Extended Supply and Use Tables of Mexico. Base Year 2018

Jose Teran-Vargas¹

Abstract

This research has the purpose to show the process of extending the Supply and Use table (SUT) for Mexico for the base year 2018 given the information available and constraints and also improving the Extended SUT (ESUT) compiled for the year 2013, and also make a comparison of the structure 2018 and 2013.

It is also shown the sources of information and its process to deliver a ESUT. The research shows how the Terms of Reference published by OECD are flexible and this gives rise to proposals for extensions. In the case of Mexico, given the sources of information there can be some propositions of disaggregation, based on the establishment as the economic unit made possible in a five-year basis through the information from the Economic Census 2018 linked to foreign trade records and other administrative Records and surveys. These extensions and the sources of information collected by the Institute allow the extension for the focus on property, size, formality and informality, and exports-oriented production. There are also additional extensions to be published later in 2024, such as the extensions of the components of the Value Added of the Exporter Focus and the Table of Use of the Exporter Focus by domestic and imported origin.

Introduction

The Supply and Use Tables (SUT) provide information about the inter-industry relationships of an economy by showing production, imports, intermediate demand, and final demand. These tables show, in the columns, the information of industries and, in the rows, those corresponding to the products generated or used by these industries.

It should be noted that the SUT's granularity and robustness make possible to extend them, to use them as a tool for the measurement of Global Value Chains (GVC), Trade in Value Added (TiVA) and globalization in general.

The characterization of the Supply and Use Tables based on industrial clusters has become a statistical challenge, because the theoretical and empirical evidence suggests that the most integrated companies in the global value chains have greater imports content and, often, higher productivity. Therefore, the use of conventional supply and use tables may overestimate the national content of the value added (and jobs) of exports, key indicators to determine the benefits of integration with Global Value Chains.

The construction of Extended Supply and Use Tables (ESUT) allows for a better understanding of

¹ Input output director, INEGI, Mexico and Professor at National Polytechnic Institute, Mexico. This work is a derivate statistic from the SUT and in general from the economic statistical system, acknowledges to every person involve in generating the basic statistics and to my colleagues in the input output directorate. The ESUT compilation is done by Gissela Gutierrez-Aguirre, Lizzet Martinez-Dueñas and colleagues led by Victor Soto-Jaramillo.

international trade and its relationship with economic activity and competitiveness. They make it possible to recognize the imported content within exports and, therefore, a fraction of the hidden costs of protectionism, as well as the net benefits of trade liberalization, particularly in services.

To respond to the international commitment, in relation to the estimation of Trade in Value Added and the construction of the ESUT, attention must be given to the assumptions that face the elaboration of said tables:

- Minimize heterogeneity within given confidentiality constraints.
- Do not impose significant processing and compilation burdens on statistics institutes.
- Do not require new data collections, or, at the very least, minimize any impact of new data collections on respondents (by taking a holistic view of statistical information gathering).

How are the Extended Supply and Use Tables constructed?

The Terms of Reference (ToR) for the Extended Supply and Use Tables developed by the Organization for Economic Cooperation and Development (OECD), propose the following disaggregation levels.



Source: Terms of Reference Extended Supply and Use Tables (ToR), OECD, 2014.

However, the OECD itself points out that producing this level of disaggregation will not be possible for most countries, considering the availability of information, confidentiality restrictions on data disaggregation or due to limitations of the offices in charge of compiling the national accounts.

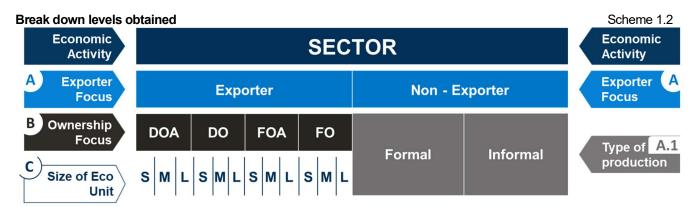
Challenges for the disaggregation of the ESUT

The main challenge for the construction of the ESUT is related to granularity and confidentiality, which in themselves are opposing concepts. In general, greater granularity implies greater risks of disseminating information that should be reserved.

In the Mexican case, article 37 of the National System of Statistical and Geographical Information (SNIEG, by its acronym in Spanish) Law establishes that the data provided by informants they are only for statistical purposes, to INEGI or to any other State Unit, these are confidential and may not be used for any purpose other than the statistical one. In addition, the Standard for the Assurance of Quality of

the Statistical and Geographic Information specifies that the Administrative Units will guarantee the confidentiality and reservation of the data that informants provide.

