

**11th Meeting of the Advisory Expert Group on National Accounts,  
5-7 December 2017, New York, USA**

**Agenda item: 3.1**

**Update on the work of the UN Expert Group on International Trade and Economic  
Globalization Statistics**

**3.1.1 Handbook on Accounting for Global Value Chains: Status of Handbook (June 2017)**

1. 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. Within this objective, the expert group further agreed that:
  - a. The Handbook will be based on extended national accounts and integrated business statistics to better inform public policies and business decisions on issues related to – for example – growth and productivity, domestic and foreign share of value added in trade, and domestic and foreign labor and capital used in the trade of goods and services.
  - b. The Handbook will provide a national perspective on globalization based on a GVC model, which describes specific GVC industries in a multi-country supply chain of goods, value adding services and institutional arrangements. Such approach will then allow for an integrated presentation of production, income, assets, liabilities, and environmental-economic transactions broken down by partner country for those GVC industries that have a significant role in the national economy resulting in GVC-specific multi-partner SUTs and related accounts.
2. The Handbook should be helpful to a wide range of compilers in offering traditional as well as alternative solutions, such as indirect estimates using existing data as well as a mix of existing and new data sources.
3. The Handbook should underline that – within the overall framework – countries can flexibly (in a modular fashion) implement the recommendations according to their national priorities.

## Outline of the Handbook

4. Regarding the outline of the Handbook, the Expert Group further agreed that:
  - a. The Handbook will be divided into five parts plus a research agenda. The first part documents the policy, business and statistical motivation of the GVC approach for measuring trade and globalization. It will show the growth in GVCs, their impact on the relevance and quality of economic statistics (i.e. value added share in trade, double counting, asymmetries), and the need for a good understanding of multi-country production processes of specific GVCs for better decision making from a national perspective.
  - b. The second part will present the general statistical framework of the extended national accounts and integrated business and trade statistics. It will provide details and explanations about the GVC-specific multi-partner SUTs and the extended regional and global SUTs; the OECD-WTO Trade in Value Added (TiVA); extended productivity framework using the KLEMS model; extended environmental-economic accounts of the System of Environmental-Economic Accounts (SEEA); and extended capital and financial accounts. This part also describes the conceptual issues around global multinational enterprise (MNE) statistics, since these enterprises are the leading actors of globalization, and it closes with a chapter that discusses special topics, including those remaining from the research agenda of the UNECE Guide to Global Production.
  - c. The third part of the Handbook will deepen the understanding of GVCs, as the central theme of this Handbook. It will describe the GVC approach, the granularity of product and industry classifications of SUTs and sequence of accounts needed to address firm heterogeneity and the integration of GVC accounts in regional and global accounts, and the firm-level and micro-level data needed to compile a GVC. This part will also illustrate the application of the GVC model through a number of multi-country case studies for selected GVC industries.
  - d. Part four will deal with the framework of integrated business, trade and investment statistics for GVC specific industry accounts, which describes a firm based approach for GVCs. By implication, an extension of business registers for large corporate firms is proposed with additional breakdowns for the characteristics of these GVC related firms, such as for size (in terms of income, employment or capital), trade intensity, ownerships through foreign direct investment, and international sourcing of business functions. Attention will be given to the harmonization of MNE and foreign affiliate statistics especially among countries which partner in economically important GVCs by developing databases for these “large cases” units. This part further discusses

methods that can improve the quality of core business statistics, among others, by linking the trade of goods and the trade in services for specific GVC industries through off shoring of production of goods and services, and by resolving bilateral asymmetries in merchandise trade, trade in services and foreign direct investment through the trade analysis of consolidated product codes and investment relationships for specific GVC industries.

- e. The final part of the Handbook will describe the applications of the measurement framework and its various extensions in terms of deriving estimates for value-added, jobs, use of capital, use of natural resources and more. It will also describe the public policies that will be supported by the extended accounts and integrated business statistics. Policy uses that will be discussed include policies in the areas of trade and development, taxes, monetary and financial stability, labor markets, and the environment.
- f. The currently proposed detailed outline of the Handbook is then as follows:

#### Part I

Chapter 1: Introduction – Policy, Business and Statistical Motivation to account for Global Value Chains

#### Part II

- Chapter 2: Overview of the general statistical framework
- Chapter 3: Extended Supply and Use Tables, including applications
- Chapter 4: Extended Productivity (KLEMS) Accounts
- Chapter 5: Extended Environmental-Economic Accounts
- Chapter 6: Extended Capital and Financial Accounts
- Chapter 7: Conceptual issues of Global enterprise perspective
- Chapter 8: Special Accounting Topics

