**International trade and economic globalization statistics**

**Report of the Secretary-General**

**Summary**

The present report was prepared in accordance with Economic and Social Council decision 2015/216 and past practices. At its forty-sixth session, the Statistical Commission established a new expert group tasked with the preparation of a handbook on a system of extended international and global accounts, and recommended the creation of an intersecretariat working group for the coordination of the work in the area of international trade and economic globalization. This report presents recent developments in the field of international trade and economic globalization statistics, the outline of the handbook and the tentative work programmes of the new expert group and the intersecretariat working group. The Commission is invited to take note of the report.

* E/CN.3/2016/1.
I. Introduction

1. At its forty-sixth session, the Statistical Commission expressed its agreement with the proposal of the Friends of the Chair group on the measurement of international trade and economic globalization to draft a handbook on a system of extended international and global accounts, to serve as the measurement framework for international trade and economic globalization (see E/2015/24, chap. I.C, decision 46/107). This handbook should build on existing work in this area, in particular the work undertaken under the auspices of the Economic Commission for Europe (ECE), the Organization for Economic Cooperation and Development (OECD) and the Statistical Office of the European Union (Eurostat), and should address issues of linkage of microdata related to business to trade statistics, as well as the integration of economic, environmental and social dimensions of trade and globalization as an extension of the System of National Accounts 2008 (2008 SNA)¹ and the System of Environmental-Economic Accounting 2012 (2012 SEEA).

2. In the same decision, the Statistical Commission, in addition to agreeing with the proposal to draft a handbook, agreed with some of the priorities for the programme of work in the area of international trade and economic globalization statistics, namely (a) promoting the creation of a global enterprise group register, building on the ongoing EuroGroups Register project; (b) improving the measurement of firm heterogeneity by further developing a classification of business functions; (c) addressing asymmetries in bilateral trade and foreign direct investment (FDI); and (d) mainstreaming the development of global supply-use and input-output tables, with the aim of increasing the coverage of the OECD-World Trade Organization (WTO) database on trade in value added. The Commission endorsed the recommendation to establish an expert group tasked with the development of the handbook on a system of extended international and global accounts and agreed with the proposal to establish an intersecretariat working group for international trade and economic globalization statistics, which would coordinate the work in that field.

3. The next section of the present report lays out the substantive background for the development of the handbook, provides an outline of its contents and indicates some of the issues that will be tackled first. The expert group that will support the preparation of the handbook and the creation of the intersecretariat working group and its coordinating role are discussed in sections IV and V, respectively. The final section focuses on the next steps in this process.

II. Handbook on a system of extended international and global accounts

4. The handbook will build upon the 2014 and 2015 reports of the Friends of the Chair group on the measurement of international trade and economic globalization (E/CN.3/2014/7 and E/CN.3/2015/12) and the work of the ECE Task Force on Global Production, of the OECD Expert Group on Extended Supply-Use Tables and of Eurostat on global value chains and economic globalization. The present section highlights the important parts of those inputs.

¹ ST/ESA/STAT/SER.F/2/Rev.5 (United Nations publication, Sales No. E.08.XVII.29).
5. Global value chains (GVCs) were highlighted most prominently in a 2013 report of Eurostat, which stated that structural changes in the global economy have made it more common for value to be added to products and services in two or more countries prior to final use. This new spatially and organizationally fragmented production and financing system requires high levels of monitoring and control, more precise coordination of logistics, and the transfer of highly complex design parameters. The necessary and well-coordinated instructions both within and between enterprises are enabled by the computerization of design and manufacturing processes, by the low cost of data communications and by improved software to manage this flow of information. As a result, physical distance has become less of a hindrance to segmenting and relocating business processes, allowing the international trading system to become more dynamic, flexible, responsive and complex. Producing for global markets provides opportunities for scale — even in narrow segments of the value chain — which never existed when markets were only local, domestic or regional.

A. Background

6. The handbook will refer to and build upon the work of the Friends of the Chair group, which concluded that improved statistics are necessary and should bring a better understanding of the role of the external sector in an economy, the openness of its domestic and foreign markets and the impact of openness on social, economic and environmental upgrading, including the level and quality of employment. More and better data are needed in developed, emerging and developing economies alike: interconnected economies require interconnected statistics and all economies can benefit from a better understanding of these relationships.

