Third meeting of the UN Committee of Experts on Business and Trade Statistics

The usefulness of linking business and trade statistics for analyzing globalization

September 30, 2020

## Outline

- Relevance of trade in the Mandate of the UNCEBTS
- The perspective of business and trade in the TT on BDBDE
- Trade by Enterprise Characteristics
- Linking business and trade statistics
- Microdata linking process in Mexico
- Statistical products as result of microdata linking in Mexico
- North American Trade in Value-Added Initiative
- Final remarks



# **Relevance of trade in the Mandate of the UNCEBTS**

'The committee will adopt an integrated economic statistics approach based upon an enterprise-centered approach perspective in the execution of its mandate'

'To provide coordination and guidance for the development of business and business-related statistics to offer information on the structure, economic activity, competitiveness of businesses'

'The committee will take a broad approach to business statistics, to advance and promote the integration of business and trade statistics.' This will allow to identify and differentiate in the SBR between categories of firms such as:

- Exporter/non exporter
- Foreign-owned/domestically owned
- Market/non-market



## The perspective of business and trade in the TT on BDBDE

In addition to traditional statistics on business demography and entrepreneurship, other thematic areas may address the issues related to business dynamics, such as statistics on:

- globalization
- skills and innovation
- research and development

- ICT usage
- e-commerce
- geospatial information

In the case of globalization, the Task Team seeks to provide information of its effects on business activities, such as:

- Activities of MNE Groups and their affiliates
- Outsourcing of FDI activities



# **Trade by Enterprise Characteristics**

- The main objective of statistics on the international trade in goods by enterprise characteristics (TEC) is to bridge two major statistical domains which have traditionally been compiled and used separately; that is, business statistics and international trade
- TEC provides information on businesses related in trade with breakdowns such as:
  - Enterprise Ownership (domestically controlled and controlled from abroad)
  - Size by level of employment (SMEs and Large enterprises)
  - Revenues
  - Industrial Activity (contribution of a particular activity sector in trade)
  - Trading status (on exports, imports, two-way traders)
  - Products traded
  - Geographical diversification by country (subnational level)



# Linking business and trade statistics (I)

- The SBR is the backbone for producing business statistics and it is key in the data integration process of multiple sources
- The UNCEBTS suggest to follow a *spine model*, which will allow to:
  - Fully exploit the SBRs through microdata linking to provide additional business characteristics (e.g. integrating trade and business data)
  - Elaborate new statistical products and further breakdowns
  - Reduce response burden with minimal impacts in the NSOs budget



# Linking business and trade statistics (II)

- Therefore, the use of the SBR and linking its microdata to other sources contribute to the study of the globalization phenomena through analyzing its effects in international trade, production, employment, and other economic variables
- In this sense, it will address the increased demand for granular information from users to:
  - Support the design and evaluation of public policies
  - Make well-informed decisions
  - Test models and theories based on reality



## Microdata linking process in Mexico

- INEGI has carried out microdata linking among several sources to elaborate new products with different breakdowns, by using the Mexican Statistical Business Register (RENEM, its acronym in Spanish)
- RENEM merges statistical information from economic surveys, and several administrative registers, as well as the economic censuses
- The statistical unit for linking business and trade statistics is the enterprise
- The enterprise, which comprises more than one establishment, consolidates all of them all under the same legal name, facilitating RENEM's data linking to customs declarations
- For producing subnational statistics (e.g. Exports by State), the consolidated enterprises are disaggregated by establishment



# Statistical products as result of microdata linking in Mexico (I)

Microdata linking carried out in Mexico is the basis for elaborating several statistical products to analyze the globalization and its effects in the Mexican economy, particularly to estimate the role and contribution of the Mexican firms in international trade, as well as in GVCs

• Mexican Profile of Manufacturing Export Enterprises (PEME)

It provides information regarding the characteristics of manufacturing enterprises involved in exports and imports with the purpose of contributing to the analysis of the effects in international merchandise trade, production and employment in Mexico https://www.inegi.org.mx/programas/peme/