It should be noted that international methodological frameworks make proposals for processes, and/or products considered optimal. Therefore, it must be borne in mind that for each country the results or breakdowns will depend largely on the availability of information sources and feasibility to link the different sources of information. Another factor to consider it is the institutional regulations that guarantee the protection of data that informants provide. For this reason, the disaggregation for our country that is most in line with the different profiles mentioned in the OECD ToR is as follows:



DOA: Domestic Owned Affiliate

DO: Domestic Owned

FOA: Foreign Owned Affiliate

FO: Foreign Owned Eco Unit: Economic Unit

Source: Prepared by the authors based on ToR, OECD, 2014.

It is also important to emphasize that the intrinsic characteristics of each economy are decisive when considering the desired breakdowns. In this sense, for our country, the breakdown of the non-export sector into formal and informal was considered, given the importance of the latter in economic activity and employment.

Conformation of ESUT

One of the main and important characteristics of this project is the exhaustive use of the Economic Census and the SUT, consequently, the economic unit of study will be the "establishment".

Regarding the structure for the presentation of the ESUT information, the same structure of the SUT will be maintained, but considering a breakdown of activities in the production that is valued at basic prices. Therefore, it is necessary to add trade and transport margins and taxes as well as taxes on products minus subsidies on products plus imports of all goods and services (not extended). On the use side, we will have the extension of only intermediate consumption, while the components of final demand will appear unpanned.

The first extension refers to the Export Focus, which characterizes and identifies establishments that

are export-oriented, that is, that a substantial part of their production is traded abroad, either because they carried out some type of processing of goods or services from abroad, or because they actively participate in a value chain, or because they resell products. To complement the total supply and use, it is necessary to measure those establishments that recorded only production or sales to the domestic market (non-exporters).

For the conformation and distribution of trade and transportation margins and taxes on net products (essential for the valuation of information at buyer's prices in the offer) an extension index was constructed, based on the production levels of each extension carried out. This distribution is consistent because the coding of economic activities is elaborated with the North American Industrial Classification System (NAICS), which implies that all those economic units that have similar production processes or production functions are classified in the same economic activity.

The second one extension to the Exporter Focus is the Ownership Focus, which groups the establishments into four categories: Domestic Owned, Domestic Owned Affiliate, Foreign Owned, and Foreign Owned Affiliate. Other extension made into the ESUT's involves the segmentation of each activity class level of the total economic activity based on the characterization of the establishments by the Size of the Economic Unit, in this sense, they are characterized as follows depend on of their number employees: Small, Medium, and Large.

It should be noted that, for the Non-Exporter Focus, its extension ends with the stage type of production: formal or informal.

Exporter Focus description.

Exports of goods and services refers to "sales, barter, gifts or grants of goods and services from residents to non-residents. In the main theories, the Exports take effect when transfer of ownership from residents to non-residents does" (Handbook of input-output table compilation and analysis, Series F No. 74, 2000, UN New York, page 172) but in some cases doesn't exist change of ownership.

To complement this definition, it is important to note that only those goods that were produced and / or that include a productive process carried out by residents, should be considered; while, in the services, they must include those corresponding to transportation and insurance made by the residents within the import transactions. (INEGI, System of National Accounts of Mexico, Supply and Use Tables, Sources, and methodologies, 2013, p.25).

Exporter focus data sources.

The data sources that allow the extension for the Exporter Focus are:

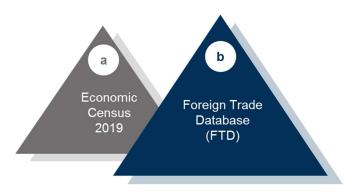
- The Economic Censuses (EC) 2019, which contain basic statistical information of the year 2018, on establishments marketing goods and merchandise and service providers. With them, structures and economic indicators for Mexico are generated at a geographic, sectorial, and thematic level of detail.
- The Foreign Trade Database (FTD) which integrates those commercial transactions that were

carried out in 2018 through customs requests and the products are codified in tariff fractions (TF) that come from Customs Registries. This is a nomenclature for the classification of goods to 8 digits, based on the Harmonized Commodity Designation and Coding System (HS) and defined in the Tariff of the General Import and Export Taxes Law (TIGIE by its acronym in Spanish).

The Supply and Use Tables, understood as the set of matrices that describe the magnitudes of
inter-industrial flows according to the production levels of each economic sector, show on the
one hand the supply, that is, the availability of goods and services, and on the other hand, the
use or destination of production.

Exporter focus data sources

Figure 1.1



Source: INEGI, 2018.

Exporter focus specific criteria.

According to the conceptualization of the term *export*, the characterization of establishments that conforms the ESUT is presented at a first moment.

Exporter focus criteria Figure 1.2



Establishments that registered transactions of goods and/or services abroad and to the national territory.