7. As stated in the 2015 report of the Friends of the Chair, policymakers and trade negotiators need to understand the cross-country benefits and risks by being able to “look through” the global value chains and observe the specific contributions that other countries are making to production networks involving their domestic firms (see para. 6 thereof). The GVC approach was suggested by the international statistical community as the preferred means of measuring the interconnectedness of economies with respect to jobs, skills, international competitiveness and the creation of value added, income and jobs. The activities associated with GVCs can be grouped into broad stages of production, from upstream research and design, through manufacturing, to downstream logistics, marketing and sales. In a GVC, many of the tasks are “offshored”, either through an enterprise’s own affiliates located in foreign countries or through independent contractors. It is this newly emergent international economic integration of production and trade and their governance that has to be better measured and analysed, including in respect of the benefits, costs and risks associated with engaging in GVCs.

8. The handbook can build upon the recommendations and guidelines provided in the ECE document entitled “Guide to measuring global production”. This Guide

---


was released at the end of 2015 and provides valuable insights into the functioning and measurement of global value chains. It provides a typology of global production arrangements and describes the principles of ownership inside a multinational enterprise, as well as ownership of intellectual property products inside global production. In addition, data source and compilation challenges are addressed, with special attention to large and complex enterprises.

9. The handbook can also build upon work presented at the International Conference on Measurement of Trade and Economic Globalization, held in Aguascalientes, Mexico, from 29 September to 1 October 2014. For example, it could use the value chain reference model to establish alternative aggregations of basic categories under the International Standard Industrial Classification of All Economic Activities (ISIC). Those aggregations can be based on enterprise activities in the offshoring of business functions, the use of intermediate inputs, the kinds of basic classes of goods produced and the variety of end markets. The reason for making those distinctions is that it is not possible, within the current ISIC, to distinguish the significant differences between enterprises that operate domestically and those that operate globally. Harmonization of enterprises into groups of similar make-up could significantly improve the accounting structure of the supply and use tables for the analysis of global value chains; harmonization could be achieved in terms of industry, supply chain position, end markets and the extent of the use of the business functions being outsourced.

10. The OECD Expert Group on Extended Supply-Use Tables addresses the estimation methods of trade in value added. In the terms of reference of the Expert Group, it is stated, inter alia, that globalization is rapidly changing long-standing assumptions about the relative homogeneity of the production functions (input-output technical coefficients) of units classified to a given industrial activity, which is, implicitly, an underlying assumption used in creating input-output-based indicators. The increasing prevalence of new types of firms such as factory less producers and contract processing firms, and the increasing tendency towards horizontal, as opposed to vertical, specialization, particularly for multinational affiliates, has fundamentally challenged these assumptions. Therefore, the OECD Expert Group is looking for the best ways to break down the classification of firms by specific characteristics (such as involvement in GVCs) which will make the subgroups more homogeneous.

11. Taking into account the work highlighted directly above, a GVC approach seems appropriate for the handbook on a system of extended international and global accounts, since GVCs cut across geographical borders and bring together those global economic activities, goods and services that belong together in the chain. Measurement of economic interdependencies (involving investment, job creation, income and intellectual property) within and across countries — between upstream design and downstream assembly — requires measurement of GVCs. Similarly, if we want to understand the interdependencies within and across countries for global retailers, and financial and non-financial service providers, as well as horizontally integrated enterprises, the GVC is the appropriate organizing framework.

12. The present focus on GVCs has important implications for the unit of measurement and related data-collection and estimation procedures. Most of the key

---

decisions of global manufacturers and global service providers are made at the enterprise level rather than at the establishment or plant level. This implies that for multinational enterprises, data on profits, research and development, transfer pricing, final product pricing, design, financing, advertising and the other links in GVCs are available only at the global enterprise level.

**B. System of extended international and global accounts**

13. A system of extended international and global accounts is considered a satellite account to the 2008 SNA and 2012 SEEA, in line with a number of recent globalization studies, guidelines and reports which have suggested that for issues related to alternative concepts or definitions, such as the treatment of the transactions and positions of global enterprises as a whole, the “most likely way forward would be by way of supplementary tables”. The “Guide to measuring global production” makes similar suggestions in its recommendations for future work. At its fourteenth session, held in Geneva from 7 to 9 July 2015, the ECE Group of Experts on National Accounts on measuring global production also suggested, given that the new concepts associated with globalization are increasingly difficult to deal with within existing national accounts, that they may be best tested in satellite accounts.7

14. Satellite accounts have the advantage of providing a supplementary framework for developing new measures, without overburdening or reducing the accuracy or consistency of the core accounts. Because such satellite accounts would be an extension of the existing system of national accounts, balance of payments and environmental-economic accounts, they can provide an integrated, consistent and comprehensive accounting framework which ties up new globalization measures, such as trade in value added, with new globalization research.

