Understanding international trade statistics

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In today’s world, with its vast array of digital information, statisticians have the challenging task of ensuring that trade analysts and others have access to timely and accurate trade data.

Producing data that are both precise and up to date is a costly exercise requiring resources that many developing countries still lack unfortunately. As a result, countries’ national statistics vary significantly in terms of frequency and level of detail. To fill in these data gaps, trade statisticians use various techniques to provide consistent estimates. Fortunately, as more and more countries have provided data of good quality, the need for such estimates has declined considerably.

Trade data challenges

Providing timely and comparable merchandise trade statistics for some developing countries, especially in Africa and the Middle East, has often been a challenge because of their lack of regular reporting of consistent and comparable data over time and across countries based on international standards and guidelines. Compiling data on commercial services has been even more challenging.

For least-developed countries (LDCs), for example, two-thirds of which are in Africa, an assessment of their data availability from 2000 to 2011 reveals that 40 out of the total number of 48 LDCs have reported detailed trade data to the UN Commodity Trade Statistics (Comtrade) database for at least one year and one trade flow (export or import). Of these, only six countries have a complete series for the entire period. For seven countries, data are available only up to 2010. A complete data series up to 2009 is available for only 15 countries. Data for 31 countries are reported for 2002 to 2005 but only 25 report data for all four years.

In addition, data reported by some countries do not necessarily comply with the international standards detailed in the United Nations International Merchandise Trade Statistics (IMTS, Rev.2). Data also vary in coverage as, for example, some countries report only domestic exports.

Unaccounted trade flows: a growing concern

Many developing countries do not provide estimates of unrecorded trade, such as cross-border and illicit trade. Some of them do not include processing zones in their merchandise trade statistics. The economic relevance of the missing data can be significant, as in the case of the United Arab Emirates where a significant part of its total exports, mostly re-exports, seems to be unrecorded. Such exports have been increasing since 2000 and represented 4 per cent of the Middle East’s total exports in 2011.

Other countries - for example, in Central America or in the Caribbean - do not include processing trade in their national statistics, even when they represent a sizable share of their trade, and report them separately. When limited information is made available by national sources on product coverage, origin and final destination, such significant data gaps become a growing concern to trade statisticians.

Overcoming the challenges

To bridge the information gap, international organizations, such as the WTO, have been compelled to estimate bilateral merchandise trade flows for certain countries. Statisticians have therefore used “mirror” trade statistics (i.e. data reported by trading partners) as a way of compensating for missing data or corroborating reported data.

Often, reported bilateral export flows from one country may not match the respective reported imports of its partner country. There are many valid reasons why. Such inconsistencies could be due to goods passing through third countries or to countries with different trading systems, whereby one country

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records all goods crossing the border while the other country only records the goods once they are cleared by customs. Inconsistencies could also be due to goods being classified differently, or being valued differently. Import data are usually considered to be of better quality than export data as these are often reported in sufficient detail to allow customs to apply duties, taxes or other regulatory controls. There are some exceptions to this rule of thumb; export data can be more reliable when trade takes place within a customs area and when exporters have a strong incentive to draw-back internal taxes (i.e. to receive a rebate on taxes or duty paid for imported goods which are subsequently exported in the same form or a different form). Partner statistics or data from national and international organizations are often used for cross-checking and validation.

Due to a lack of data from LDCs, the WTO Secretariat has based its estimates for a long time on partner countries’ trade statistics taken from the UN Comtrade database. Because the bulk of LDC trade has been with developed or advanced developing countries with good statistical capabilities, this procedure allowed for reasonably accurate estimates. The disadvantage of this approach, however, was that trade between LDCs as well as trade between LDCs and other non-reporting developing countries could not be reflected. A delay in reporting from some developing countries also limited for recent years the coverage of LDC trade flows obtained from partner countries’ trade statistics.

Cross-checking various sources, such as national accounts and balance-of-payments statistics, provided some information, however, on these unaccounted trade flows. In these cases, the WTO Secretariat allocated such trade to “unspecified products from unspecified destinations” due to insufficient information.

**Improved data availability and quality**

Developing countries have made dramatic progress in improving the compilation of international trade statistics in recent years. Annual data on total merchandise exports and imports are officially published within six months of the reporting period (i.e. reference year) for about 150 countries, which account for more than 95 per cent of global trade. The WTO Secretariat primarily relies on this information for the compilation of countries’ total merchandise exports and imports. The quality of annual data is regularly monitored through the compilation of short-term statistics, for example, which permit revisions of the data and through the WTO-managed inter-agency Common Data Set, a joint venture with Eurostat, OECD, the UN Statistics Division and UNCTAD, which allows international organizations to compare and cross-validate their data.

The availability and quality of developing countries’ statistics in the UN Comtrade database, broken down by partners and by-products, have also largely improved in the last decade. Out of the 48 LDCs, five have provided data for the latest statistical year. In addition, many African LDCs and most LDCs in the Middle East have provided data up to 2010. In view of these improvements, a monthly version of UN Comtrade is being developed by the UN for a selection of reporting countries.

As a result of these improvements in trade reporting, the WTO Secretariat has attempted since 2011 to use as much data reported by individual countries as possible, as well as data from national sources, and has limited its estimates based on partner countries’ statistics in cases where reported data are not available. The Secretariat has also attempted to improve partner attribution of particular product groups, such as fuels. This applies, for example, to fuel exports from Middle East countries, especially from Saudi Arabia and the United Arab Emirates. The Secretariat has also attempted to improve the consistency of merchandise statistics listed by origin and destination by making a number of data adjustments. These adjustments are explained more fully in Chapter 4 of this publication.

On the services side, the availability of statistics has dramatically improved over recent years, for balance-of-payments based data (sectoral and partner data) as well as for data describing the activities of foreign affiliates. Developing countries are gradually implementing the international recommendations in the inter-agency Manual on Statistics of International Trade in Services, but currently most of the detailed statistics (in particular, for balance of payments by partner and foreign affiliates) are available for developed and transition economies only. Also, to better respond to the needs of users, the WTO Secretariat and other organizations are working to develop more detailed statistics and to improve the quality of trade in services statistics.

Finally, cooperation on trade in services statistics is a priority of the inter-agency Task Force on Statistics of International Trade in Services. This cooperation has led to the recent creation of a UNCTAD-WTO work programme on trade in services statistics, covering both annual and quarterly data.