Harmonized System Code Updates: Statistics Canada’s Experience

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Delivering insight through data for a better Canada
Statistics Canada’s CIMT program

- The Canadian International Merchandise Trade (CIMT) program is a monthly statistical program with “mission critical” status
- CIMT serves a number of different types of users
  - Timely macroeconomic indicator
    - Input to Canadian Macroeconomic Accounts
    - Economic forecasting
  - Source of multidimensional customs basis statistics
    - Detailed product categories by value and quantity by country, province, mode of transport, etc.
  - Interest from specific companies and industry associations, other government departments, academics, the media and the general public
- Data products
  - Analytical texts
  - Data tables
  - Data visualizations
  - Custom data extractions
- The Harmonized System (HS) is the foundation for all product-based statistics published
Structure of Canadian HS Codes

**Imports**
1234.56.78.90
HS6: WCO
Tariff code: Finance Canada
Statistical Suffix: Statistics Canada

- Customs Tariff published by the Canada Border Services Agency
- Updates are possible any month, largely due to tariff code changes

**Exports**
1234.56.78
HS6: WCO
Statistical Suffix: Statistics Canada

- Canadian Export Classification published by Statistics Canada
- Updates are generally introduced each January, if applicable
HS Update Process

• The HS is treated as a “living” classification by Statistics Canada
  • Continuous evolution as opposed to complete classification version changes
  • Use of start/end dates and parent/child relationships to manage HS changes

• Coordination between federal departments to implement changes
  • Canada Border Services Agency
  • Finance Canada
  • Statistics Canada
  • Global Affairs Canada

• Statistics Canada efforts led by International Accounts and Trade Division Metadata team
  • Use of Aria for metadata management
  • Concordances with other classifications maintained (NAPCS, NAICS, BEC, US HTS)
HS Update Challenges – WCO Updates

• Regular WCO amendments require significant effort to implement
  • Relatively short timeframe to complete all required work
  • Collaboration on multiple fronts

• Periodic recommendations to National Statistical Offices between major updates
  • Little time for Statistics Canada to react to proposed changes
  • Breaks in series in relatively quick succession create data challenges
HS Update Challenges – Data Exchange

• Canada and the US rely on an exchange of import data to compile their export statistics
  • Accuracy and coherence of statistics
  • Reducing administrative burden for traders
• Coordination with the United States Census Bureau on statistical breaks
  • Aligning export statistical breaks with the import breaks featured in the other country’s classification
    • Concordances maintained
  • Particularly important for Canada’s export classification
    • 75% of Canada’s exports are destined to the United States
    • US HTS can be updated in January and July of each year
HS Update Challenges – Stewardship

• Stewardship of the statistical suffix is granted to Statistics Canada by law
  • “The Chief Statistician shall establish a coding system for goods imported into and exported from Canada to enable the Chief Statistician to collect, compile, analyse, abstract and publish statistics in relation to those goods.”
    – Statistics Act, 1985

• Specific data users seeking added HS granularity can submit requests for new statistical breaks

• Burden of weighing the needs of different data user groups that can sometimes be in conflict
  • Time series stability vs. maximizing relevance
Importance of time series in statistics

- Time series analysis is challenging when breaks in series exist in a classification
  - The same product is not measured consistently through time
  - Analysis of historical trends becomes limited
  - The existence of a category does not guarantee its correct usage
Importance of time series in statistics

• Breaks in series also affect the compilation of trade statistics
  • Tools and processes for outlier detection often depend on historical results

• Particular impact on deflation of merchandise trade
  • Real imports and exports (trade values after removal of price effects) are important components of GDP
  • Compilation depends on tracking prices for a fixed basket of goods over time
    • Methods to compensate for HS changes exist but have limitations
    • Quality of results and ability to analyze movements deteriorate over time as HS changes are applied
Achieving the right balance

- HS must change to reflect evolving products and tariff treatments
  - WCO and Tariff code changes are always applied as scheduled
- StatCan approach to managing requests for statistical breaks
  - Internal StatCan assessment of request
    - Materiality of proposed categories
    - Risks related to confidentiality of importers/exporters
    - Impact on price/volume compilation
    - Coherence with US breakouts
- HS update committee
  - Annual meetings with other federal departments holding a key stake in HS updates
  - Reviewing the merits of the request against the risks and seeking a consensus
- Wherever possible, deferring these changes to WCO update years
Thank you

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