunately, the presentation does not report on which basis was used in compiling the balance of payments data by partner country.

Even if Canada were to decide to retain its current methods for imports on a BOP basis, that is allocation by country of consignment, there will be a significant communications challenge in expanding the partner country data. This arises since the limited number of regions published in the Canadian BOP, has led to most bilateral trade analysis being conducted using the data from the merchandise trade program which as noted is based on imports by country of origin. Thus the impression that analysts have of our trade by partner country is not generally based on BOP merchandise trade data.

If we are going to start publishing additional BOP regional data series for merchandise trade, we need to investigate the impact this will have on the message we are sending about Canada’s trade position with these regions. This is particularly true for those regions from which we import significant amounts.

**Impacts for Selected Countries**

Differences exist in the country of origin and country of consignment for most countries but these differences are of relatively small consequence in many cases. The paper will first look at trade with the United States, Canada’s principal trading partner; Mexico, the third party to the North American Free Trade Agreement; and China, due to its rapid growth as a source of imports to Canada. Due to the special trade linkages between China and Hong Kong, data for Hong Kong are also included for completeness.

The United States is Canada’s largest trading partner for both exports and imports. The chart below which is based on data in Annex 1, shows two series for imports from the US – a series based on country of origin and one based on country of consignment. The line on the chart is the percentage difference between the two series.
The gap, which in 2007 was over $40 Billion, has grown from about 6% in 1990 to about 16%.

Imports of Mexican origin have increased in value by about 35% over the past 5 years but the proportion that arrives in Canada with consignment indicated as the United States has remained relatively steady at just over 50%.

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Imports of Chinese origin on the other hand have more than doubled in the past 5 years and while the share of these goods that are shipped from China has grown dramatically the value of goods with US as place of consignment also continues to grow.
Imports from Hong Kong are much smaller in value and the trend is quite different with total imports by origin having declined over the period by some 46%. The imports of Honk Kong origin also with consignment from Hong Kong have dropped by half over this period. Thus imports of Hong Kong origin passing via the US or other countries have been falling more slowly.

While these charts clearly demonstrate the communications challenge if we are to produce BOP merchandise trade by partner country based on country of consignment, the primary question is: Which basis is the better proxy for change of ownership in the Canadian case? The next section will turn to this question.

**Country of Origin and Consignment for Different Ownership Situations**

Given that it is ownership change that is the conceptually correct basis for allocation, it may be instructive to review how different situations will arise depending on which country the importer actually transacts with for the purchase of the goods. The simplest case is where ownership, origin and consignment are all the same as both indicators will point to the correct partner country.

The cases that follow all deal with situations where country of origin and country of consignment differ.

1. **Importer transacts with the Country of Origin**
   
The country of origin is the correct indicator while country of consignment would be incorrect. The country of consignment may be useful for estimating some parts of transportation.
2. **Importer transacts with the Country of Consignment**

The country of consignment is the correct indicator. There are two cases where this may occur that may be worth mentioning:

a. Exporter in country of consignment purchased goods from country of origin. These are re-exports of the consignment country.

b. Firm in the consignment country sent goods for processing and the processing country became the country of origin.
   
   i. Under current methodology, these are the same as in Case 2 a.
   
   ii. In the new treatment of goods for processing these would simply be exports of the consignment country.

3. **Importer transacts with third country (neither Country of Consignment or Origin)**

   In these cases neither the country of origin nor the country of consignment is a good indicator of ownership change.

   a. Third country firm purchases from the producer in country of origin and sells to importing country – well known case of merchanting.

   b. Third country firm sends goods for processing and the processing country becomes the country of origin and has them shipped directly to importer. Both country of origin and consignment point to processing country but exporter is the third country in both current and future practise.

   c. Third country firm sends goods for processing and the processing country becomes the country of origin and has them shipped to importer via consignment country. Exporter is the third country in both current and future practise but origin and consignment point to two different countries.

**Does Ownership Change?**

Neither the country of origin nor the country of consignment provides precise information on the change in ownership. The recent goods for processing discussions have noted that there may be no change of ownership at all when goods cross borders but they will still have a country of origin and country of consignment. This paper does not directly address the identification of goods for processing flows.

The vast majority of the goods arriving in Canada with a country of consignment different from the country of origin have a country of consignment of the United States. The following discussion will focus on this case.

**Logistics Arrangements**

Chinese or Mexican goods could simply be shipped via the United States as part of an efficient delivery to Canada employing a logistics operation that uses this route.
Until recently, Mexican truckers could only enter 20 miles in U.S. territory. In 2007, almost 90% of the Mexican-origin goods exported from United States to Canada entered Canada by road. While Mexican truckers could carry the goods to the US-Mexican borders, an American or Canadian trucker would have to be employed to continue the journey up to Canada. Neither the Canadian importer nor Canadian border officials may know if the goods were declared as in transit when entering in United States or if there was an actual change of ownership within the US.

The growing trade with Asian countries has caused traffic congestion at ports in North America. Asian goods exported to Canadian destinations may be shipped to a U.S. port simply based on availability then delivered by rail or road to their final destination in Canada. Of course the reverse is also true.

On the other hand, the implementation of distribution centers for the whole of the North American market in one location may also be a factor. Large multinationals may want to centralize their distribution services at one or few points for all North American stores. As an example, in 2007, the North American distribution center of Lego Systems Inc, the North American Division of LEGO Group, was located in Texas for distribution of Lego products to retailers in the U.S. and Canada.

While logistical considerations may have nothing to do with ownership change, in other cases the adoption of North American marketing and distribution strategies (more often with distribution centered in the larger US market) may lead to ownership being held by the US resident distributor.