15. The system of extended international and global accounts will seek consistency with and elaborate on the core accounts of the SNA and SEEA. In this regard, the system of extended international and global accounts will significantly improve the relevance of economic, environmental and social statistics. It is expected that policymakers, business analysts, researchers and investors will be able to draw from the large kit of analytic tools based on the system of extended international and global accounts, with national accounts, balance of payments and environmental-economic accounts at the core.

16. Specifically, the system of extended international and global accounts, as a satellite account, will provide an integrated presentation of the accounts and tables that supply an integrated international and global framework for decomposition and linkages of production, income, expenditures, assets, liabilities and environmental-economic transactions across regions, countries and industries. It is expected that these accounts and tables will provide additional breakdowns of existing international entries in the core accounts, such as breakdowns of exports and imports by the characteristics of exporters. Moreover, they are expected to provide global linkages, with alternative scope and concepts, to the core accounts, such as global supply and use tables that are linked to expanded country tables, allowing for a decomposition of trade and bilateral balances on a value added basis.

---

6 Available, for example, at http://www.unece.org/publication/impact_of_globalization_on_national_accounts.html.

7 See http://www.unece.org/index.php?id=37893#/.
III. **Expert Group on International Trade and Economic Globalization Statistics**

17. The Statistical Commission decided to establish an expert group tasked with the development of the handbook on a system of extended international and global accounts and proposed that this group be a continuation of the Friends of the Chair group, offering other countries the option of joining. All of the members of the Friends of the Chair group reconfirmed their membership in the newly established expert group. Kazakhstan and the United Kingdom of Great Britain and Northern Ireland, both of which had expressed interest in this regard at the forty-sixth session of the Commission, also joined. Ireland was chosen as the Chair of the Expert Group. The full membership is set out in the annex to this report.

18. The first meeting of the Expert Group will be held at United Nations Headquarters from 26 to 28 January 2016. The terms of reference of the Expert Group and its programme of work will be discussed at that meeting. The outcome of that meeting will be presented in a background document to this report.

IV. **Intersecretariat Working Group on International Trade and Economic Globalization Statistics**

19. At its forty-sixth session, the Statistical Commission also agreed with the proposal to establish an Intersecretariat Working Group on International Trade and Economic Globalization Statistics with a mandate to include coordinating work undertaken by the various international and regional organizations in that field. The Intersecretariat Working Group should also promote the development of databases, at international, regional and national levels, for international trade and economic globalization statistics; and coordinate and promote capacity-building activities to improve those statistics at the microlevel for the better calculation of statistics at the macro level.

20. The members of the Intersecretariat Working Group are: Eurostat, the International Monetary Fund, OECD, the United Nations Conference on Trade and Development, ECE, the Statistics Division of the Department of Economic and Social Affairs of the Secretariat and WTO. The first meeting of the Intersecretariat Working Group will be held at United Nations Headquarters on 29 January 2016. The terms of reference and the programme of work of the Group will be discussed at that meeting. The outcome of the meeting will also be presented in a background document to this report.

V. **Next steps**

21. The outcome of the meeting of the Expert Group in January 2016 will determine its programme of work. Given the decision of the Statistical Commission in 2015, it is expected that the programme of work will include steps to advance the drafting of the handbook, and steps to advance the creation of a global enterprise group register, to improve the measurement of firm heterogeneity for GVC purposes, to address asymmetries in bilateral trade and investment and to mainstream the development of global supply and use tables, building on work done by OECD in relation to the OECD-WTO Trade in Value Added (TiVA) database.

22. The Statistical Commission is invited to take note of the present report.
Annex

Membership of the Expert Group on International Trade and Economic Globalization Statistics

Africa: Cabo Verde, Morocco, South Africa and Uganda

Americas: Canada, Colombia, Costa Rica, Mexico and United States of America

Asia: China, India, Iran (Islamic Republic of), Kazakhstan, Republic of Korea, Thailand and Viet Nam

Europe: Ireland (Chair), Denmark, Italy, Netherlands and United Kingdom of Great Britain and Northern Ireland


United Nations Secretariat: Statistics Division of the Department of Economic and Social Affairs