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UNITED NATIONS
DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS

STATISTICS DIVISION
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THE COMPILERS MANUAL
of International Merchandise Trade Statistics

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Overview

As part of the session on "Measurement and Data Limitations" of international merchandise trade statistics (IMTS), this working paper highlights the different players and components in the production process of these statistics. The creation of trade data starts when an importer or exporter files a customs declaration form. From there on, the information moves through the channels of a customs office via a national statistical office to the United Nations Statistics Division (UNSD). At each step of the way some regulations are in place, which determine the final outcome. Eventually and hopefully, the trade data will end up in the UN Comtrade database. Even though UN Comtrade contains an enormous amount of trade statistics, data for some countries and certain years are missing. A data user needs to be aware of such limitations. Some alert signs have been added at the end of the paper.

Standards

The World Customs Organization (WCO) is the principal body responsible for regulations at customs offices. With very few exceptions all countries are associated with WCO. Among the better known standards determined by WCO are the Harmonized System commodity classification (with recommended units of measurement for quantities), the regulations on Country of Origin and the Kyoto convention on trade facilitation. Especially nowadays, there are many regulations related to border security which are important in themselves, but mostly do not have a direct influence on the transactions themselves.

A second player for setting standards is the World Trade Organization (WTO). Most rules created at WTO concern fair market access, which will determine to a certain extent the amounts of goods traded among countries, but which do not immediately influence the registration process of IMTS. However, WTO set an IMTS standard for valuation of transactions with the WTO Agreement on Valuation. It determines what should be included in the customs values on which duties can be imposed. Value components include cost of the merchandise, cost of transportation and insurance. WTO is also involved with WCO in setting the rules for Country of Origin.

Whereas WCO and WTO are the regulating bodies for all aspects of the international trading process, UN (specifically UNSD) takes charge of maintaining the concepts and definitions of IMTS. The process of arriving at these standards involves consultations with countries and international agencies. The platform at which most issues are discussed and worked out is the Task Force on IMTS. Members of this Task Force are WTO (the convener), WCO, UNCTAD, OECD, FAO, Eurostat, IMF, UNIDO, the regional commissions of the UN, and UNSD. Together this group produces recommendations and proposes these to the UN Statistical Commission to be officially adopted by all National Statistical Offices.

Similarly to regulations set at WCO and WTO, the adopted recommendations at the UN should be written into the national (statistical) laws of each country.

The Compilers Manuals

After producing the manual on Concepts and Definitions of IMTS (Revision 2) in 1998 – which contains the IMTS standards currently in force – the Task Force wanted to give guidance to national data compilers. In contract to the "Concepts and Definitions" which is mostly theoretical in nature, the Compilers Manual was meant to be practical. The document was published in 2004. Issues which are covered include Coverage, Time of Recording, Trade System, Classification, Valuation, Partner country and Quantity Measurement. The main recommendations are as follows.

- *Coverage*. All goods which add to or subtract from the material resources of a country by entering or leaving its economic territory need to be registered for IMTS. Specific issues are inclusions of – for instance – barter trade, humanitarian aid and goods for military use and exclusions of monetary gold, goods temporarily admitted, empty bottles, or waste and scrap with a negative value.
- *Time of Recording*. The data of lodgement of the customs declaration is recommended.
- *Trade System*. It is recommended that countries use the general trade system for IMTS, including the registration of goods entering (and leaving) warehouses, processing zones and commercial free zones.
- *Classification.* The Harmonized System is recommended for the classifications of goods.

- *Valuation.* CIF (Cost-Insurance-Freight) value is recommended for recording of imports and FOB (Free-on-Board) for exports.
- *Partner country.* Country of Origin is recommended for imports and country of last known destination for exports.
- *Quantity Measurement.* The WCO standard units of measurement are recommended when collecting and reporting IMTS.

