Commodity Classification and Quantity Information

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Commodity Classification
Let’s go back to scope

Definition of the scope of international merchandise trade statistics as recording of goods which add to or subtract from the stock of material resources of a country by entering (imports) or leaving (exports) its economic territory.

What, How, When, Where
Classification / Nomenclature

• **Common language** in defining and categorizing goods
  – Is a “smart watch” a watch or an electronic device?

• **Without it, trade data would not be comparable**

• **Has been evolving since 1900 ... from “minimum list of commodities”, SITC, HS**
And now ...

Relationship between different classifications

Activity classification
Mainly use for production
ISIC

Product classification
Mainly use for merchandise trade
CPC^a
SITC
BEC

For trade analysis
For data collection and analysis

a Includes services.
The latest version

- HS 2017 (in force in 2017) - WCO
- SITC Rev. 4 (based on HS 2002) - UN
- BEC Rev. 5 (adopted March 2016) - UN
- CPC Rev. 2.1 (2015) – UN

UNSD maintains correlation tables among them
Correlation among different commodity classifications
Correlation Tables

• Correlation tables maintain full relationship between one classification to the other, or within two different versions of the same classification

  – 1 To 1, 1 To N, N to 1 and N to N
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Commodity correlation of Alcoholic Beverages

1 To 1

N To 1

1 To N
Commodity correlation of "Medicaments (SITC 542)"
Conversion Tables

• Conversion tables show simplified relationship between one classification to the other, or within two different versions of the same classification
  – 1 To 1, 1 To N, N to 1 and N to N

• They are used to convert data compiled in one classification to another (using aggregation), so that long time series can be maintained
The complex relationships (left) are simplified (right)
Conversion Tables (cont.)

- UNSD maintains matrix of correlation and conversion

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- However, countries are welcome to establish their own conversion tables taking into account national circumstance
Quantity Information
Importance of quantity information

• It may provide a more reliable indicator of international movement of goods and economic analysis because it is free of valuation problems;

• It can be used in checking the reliability of the value data;

• It is indispensable in the construction of external trade indices and for transportations statistics.
WCO recommended units

5.3. The standard units of quantity recommended by the World Customs Organization (WCO). In 1995, WCO adopted a recommendation on the use of standard units of quantity to facilitate the collection, comparison and analysis of international statistics based on the Harmonized System.\textsuperscript{101} The WCO standard units of quantity are:\textsuperscript{102}

- **Weight**\textsuperscript{103}:
  - kilograms (kg)
  - carat (carat)

- **Length**:
  - metres (m)

- **Area**:
  - square metres (m\textsuperscript{2})

- **Volume**:
  - cubic metres (m\textsuperscript{3})

- **Electrical Number**:
  - pairs (2u)
  - dozens (12u)
  - thousands of pieces/items (1,000u)
  - packs (u (set/pack))

5.4. In the WCO recommendation, one of the above standard units of quantity is specified for each HS six-digit subheading.\textsuperscript{104}
Recommendations

• Compilation and reporting of quantity information: collect or estimate, validate and report quantity information in WCO standard unit of quantity and in net weight on all trade transactions (para. 5.5);

• Quantity conversion factors: provide conversion factors to the recommended standard units in the metadata ... (HS 6 digits codes are used para 5.5).
Main compilation challenge

Q35. Do you collect quantity information (net weight and supplementary quantity units)?

- Yes

<table>
<thead>
<tr>
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<th>Net weight (e.g. excluding packing)</th>
<th>Supplementary quantity units</th>
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← 2014 African IMTS Survey

- Quantity is **not a mandatory** data item in Customs declaration
- Therefore, quantity are only **partially filled** by traders
- Even if **mandatory**, many are filled with garbage figures
Methods to check quantity

• Using benchmark (Standard Unit Values: SUV)
  – Unit values from customs records;
  – Generation of SUV for every month by commodity by flow and by quantity unit;
    • Outlier must removed
    • Statistical criteria used to check the SUV reliability (especially checks to measure heterogeneity within the most detailed level of HS)
Common corrections and estimation methods

– Cooperate with **Customs** to verify declaration;
– Using **other data sources** (i.e., enterprise surveys, port statistics, etc.);
– Applying **reference prices** (i.e., price of live animal);
– Applying **historical unit values** (i.e., moving average of last X corresponding period);
– Estimating import price based on **consumer price** (by deducting cost of transport, mark up, taxes, etc.);
Questions?

Commodity Classification

Correlation Tables

Quantity Information
Thank you

Please send your comments to muryawan@un.org