Measurement of International Trade and Economic Globalization

Concept Note

In recent years, concerns were raised about the shortcomings of the existing official trade statistics for the purpose of reflecting bilateral economic relations. The high level of import content in exports makes gross bilateral trade statistics unsuitable for bilateral trade negotiations. Trade analysis requires new measures which better reflect the level of interdependencies among countries engaged in global value chains (GVCs). In order to understand the true nature of trade relationships, we need to know what each country along a global value chain contributes to the value of a final product. We also need to know how that contribution is linked to those of other suppliers in other countries coming before and after along the chain, and how much employment and income is generated through this value addition.

The statistical community responded to these concerns through a number of initiatives, such as the UN/Eurostat/WTO Global Forum on Trade Statistics in 2011, the OECD-WTO initiative on Trade in Value-Added launched in 2012, and the 2013 Eurostat report on Global Value Chains. An official response was delivered by bringing the measurement of international trade and economic globalization to the agenda of the UN Statistical Commission in 2013[1] and again in 2014[2]. The corresponding decisions of the Commission stress the need for a measurement framework and a mechanism for coordination. Specifically, in Decision 44/106[3] of its session in 2013, the Commission recognized the need for an overarching measurement framework for international trade and economic globalization, taking into account the existing frameworks and guidelines of the System of National Accounts, Balance of Payments, and the Guidelines on Integrated Economic Statistics, as well as the research and studies done by Eurostat, the OECD, the IMF and various working groups. The Commission also recognized the need for an appropriate mechanism for coordination of the work in this field, ensuring that the functions of the existing expert groups, working groups and task forces are accounted for at the international and regional levels. In the same decision, the Commission agreed to the creation of a "friends of the chair" (FOC) group tasked with preparing a concept paper on the scope and content of the framework, and on the appropriate mechanism for coordination of the work in this area.

[1] See http://unstats.un.org/unsd/statcom/doc13/2013-7-TradeStats-E.pdf
[2] See http://unstats.un.org/unsd/statcom/doc14/2014-7-Trade-E.pdf
[3] See http://unstats.un.org/unsd/statcom/doc13/2013-Report-E.pdf

The global economy is increasingly structured around GVCs that account for a rising share of international trade, global GDP and employment. GVCs link firms, workers and consumers around the world and often provide a stepping stone for firms and workers in developing countries to integrate into the global economy. A GVC describes the full range of activities that firms and workers perform to bring a product from its conception to end use. This includes activities such as design, production, marketing, distribution and support to the final consumer. The activities that comprise a value chain can be contained within a single firm or divided among different firms. In the context of globalization, the activities that constitute a value chain have generally been carried out in inter-firm networks on a global scale. The dependency structures of the firms in the GVC networks are of crucial importance in order to measure where income, knowledge and employment are generated, and to understand potential risk and vulnerabilities in case of a future financial crisis. Within this changed economic landscape, more complex measures of trade and production are necessary both on micro-and macro-economic level.

In other words, national economies relate to one another in a number of ways be it through trade in goods, trade in services, tourism, foreign direct investment, establishment of foreign affiliates, transfer of knowledge, creation of jobs, redistribution of income, migrant workers, emissions of CO_2 or in other ways. A comprehensive way of charting those interdependencies is through a global Supply and Use table (SUT), in which countries connect through imports and exports of goods and services into and out of specific industries. Ideally, the global SUT contains for each international flow an export of a product from an industry of one country into an industry (or into final consumption) of another country, as the corresponding and matching import. In principle, only one global SUT should exist to be used by all national and international agencies for the analysis of trade and globalization. Besides the implicitly mentioned matching of bilateral trade flows (both for goods and services), further refinement may be necessary regarding the use of inputs by type of enterprise for either the domestic or the international market, including the special cases of multi-national enterprises and their foreign affiliates, goods for processing (manufacturing services) and re-exports. Further details on such global SUT were described in a recent paper of the OECD.

Compiling a global SUT requires a very close alignment and harmonization of national SUTs, price statistics and trade statistics. To achieve this in the short term, some practical decisions need to be taken and agreed upon internationally for the creation of a symmetrical and fully balanced bilateral trade matrix at the global level, which would have buy-in, cooperation and endorsement of all concerned countries. This matrix would be built strictly for the purpose of compiling an internationally recognized and accepted SUT. In the longer term, the existing recommendations for international trade statistics would need to be reviewed with the purpose of making them more symmetrical in terms of the reporting of exports and imports, and thus more suitable for the compilation of a global SUT.

A System of International Accounts. The implications of building a global SUT [for the purpose of deriving, for instance, indicators for Trade in Value Added or Trade in Jobs] are farther reaching than just addressing asymmetries in trade and heterogeneity in firms. The underlying concepts and definitions as basis for measurement of these international statistics would need to be reviewed as well. In terms of the System of National Accounts, the Rest of the World Account would need to be more explicitly defined, especially since a global SUT implies a perfect alignment of international flows, and some international recommendations regarding heterogeneity of firms (where economically relevant). In the longer term, this set of new concepts and definitions could form a System of International Accounts, as the measurement framework for international trade and economic globalization.