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Gross Value Added of E-Commerce in Mexico

Prepared by the National Institute of Statistics and Geography

Summary

The objective of this indicator is to provide the users information that allows them to know the evolution of the gross value added of e-commerce from year 2013 onwards, as a first approach to seize the importance and relevance of the digital economy in the Mexican National Accounts System. As an innovative way to tackle this statistical challenge, the measurement of the gross value added of e-commerce was made under a supply approach, and is disaggregated into wholesale and retail trade, as well as other services realized via informatic networks.
I. Introduction

1. The so-called "digital era" is revolutionizing the global social and economic dynamics. Everyday actions such as studying and working, obtaining services of lodging, mobility, communications and the trade in goods and services have evolved rapidly.

2. Digitization has transformed the way in which households, businesses and governments interact through local and cross-border transactions. This has marked a new stage of the globalization characterized by the flow of cross-border data, modifying the nature, patterns and economic actors in the international context of trade in goods and services.

3. The development of the internet, broadband networks, mobile applications, communication services and hardware have been the foundations of the digital economy, which gain day by day greater importance, becoming a task of study for both the statistical community and for those responsible of the development of a statistical framework that explicitly includes the importance of this phenomenon.

4. The new forms of contracting services change the role of traditional suppliers by web-based suppliers. Some examples of the digital economy are:
   - Accommodation Services.
   - Passenger transportation services.
   - Freight transport services.
   - Marketing services.
   - Financial intermediation services.

5. There is a change in the role of households, from consumers to producers: people directly hire transportation or lodging services each other, whereas previously resorted to travel agents or transport companies; as well as using online banking services instead of going to "a bank" to make transactions.

6. The measurement of these transactions, which are carried out in a virtual and on digital platforms, represents a challenge for the National Institute of Statistics and Geography (INEGI by its acronym in Spanish), since there is a necessity of incorporating questions in the projects of generation of basic statistics to identify the address and amounts that are implied.

7. INEGI through the System of National Accounts of Mexico (SCNM by its acronym in Spanish), reflects the changes in the global context of economic measurements, studying the best practices to make them visible. As a result of this, the measurement of the gross value added of e-commerce and its participation in the Gross Domestic Product (GDP) are presented, as a first approach to the measurement of the Digital Economy. Particularly, this indicator reflects the behavior of the electronic commerce, understood as the process of purchase, sale or exchange of goods, services and information conducted over computer networks, whose payment may or may not be done online.

II. Sources of information and methods of calculation

8. The measurement of the gross value added of E-commerce, was made under a supply approach related to the wholesale, retail and other commercialization services.

9. To calculate the gross value added of E-commerce for the base year 2013 the following sources of information were used:
10. Economic Census 2014:
   o Income from the supply of goods and services.
   o Percentage of sales made over the internet, email or through hosting of a web page, during 2013.

11. Supply and Use Tables (SUT) 2013:
   o Trade margins.
   o Use of services.

12. With the information obtained from the Economic Censuses 2014 related to the total sales income and the percentage of those sales performed electronically, the factor that identifies e-commerce on the supply of goods and services was calculated.

13. The e-commerce data for goods and services is obtained by multiplying the factor obtained for each kind of activity by:
   - the trade margin for the goods, or;
   - the total use of services for the service activities.

14. It is possible to distinguish between wholesale and retail trade of goods, since it is identified the e-commerce that is carried out by the commercial activities and electronic trade related to the trade margins of the goods themselves in all the commercial phases in which they are.

15. That is, all the channels of possible distribution, are considered, as shown in the next diagram.

Diagram of sales channels

![Diagram of sales channels](image)

Channel A: From the Producer directly to the Consumer (without margins)
Channel B: From the Producer to the Consumer through a wholesale merchant (Wholesale margins)
Channel C: From the Producer to the Consumer through a wholesale merchant and a retailer (Wholesale and retail margins)
Channel D: From the Producer to the Consumer through a retail merchant (Retail margins)

16. Once the values of e-commerce for goods and services are identified, the GVA is calculated referred to the gross total production (GTP) for each activity, according to the GVA / GTP ratio of the SUT 2013. By multiplying both results, the GVA of the e-commerce is obtained.

17. To follow-up of the annual series, the following information is considered:
   - Annual Trade Survey:
o Marketing means (internet).

- Goods and Services Account:
  o Trade Margins.
  o Use of services.

18. From these two sources the variables that allow us to characterize the trade electronic to follow their behavior are used, applying the same grouping criteria used in the base year 2013.

19. It should be noted that this product is a first approach to the measurement of the Digital Economy, specifically the e-commerce, and provides relevant information to promote public policies, academic research and an extension of the economic knowledge of the country based on the results obtained.

III. Main results

20. Taking advantage of the information available from the Economic Census 2014 and the SUT 2013, the measurement that allows to observe under the optics of the Supply of goods and services the GVA of e-commerce was made.

Gross Value Added of E-commerce
The GVA of e-commerce is available in a series started in the year 2013, at current prices and prices of 2013, for the total economy, and showing the wholesale trade, retail trade and other services, in millions of Mexican pesos.

References: