

The Use of Economic Surveys, Business Records and the Economic Census in the statistics of the Global Manufacturing Production



INSTITUTO NACIONAL
DE ESTADÍSTICA Y GEOGRAFÍA

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General context



INEGI recognized the need to measure and/or estimate the Global Production (GP) to estimate the insertion of the manufactures in the Global Value Chains and to support users in decision making and in doing analysis of this sector.

General context

The Global Production was measured for the first time in the country through the implementation of 3 criteria linked to microdata of the sources, namely:

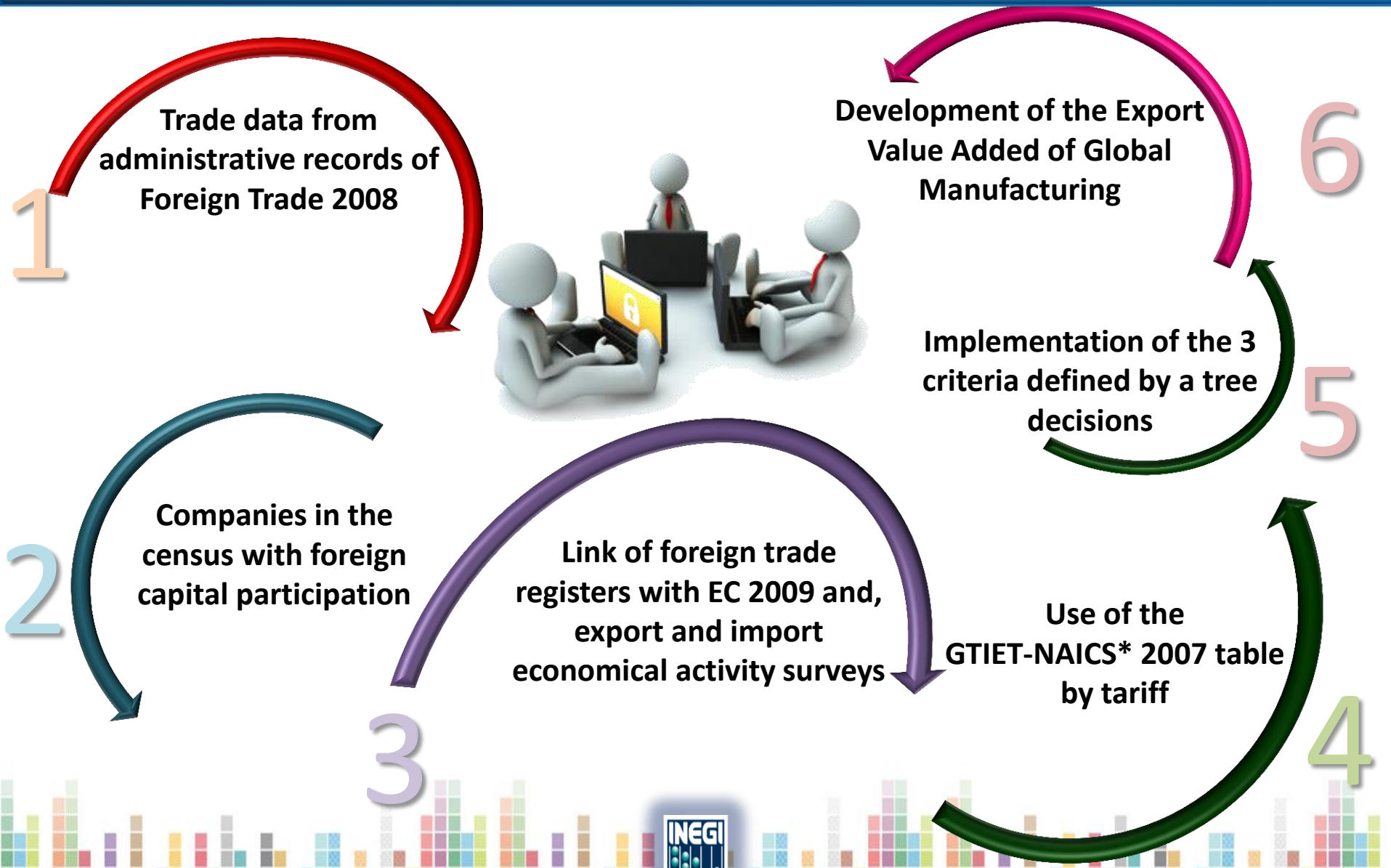
Companies whose inputs come from abroad and their production is for exports.

Companies with most of foreign capital and whose production is destined for exports.

Companies not considered in the two types above and their exports are intermediate consumption goods.



What we did to measure GMP



GTIET: General Tax of Import and Export Tariff
NAICS: North American Industrial Classification System

What we did to measure GMP

Articulation of the foreign trade registers with EC 2009 and surveys

Consolidation of companies

Orientation of
companies

Link

Annual Survey of
Manufacturing Industry and
IMMEX statistics

- Identifying establishments

Economic Census 2009

- Companies

Information by company

Companies oriented
export to

Identify in the
Database of
Foreign Trade
(customs records)

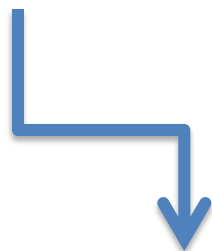
No oriented
companies to
export

What we did to measure Value Added of Global Manufacturing Exports (VAGME)

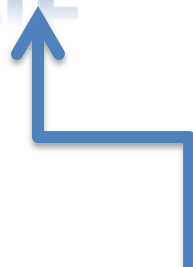
$$7 \quad X_{MG} = M_{MG}$$

X_{MG} = Global Manufacturing Exports

M_{MG} = Global Manufacturing Exports



VAGME



CIN_{MG} = Intermediate consumption of domestic Origin of Global Manufacturing

VAB_{MG} = Gross Value Added of Global Manufacturing

$$CIN_{MG} + VAB_{MG}$$



What results were obtained

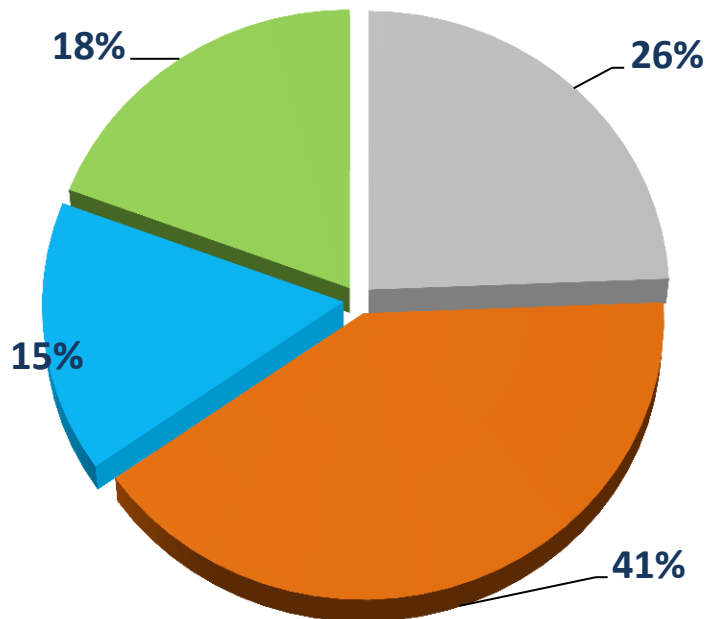
With the use of microdata (2009 Economic Census , Foreign Trade Business Records and the Annual Survey of Manufacturing Industry), the following statistics were developed to the users:

- **Export companies profile**
- **Export value by state**
- **Value Added of Global Manufacturing Exports (VAGME)**

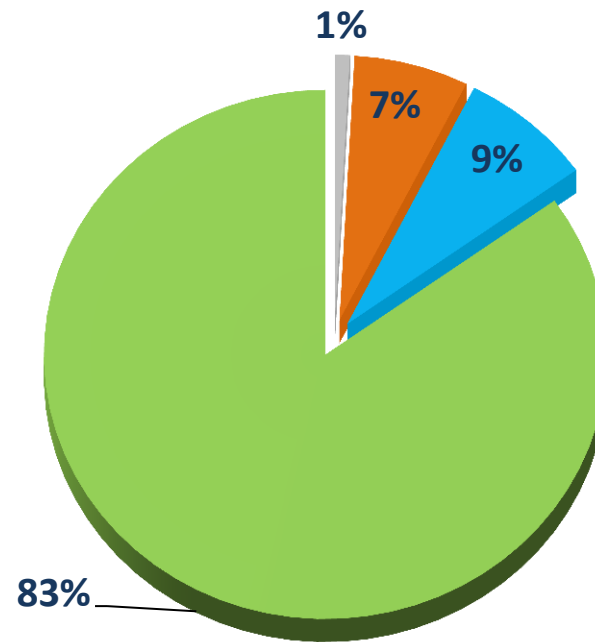
Export companies profile

Distribution of number of manufacturing companies and value of the entire foreign trade as size of the companies, 2010-2013

Number of companies



Total trade



Small
1 to 50

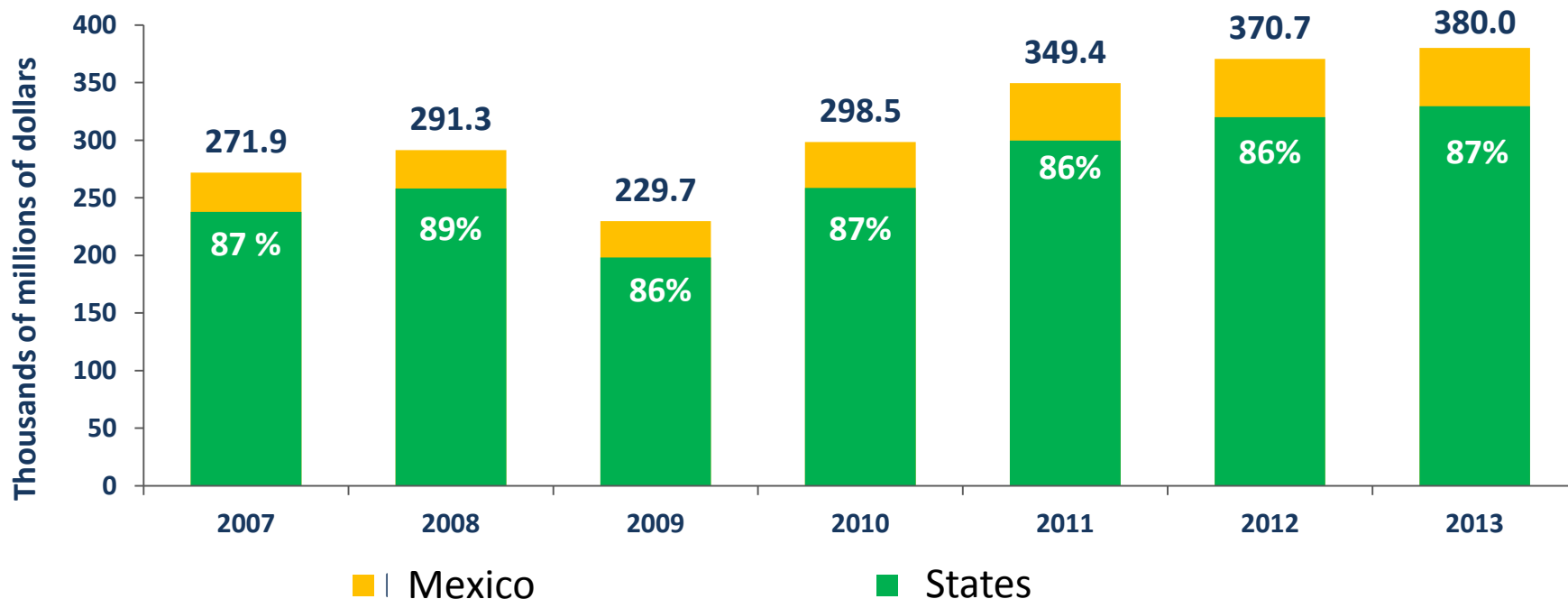
Medium
51 to 250

Big
251 to 500

Macro Company
500 and more

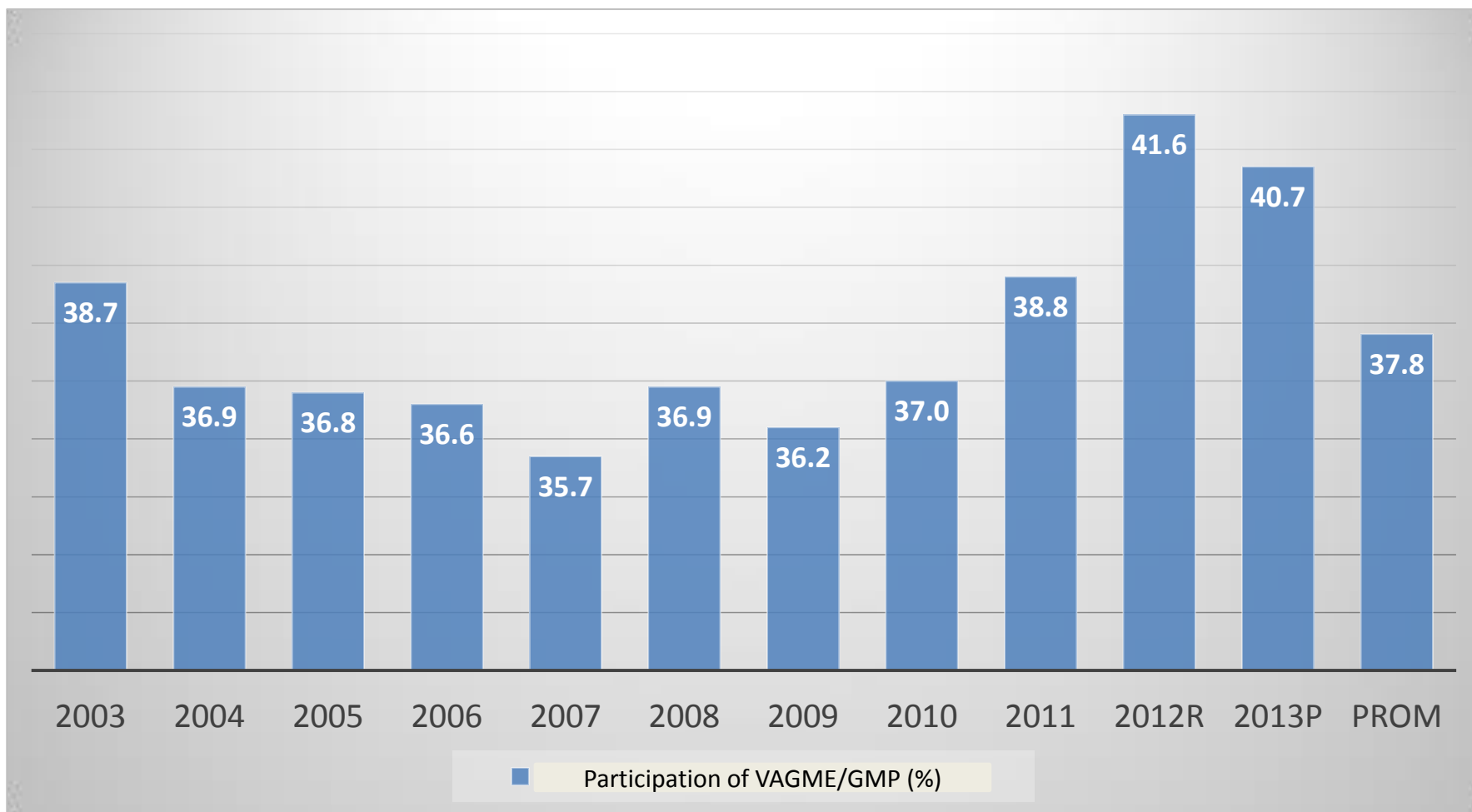
Export value by state

Coverage of Exports of States in value of the Entire Exports of the country



Note: The exports that are distributed by State are in average 87% of the whole of the exports of goods for the period 2007-2013; the rest corresponds to the agricultural sector and to exports that were not possible to assign by State.

Value Added of Global Manufacturing Exports (VAGME)



New characteristics of microdata that is provided by the Economic Census, Business Records and the Economic Surveys for the Measurement of Global Production



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Census information is strengthened

In order to strengthen and contribute to measurement of Global Production and Global Value Chains, the Economic Census included a set of three questions in the following questionnaires:

- Questionnaire for the Manufacturing Industry,
- Questionnaire for Service Establishments and,
- Questionnaire for Lodging Services.



Future goals : to identify economic units

The treatment of microdata from the census information will be associated with the answers received in the questionnaire, which will serve to identify the units that will be studied.



QUESTION



During 2013 this establishment participated in integrated processes through contracts or programs of economic cooperation with companies located in other countries?

Economic units that respond **affirmatively will be used as part of the universe of study** to generate extended IOT and the measurement and development of TiVA indicators.

Production use

With the QUESTION in the 2013 Census

“In 2013 what percentage of your income corresponded to contracts or partnership programs with companies located in other countries?”