# Statistical products as result of microdata linking in Mexico (II)

#### Exports by State

Based on PEME, it takes advantage of geographical data on the production and employment of establishments to provide quarterly figures about the exports of goods for the 32 states of Mexico <a href="https://www.inegi.org.mx/temas/exportacionesef/">https://www.inegi.org.mx/temas/exportacionesef/</a>

#### Value Added of Exports for Global Manufacturing (VAEMG)

It displays under the framework of the System of National Accounts the domestic value-added content of the manufacturing enterprises located in Mexico that participate in global production. <u>https://www.inegi.org.mx/temas/pibval/</u>

#### Extended Supply and Use Tables (eSUTs)

Explains the inter-sectoral relationships in the Mexican economy, providing insights on firms' heterogeneity. The eSUTs are an extension of the National Supply and Use Tables (SUTs) containing a set of figures that describe the size of the inter-sectoral flows, displaying variables such as production, imports, intermediate and final demand <a href="https://www.inegi.org.mx/temas/coue/">https://www.inegi.org.mx/temas/coue/</a>



### North American Trade in Value-Added Initiative (I)

- NA-TiVA is an initiative promoted by the statistical agencies of Canada, Mexico and the United States, which aims to produce a regional database on Trade in Value-Added (TiVA), to measure and support the analysis of the interconnectivity, as well as the contribution of each sector of every economy in the regional GVCs
- NA-TiVA initiative was formalized in 2016 through a Memorandum of Cooperation which highlights the importance of data sharing and transparency of cross-border statistical collaboration
- Participant agencies: Statistics Canada, National Institute of Statistics and Geography, (INEGI-Mexico), and from the United States, the U.S. Trade Representative, U.S. International Trade Commission, Census Bureau and the Bureau of Economic Analysis



# North American Trade in Value-Added Initiative (II)

- To analyze the interconnectivity within the three countries of the region by industry and products traded, the MoC stablished the following deliverables:
  - Methodological document
  - Regional Supply and Use Tables (NA-SUTs)
  - Inter-Country Input-Output (NA-ICIO) Tables
- Extended Supply and Use tables (eSUTs) for each country
- NA-TiVA database

- NA-SUTs, NA-ICIO and eSUTs
  - The construction is based on the national SUTs and Input-Output Tables (IOTs) developed and provided by each country, consisting of raw data for subsequent harmonization efforts, which aim to a common data set at detailed level, as well as product and industry classifications
  - For the development of the eSUTS, it is required to process data on firm heterogeneity (size by employees, trading status and ownership profile)



### North American Trade in Value-Added Initiative (III)

- Trade statistics are an essential input for the construction of the regional SUTs and this data should be reconciled through the application of a methodology focused on reducing bilateral trade asymmetries
- Methodological document and the NA-TiVA database

All the process is explained in a *White Paper* that captures the concepts and procedures used for the multi-country accounts as well as the methodologies followed by other worldwide initiatives to ensure international comparability

• The NA-TiVA team has published a first version of the *White Paper* and it is expected to update this version by the end of 2020. On the other hand the three countries are working towards producing a NA-TiVA database in 2021

https://www.usitc.gov/publications/332/working\_papers/na-tiva\_white\_paper\_for\_posting\_2-26-2018.pdf



### **Final remarks**

- The current revision of BPM and the forthcoming update of other international manuals (such as IMTS, MSITS and SNA), give us the great opportunity for improving the bridges between business and trade statistics to contribute for an integrated view of economic statistics worldwide
- For this purpose it is necessary strengthening coordination and communication among the engaged IOs and participating NSOs, for connecting adequately conceptual and compilation issues which will be part of the revision and update of all these manuals
- Some areas that should be considered (among others) in this work are:
  - Statistical unit (the relevance of establishment)
  - Thresholds (in features such as size of enterprise and trading status)
  - Sectorization of MNEs (foreign or domestic controlled)
  - New sources and methods to measure global production (based on the full integration of business and trade statistics)



# **Thank You!**

**Contact:** 

Gerardo Durand Deputy Director General of Economic Administrative Registers

gerardo.durand@inegi.org.mx

