

# HISTORICAL UPDATES TO TRADE STATISTICS

## **Background**

Recently the processing systems and databases used to produce Canadian international merchandise trade data were converted from a mainframe to an Oracle Unix environment. As part of this migration project, historical inconsistencies related to the integrity between trade data and the underlying metadata were resolved for the period 1988 to 2003.

In order to synchronize the internal data holdings with the publicly available CANSIM database, it is necessary to update the CANSIM tables with historical changes for the period 1988 to 2003. The changes are generally minor in nature and affect only the customs based trade data.

The two most common examples of the updates are related to HS commodity coding and country allocation. The introduction of time stamping in 2004 forced integrity between the trade data and the underlying metadata.

## **HS Coding**

The Harmonized System (HS) has been used in Canada for the classification of international merchandise trade since 1988. Periodically, the Department of Finance introduces amendments to the HS classification due to changes in tariff rates. In the past, at the time of the introduction of new HS codes, the Canada Border Services Agency allowed a grace period of a few months to permit the import community to adapt. Consequently, for a short time period, importers could use either the new or old classification code despite the termination of the old code in the tariff schedule.

## **Country Coding**

Since 1988, changes have been implemented to the number of countries that comprise the complete universe. The dismantling of the former USSR is a good example of this dilemma with respect to the coding of the Country of Origin variable. There was a period of time between the break-up of the former USSR in 1991 and the universal acceptance of several new country codes representing new countries such as Estonia, Belarus, and Ukraine, etc. There are continuous changes in the countries identified in the international trading world, however, with definitive start and end months identified within the metadata since 2004, trade statistics can be easily adjusted to allow for this type of change.

## **Impact**

The objective of these changes is to update the unadjusted customs basis CANSIM international merchandise trade for the years 1988-2003. The following tables are impacted:

- 228-0001 Merchandise imports and exports, by major groups and principal trading areas for all countries, monthly (dollars)
- 228-0002 Merchandise imports and exports, by major groups and principal trading areas for all countries, quarterly (dollars)
- 228-0003 Merchandise imports and exports, by major groups and principal trading areas for all countries, annual (dollars)
- 228-0033 Imports, customs-based, by province of clearance, monthly (dollars)
- 228-0034 Domestic exports, customs-based, by province of origin, monthly (dollars)
- 228-0041 Merchandise imports and exports by sector and sub-sector, customs and balance of payments basis, for all countries, monthly (dollars)
- 228-0042 Merchandise imports and exports by sector and sub-sector, customs and balance of payments basis, for all countries, quarterly (dollars)
- 228-0043 Merchandise imports and exports by sector and sub-sector, customs and balance of payments basis, for all countries, annual

These changes to the data while minor in dollar value do touch upon all levels of the data.

### **Summary of Updates**

The analysis of the impact on the CANSIM tables for the years 1988 to 2003 has been completed and all updates within the CANSIM tables have been identified at aggregated levels. All dollar and percentage changes at the sector, subsector, and major group levels for each of the months in the years 1988 to 2003 for all of the aggregations have been calculated.

There are changes in the HS10 or HS8 value in each of the data months during the period of January 1988 to December 2003. In addition, there are also several country of origin or country of destination changes. These modifications are not necessarily reflected as significant changes within the CANSIM tables which are at sector, major group and principal trading area (PTA) levels of aggregation.

It is worth noting that the 18,624 active HS10 codes for imports are aggregated to 63 major groups, then to 9 sectors. Similarly, the 6,114 HS8 codes for exports are aggregated to 64 major groups, then to 9 sectors.

The thousands of relatively minor changes at the detailed level are either not evident at the aggregated levels because the HS classification changes are within the same major group or, if assigned to a different major group, the impact is not significant at the greater levels of aggregation.

Similarly, in the case of the six PTAs, a change in the country of origin or destination does not automatically result in a change to the total value for the aggregated PTAs: United States, United Kingdom, Japan, European Union (excl. UK), Other OECD, and Other Countries.

### **Summary of Impact**

#### **Table 228-0003 – annual**

#### **Imports (Total value change less than .1% for all years)**

Years 1988 to 1993 – there was an average of 3 section groups each year with a difference of more than 0.1% and there was only one section, occurring in 1988, with a difference greater than 1.0%.

Years 1994 to 2003 – There were no years where any of the differences at the section level was greater than 0.1%.

**Exports (Total value change less than .1% for all years)**

There were only two years (1998 and 2003) when the difference at one of the section levels was greater than 0.1% but less than 1.0%.

**Table 228-0043 – annual**

**Imports (Total value change less than .1% for all years)**

Years 1988 to 1993 – there were between 5 (1988) and 11 (1993) sub-sectors with a difference of more than 0.1%.

Years 1994 to 2003 – there was only one year (1999) when one sub-sector was more than 0.1% different.

**Exports (Total value change less than .1% for all years)**

Years 1988 to 1993 – There was only one sector and between 2 and 5 subsectors were the difference was greater than 1.0%

Years 1994 to 2003 – Only 1998 and 2003 had one subsector difference greater than 0.1%

**Table 228-0033 – monthly**

**Imports (Total value change less than .1% for all years)**

Years 1990 to 1993 – There were between 47 to 59 sectors in the months for these years when the difference was greater than 0.1%, although only 1 sector in one month during 1990 had a difference of more than 1.0%.

Years 1994 to 2003 – There was only one sector in one month of 1998 when the difference was greater than 0.1 %.

**Table 228-0034 – monthly**

**Exports (Total value change less than .1% for all years)**

Years 1990 to 1993 – There were no months or sectors when the difference was more than 1.0%.

Years 1994 to 2003 – There were two sectors in 1996 and three in 2001, two in 2002 and one in 2003 when the difference was greater than 1%.