**Foreign Ownership Arrangements**

Most sectors of the Canadian economy are open to foreign ownership. The largest source of foreign ownership comes from the United States. While the proportion of Foreign Direct Investment from the US has declined slightly in the past few years, it remained near 60% in 2007.

There are a number of large retail and wholesale companies which are head quartered in the United States. Some of these clearly have North American marketing strategies which could mean that goods are being sourced from central purchasing operations and distributed through the North American market. In these cases, there is some reason to believe that ownership may pass through the US headquarters for at least some of these goods.

The bottom line is that we do not have any clear indicators as to which designation – country of origin or country of consignment – is the better indicator of change of ownership.

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3 There are foreign ownership limits in some sectors such as finance and communications.
Way Forward

The Balance of Payments Division is moving forward with changing systems and producing preliminary estimates for 16 additional countries. No final decision on changing our practice of using country of consignment has yet been taken. However, it is clear that no matter which decision is taken, the differences that will be come evident for several countries will require a well developed communications strategy.

In support of these decisions and the communication strategy, it is proposed to undertake some additional research. The International Trade Division has for some years undertaken an exercise whereby it links the information on the customs forms for the exports to our Business Register. More recently, a similar exercise has been undertaken for imports. We are planning to use this tool to study if the imports where the country of consignment and origin are different are concentrated in any of the larger importers. If this is the case, we would approach these importers directly to obtain additional information on the counterparties to their import transactions.

The earlier noted study by the UN on country practices in compiling trade data indicate that about 50 countries are compiling the data on both a country of origin and a country of consignment basis. While it will be necessary to choose one approach for the official statistical releases, it may be best to produce data on both basis to better inform our users on the potential differences in using one method or the other. This of course would have significant implications for the communications strategy.
Annex A  Trade Balances

Trade Balances are even more susceptible to change given they are net values. The following graphs show the comparisons between the trade balances on a customs basis as published by the International Trade Division and a preliminary estimate of the BOP Balance with current export and import treatment, including export undercoverage. Note the US, UK and Japanese values are as per published currently as the changes do not affect that data.
## Annex B

### Canadian imports from United States (in millions of C$)

<table>
<thead>
<tr>
<th>Year</th>
<th>place of export</th>
<th>country of origin</th>
<th>gap as share of BOP imports from USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>93,329</td>
<td>87,875</td>
<td>5,454</td>
</tr>
<tr>
<td>1991</td>
<td>93,039</td>
<td>86,416</td>
<td>6,623</td>
</tr>
<tr>
<td>1992</td>
<td>104,691</td>
<td>96,470</td>
<td>8,221</td>
</tr>
<tr>
<td>1993</td>
<td>124,132</td>
<td>113,846</td>
<td>10,286</td>
</tr>
<tr>
<td>1994</td>
<td>150,966</td>
<td>137,345</td>
<td>13,621</td>
</tr>
<tr>
<td>1995</td>
<td>167,924</td>
<td>150,682</td>
<td>17,242</td>
</tr>
<tr>
<td>1996</td>
<td>175,144</td>
<td>156,953</td>
<td>18,191</td>
</tr>
<tr>
<td>1997</td>
<td>206,104</td>
<td>184,414</td>
<td>21,690</td>
</tr>
<tr>
<td>1998</td>
<td>228,694</td>
<td>203,578</td>
<td>25,116</td>
</tr>
<tr>
<td>1999</td>
<td>243,766</td>
<td>215,575</td>
<td>28,191</td>
</tr>
<tr>
<td>2000</td>
<td>261,767</td>
<td>229,660</td>
<td>32,107</td>
</tr>
<tr>
<td>2001</td>
<td>249,084</td>
<td>218,290</td>
<td>30,794</td>
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<tr>
<td>2002</td>
<td>248,968</td>
<td>218,497</td>
<td>30,471</td>
</tr>
<tr>
<td>2003</td>
<td>234,229</td>
<td>203,822</td>
<td>30,407</td>
</tr>
<tr>
<td>2004</td>
<td>243,826</td>
<td>208,987</td>
<td>34,839</td>
</tr>
<tr>
<td>2005</td>
<td>252,340</td>
<td>215,196</td>
<td>37,144</td>
</tr>
<tr>
<td>2006</td>
<td>257,124</td>
<td>217,642</td>
<td>39,482</td>
</tr>
<tr>
<td>2007</td>
<td>261,431</td>
<td>220,420</td>
<td>41,011</td>
</tr>
</tbody>
</table>
Annex C

Canadian imports of goods by country of origin and country of export (in millions of Canadian dollars)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Origin China, exported from</th>
<th>Year</th>
<th>Origin Hong Kong, exported from</th>
<th>Year</th>
<th>Origin Mexico, exported from</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>China</td>
<td>Hong Kong</td>
<td>United States</td>
<td>Others</td>
<td>Total</td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td>7,345</td>
<td>4,907</td>
<td>3,308</td>
<td>444</td>
<td>16,004</td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td>9,320</td>
<td>4,232</td>
<td>4,578</td>
<td>453</td>
<td>18,583</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td>12,955</td>
<td>4,286</td>
<td>6,082</td>
<td>781</td>
<td>24,104</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td>16,756</td>
<td>4,378</td>
<td>7,634</td>
<td>746</td>
<td>29,515</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td>20,494</td>
<td>4,195</td>
<td>8,991</td>
<td>812</td>
<td>34,491</td>
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<tr>
<td>2007</td>
<td></td>
<td>23,357</td>
<td>4,202</td>
<td>9,973</td>
<td>765</td>
<td>38,297</td>
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