#### Part III

- Chapter 9: Global Value Chain Satellite Account
- Chapter 10: GVC Industry Modules and their Application

#### Part IV

- Chapter 11: Firm heterogeneity related to globalisation
- Chapter 12: Bilateral asymmetries, Global Groups Register and the exchange of information

#### Part V

- Chapter 13: Public policy use of the Extended Accounts
- Chapter 14: Research Agenda

## **Guidelines for the drafting process**

5. Chapter 2 will set the tone for the Handbook describing in general terms what an industry-specific Global Value Chain (GVC) approach encompasses, which (i) focuses on a national perspective on globalization based on a multi-partner GVC approach, (ii) accounts for multi-partner supply chain of goods, value adding services, integrated business statistics and institutional arrangements in specific GVC industries, and (iii) then compiles GVC industry-specific multi-partner SUTs and related accounts. Chapter 2 explains that extensions are needed to the existing standards for national accounts, balance of payments, and integrated economic statistics due to the international fragmentation of production and corresponding globalization of economic activities. Chapter 2 also describes building regional and global supply and use tables, which complement the GVC approach at the regional and global levels. The chapter will conclude by pointing towards all the indicators which could be derived from various approaches and how they relate to each other.

6. Each of the chapters following Chapter 2 should highlight the common theme of accounting for GVCs at the different multi-country levels, namely at the industry-specific GVC level and the regional and global levels:

- For the extended SUT (TiVA) approach;
- For the extended KLEMS approach;
- For the extended environmental-economic accounts;
- For the extended capital and financial accounts;
- For the conceptual issues around global multi-national enterprise (MNE) statistics; and
- For the remaining issues from the research agenda of the UNECE Guide to Global Production.

7. The third part of the Handbook will deepen the understanding of GVCs, as the central theme of this Handbook. It will describe the template for the multi-partner SUT of the industry-specific GVC. It will also show a number of specific examples

8. Part four will deal with the framework of underlying integrated business, trade and investment statistics for the industry-specific GVC approach. It can easily refer back to Chapter 2 and the integrated economic statistics, as well as to globalization indicators which can be derived.

9. The final part of the Handbook will describe the policy applications of the indicators which are derived from the industry-specific GVC approach.

10. Drafting advice, as provided at the second meeting in November 2016 in New York:

⇒ Audience is perceived as high level executive, which means that the descriptions can be technical but need to remain accessible; examples include U.S. Economic Report of the President (Council of Economic Advisers), or OECD Economic Outlook

⇒ Use links to existing materials

- The handbook is intended to be a high level overview of how economic statistics can be made more accurate and relevant in measuring the effects of globalization, organized by topic area. The handbook builds on existing standards, guidelines, and research and should not repeat them but give an overview of them and point the reader to the more detailed and technical original source materials.

⇒ Suggest alternative methods:

- The manual should be helpful to a wide range of countries and statistical systems, and where relevant, it should highlight alternative solutions
  - Indirect estimates using existing data
  - Use of mixed data
  - Top Down and Bottom Up
- The manual should also make clear that within the overall framework, countries can flexibly (in a modular fashion) implement the GVC industry-specific multi-partner accounts according to their home country priorities

⇒ Keep it General/Generic:

- Don't overdo home country examples. Try and use boxes for examples for more details on home country; try and include another country example to pair with home country example, whenever possible.

⇒ Avoid duplication across chapters, but chapters should be able to stand alone

- Most readers will not read the entire volume, but read selected chapters, so each chapter should have just enough context to “stand alone.”
- ⇒ Balanced references and descriptions of concepts, methods, research, and data
- This volume includes a mix of authors – official statisticians, economists, academics and other and researchers. Try and include references to relevant work/research outside the arena of official statistics The Executive
- ⇒ Summary/Forward should:
- Highlight policy uses of the extended accounts and data;
  - Provide a very high level overview of methods for better measuring the impact of globalization;
  - Explain what’s included in the volume; what’s out, and why;
  - Explain that the chapters cover a range of topics and techniques and some are more mature than others and therefore the volume contains a range of advice and recommendations
- ⇒ Add material on the implications of globalization on the distribution of income and on imported input prices
- It was agreed that these topics needed to be addressed in the handbook.