It will be measured part of the production serving the domestic market, foreign market and the share of services by classifying income, production, and net sales at the microdata level (establishments).

**REVENUE FROM THE
SUPPLY OF GOODS AND
SERVICES**

**PRODUCTION AND NET
SALES OF MADE PRODUCTS**

Distinguishing transactions related to contracts with companies in other countries from those internal or domestic.



Identifying transactions between subsidiaries/No Subsidiaries

Also:

QUESTION

Contracts or partnership programs with economic units located in other countries, mainly established :



Identifying transactions between subsidiaries / No Subsidiaries

Other characteristics to be identified of the microdata crossings with the census sections

TYPE OF ECONOMIC UNIT

To identify if the establishments invest in Research and Development

**SCIENCE,
TECHNOLOGY
AND
INNOVATION**



Source of funding:

- own resources
- domestic subsidiaries
- foreign subsidiaries

A decision tree will be designed to assess whether it is possible to characterize the economic unit in:



FACTORYLESS

HEADOFFICE

MERCHANTING

Among others...



Other characteristics to be identified

PROPERTY OF THE ECONOMIC UNIT

QUESTION

“Please indicate if there is foreign capital participation in the share capital of this establishment?”

Please indicate the percentage?



Another feature to be measured is the property of the economic unit through the participation of foreign capital



Other characteristics to be identified

Census information is classified by strata which will identify the size of the company based on the number of workers and rank establishments respectively:

**DEPENDENT PERSONAL
FROM THE REGISTERED
NAME**

**Small
(0-9
workers)**

**Medium
(10-249
workers)**

**Big
(more than 250
workers)**





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