Technical cooperation

UNSD went out to the countries to promote the use of the Compilers Manual via workshops in 2003 (Addis Ababa), 2004 (Khartoum [organized by FAO] and Addis Ababa) and 2005 (Abuja). In this way first hand explanation was given to national data compilers (both custom officers and statisticians) on how to solve practical problems in the compilation of IMTS. Further workshops are planned for Douala (2006), Fiji (2006 [organized by FAO]), Bangkok (2006), Beirut (2007) and South Africa (2007). Through these regional workshops we reach many countries. Practically all African countries will have attended our workshops between 2003 and 2007, Middle East countries, South East Asian countries and Pacific Island states will be visited in the near future.

Reporting

A noticeable increase in number of countries reporting to the UN can be observed around 1995 which can be explained partly by the opening of the centrally planned economies, like China (first detailed set of data in 1987), Russian Federation (1996), the Central and Eastern European countries (Hungary and Poland, 1992, Bulgaria, 1996) and Vietnam (1997). For another part it should be credited to improvements of technology and programs like ASYCUDA which help automate the clearance of declarations at customs offices in developing countries. Also, direct contact with the data compilers has increased the coverage of data in UN Comtrade a lot. Of course, the advances in technology in about all countries have made data compilation and data transfer much easier. Annex 1 shows this increase in number of reporting countries for the group of Least Developed Countries.

UN Comtrade

Since June 2003, UN Comtrade is publicly accessible on the Internet. Large amounts of trade data are available for economists, researchers and students alike. The higher visibility of UN Comtrade puts some pressure on the UN to provide more guidance on use of the data. Whereas help functions are provided, more can be done. A detailed User's Guide is being produced and will be released as an electronic document soon. During 2006 more meta-data will appear on the website to give as much background information as possible. Recently we also added a "Read me First" page as compulsory reading to this site, so users are made aware of limitations of the data.

Limitations

Certain functionalities (like creation of your own country groups) are provided to the user of UN Comtrade to facilitate arriving at desired query results. However, these facilitations may also easily lead to unexpected results. The "Read me First" page highlights five cases of possible errors, all based on false assumptions of the structure of the data, namely:

1. **Totals can be higher than the sum of the details.** The values of the reported detailed commodity data do not necessarily sum up to the total trade value for a given country dataset. Due to confidentiality, countries may not report some of its detailed trade. This trade will - however - be included at the higher commodity level and in the total trade value. For instance, trade data not reported for a specific 6-digit HS code will be included in the total trade and may be included in the 2-digit HS chapter. Similar situations could occur for other commodity classifications.
2. **Don't assume full coverage for groups of countries.** Countries (or areas) do not necessarily report their trade statistics for each and every year. This means that aggregations of data into groups of countries may involve countries with no reported data for a specific year. UN Comtrade does not contain estimates for missing data. Therefore, trade of a country group could be understated due to unavailability of some country data.
3. **Don't assume data in all classifications.** Data are made available in several commodity classifications, but not all countries necessarily report in the most recent commodity classification. Again, UN Comtrade does not contain estimates for data of countries which do not report in the most recent classification.
4. **Don't assume perfect representation on converted commodities.** When data are converted from a more recent to an older classification it may occur that the converted commodity code contains more (or less) products than what is given by the official commodity heading. No adjustments are made for these cases.
5. **Imports do not equal exports.** It is not necessary that imports reported by one country should coincide with exports reported by its trading partner. Differences in reporting could be explained by differences in concepts and definitions used by the countries. The recommendations for international merchandise trade statistics can be found in the Compilers Manual to the IMTS, Rev.2.

Future steps

The next step in the work of the International Trade Statistics Section of the United Nations is to add World Totals to the UN Comtrade website. These totals will give opportunities to calculate shares of trade by country and commodity. At about the same time we also like to introduce the World Trade Matrix in which trade will be available for all countries by all countries. Both the World Totals and the World Trade Matrix require necessarily estimates for missing trade data. For years we have been working on methodologies to improve trade estimates, and we believe that we are now at the point that we can share these estimates with the general public.

Annex 1:   Number of reporting countries for the group of Least Developed Countries.