SNA/M1.18/2.e

12th Meeting of the Advisory Expert Group on National Accounts, 27-29 November 2018, Luxembourg

Agenda item: 2.e

GVC satellite account

UN report on the work on Handbook on Global Value Chain Accounting

Globalization is a centuries old phenomenon of growing interactions between countries. In recent decades, the traditional interrelations have grown considerably. Due to reductions in transportation costs, the information technological revolution, and more open economic policies, production processes of a final product are increasingly fragmented across the national economies in a production chain between resident and non-resident firms. The parts and components that now make up a final product, being either a good or service, are produced in different countries, what has been termed the "unbundling" of production. Therefore, intermediate goods and associated services may cross national borders several times before they are assembled and sold as a final product in the market or delivered to a third party. Moreover, international trade in goods and services is increasingly intra-firm trade, often organized and led by large multinational enterprises or enterprise groups (MNEs). These interlinked core production activities and supporting services activities to produce a final product coordinated and led by a lead firm are commonly referred to as global value chains (GVCs).

While national Statistical Organizations (NSOs) currently produce a wealth of information on international trade, economic performance, foreign investment, and employment – all of which encompass the activities of the economic actors participating in GVCs – such information is not often assembled or presented in a way that permits an understanding of the role and impact that GVCs have within a given economy and within the broader global economy. Existing macroeconomic accounting frameworks, such as supply and use tables and national accounts, effectively describe the relationship between one industry and another within a given economic territory but are not able to illustrate the international linkages that are essential to analyzing the impact and importance of GVCs. In addition, standard macroeconomic account tools are organized around products, industries and sectors, while the more applicable organizing framework to explain a GVC are business processes and activities.

To address these measurement challenges, the UN Statistical Commission at its 44th session in 2014 established the Friends of the Chair Group on the Measurement of International Trade and Economic Globalization, which was tasked with preparing a concept paper on the measurement framework for international trade and economic globalization. That report provided an overview and assessment of the conceptual, compilation and analytical issues that have emerged in respect of the prominence and governance of GVCs in international production and trade. The Group concluded that a GVC satellite extension of the national accounts and a GVC framework of integrated business statistics were needed to address the measurement issues in a coherent way. At its 46th session in 2016, the UN Statistical Commission established the Expert Group on International Trade and Economic Globalization Statistics (EG ITEGS) to develop a Handbook that would address the GVC-related classifications and the integration of the System of National Accounts 2008 (2008 SNA), supported by an integrated framework of business and trade statistics. The UN Statistical Commission also agreed with the proposed development of a global enterprise group register to assist national statisticians to better understand business strategies and

the international trade and foreign direct investment relations between enterprises in compiling cross-border macroeconomic, trade and business statistics.

EG ITEGS consists of more than 30 experts in the fields of national accounts and business statistics from national statistical organizations and international organizations. It has met once in 2014, twice in 2016, once in 2017, and once in 2018 to discuss the drafting of the "Handbook on Accounting for Global Value Chains". The main objective of the Handbook is to provide a high-level overview of how economic statistics can be made more accurate and relevant in measuring the effects of globalization in national accounts and business statistics. The Handbook provides a national perspective on globalization based on a Global Value Chain approach for specific industries in a multi-country supply chain of goods, value adding services and institutional arrangements.

The Handbook describes a new GVC framework for measuring and analyzing economic statistics, which captures the effects of globalization in national accounts and business statistics. This approach provides a national perspective on globalization while building a multi-country satellite account for a specific set of GVC-related economic activities, like automotive industry, apparel and textiles industry, electronics industry, etc. . The GVC approach builds on the integrated collection of business statistics from large global enterprises (across countries) for this select set of GVC-related economic activities, including trade in intermediate goods and services and foreign direct investment. In addition, inter-country supply and use tables, as well as inter-country input-output tables, can help to chart and understand relations at a macroeconomic level. To properly and correctly measure the cross-border statistics, some data-sharing with important economic partner countries may be necessary.

The Handbook further builds on existing work by the Economic Commission for Europe (ECE), the Organization for Economic Cooperation and Development (OECD), the World Trade Organization (WTO), Eurostat and others. Moreover, the Handbook complements other initiatives undertaken at regional and international levels, such as the extensive work by the OECD-WTO Trade in Value Added (TiVA) project and the Eurostat 'Full International and Global Accounts for Research in Input-Output Analysis (FIGARO) project and Framework for Integrated Business Statistics (FRIBS). Other initiatives brought into view are the World Input-Output Database (WIOD) initiative, Asian I-O table (of IDE-JETRO), the environmental-economic extensions (EE-MRIO), such as EXIOPOL and Eora, and the IMF led G-20 data gaps initiative on global economic and financial interdependencies and vulnerabilities, among others.

The Handbook is organized in five parts:

1) an **Introduction**, which defines GVCs and lays out in what ways existing economic statistics are not suited for measuring GVCs, as well as the policy needs that GVC accounting can address;

2) the **Conceptual Framework of GVC Accounting**, including descriptions of how to define the industrial and geographical boundaries of a GVC, classifications, required data and data sources, extensions to supply-use tables, and GVC-specific multi-partner country institutional sector accounts;

3) the **Framework for Integrated Business Statistics**, which lays out definitions for business lines and business functions, profiling large multinational enterprises, the importance of business registers and global registers; and resolving data inconsistencies in basic economic statistics (e.g., bilateral trade asymmetries);

4) the **GVC Analysis and Policy Framework**, demonstrating in depth how GVC accounting and resulting data can address specific policy questions

5) an **Annex**, which covers empirical challenges in compiling GVC accounts (such as estimating for missing data) and other conceptual accounting topics (such as inward/outward processing and factoryless goods production)

It also includes a Glossary of terms.

The preparation of the Handbook is driven by an editorial board, which includes the Editor of the Handbook, the Chair of the Expert Group and, as secretariat, the Statistics Division of the Department of Economic and Social Affairs of the UN Secretariat.

The Handbook is currently undergoing revisions. It is expected that the EG ITEGS will finalize it by the end of 2018. Upon decision of the EG ITEGS, the Handbook will be sent for country consultation of which the outcome will be reported to the Commission. The Handbook will be presented as a background document to the UN Statistical Commission in March 2019 for endorsement. Background papers, expanding on certain topics from the Handbook in more detail, have already been drafted by the members of the EG and will be posted online as further reference material in the form of a Compendium.