Establishments that registered transactions of goods and / or services in the national territory.

Source: INEGI based on The Terms of Reference, OECD, 2014.

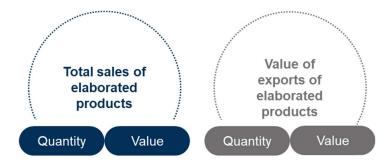
Exporter focus data processing.

Conformation of the universe of study

For this scenario, the EC 2019 in its Chapter XIII. Production and Net Sales of Processed Products details the distribution of its processed products in different categories in quantity and value. From this production value, for our objective we identify for each establishment the corresponding sales to the foreign market made in the year under study.

Production and net sales of products

Figure 1.3



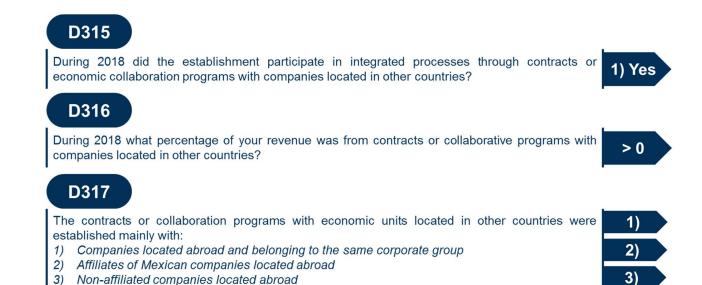
Source: INEGI, 2023.

For the characterization of the establishments, the criteria implemented in the 2013 ESUT relevant to the definition of the focus are maintained. The foreign income variables are used, which refer to the income that the establishment obtains directly from residents abroad.

In accordance with the above, the establishments confirm their intervention in integrated processes through a battery of questions referring to international linkages. From these, the percentage participation of such processes through contracts or economic collaboration programs with companies located in other countries is obtained. In addition, export and domestic supply amounts are established based on their production record and net sales of processed products.

International Engagement

Figure 1.4



Source: INEGI, 2023.

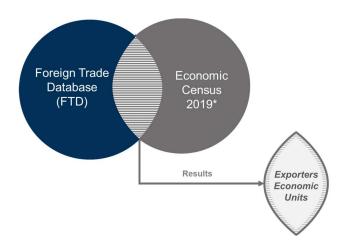
The following, a directory is formed with the total number of establishments characterized in the ECs, then, a compilation process is carried out of the total number of export transactions carried out during 2018 for each establishment through its linkage with the FTD and the establishments that carried them out are identified. Subsequently, a depuration of this entire universe of information is carried out to eliminate duplicate records and those in which the consistency of their identifiers, that is, the Federal Taxpayers' Registry (RFC, by its acronym in Spanish) and the Social Reason (RS, by its acronym in Spanish) are not adequate.

The linkage of the establishments in both sources of information, the EC 2019 and the FTD, resulted that the exporter focus covers 82% of the total value of exports of goods of all economic activity in our country. This process defines the exporting economic units of the total economic activity. The following information was collected from the related establishments:

- Censual Production
- Classification by Economic Activity.
- VIII. Revenues from the supply of goods and services from abroad.
- Exports of the FTD.
- Imports of the FTD.

Conformation of the universe of study of exporter focus

Diagram 1.1



Source: INEGI, 2023.

Calculation of coefficients

For those economic units linked in the previous process, it was necessary to create distribution coefficients, this were formed with the Census Production of each economic activity based on its participation in the Total Production of the economy. These coefficients allow the distribution of production, to determine the proportion corresponding to the Exporter and Non-Exporter focuses into the Census Production of each of the identified establishments.

Once the coefficients are determined, the economic activities are breakdown in Exporter and Non-Exporter, both for Supply and Intermediate Demand; likewise, for the case of Trade and Transportation Margins and Net Taxes, they are extended in Exporter and Non-Exporter, guaranteeing the level determined in the SUT 2018. In other words, each cell of the Supply Table (SU) and the Use Table (UT) was disaggregated with said coefficients, in such a way that when adding each one of the breakdowns they are equal to the SUT.

The non-exporter focus is obtained by the difference of the total economy minus the result of the Exporter focus. In addition, for this focus, the breakdown of the informal sector was made with the information available from the Measurement of the Informal Economy 2018. (INEGI, GDP and National Accounts, Measurement of the Informal Economy 2013. Sources and methodologies, 2013).

Data processing

The coefficients are used to obtain the total production volume of those economic units belonging to the "Exporter Focus", the rest of production is destined to the "Non-Exporter Focus", distributed according to the criteria established to identify the establishments corresponding to each breakdown of the focus.

It should be noted that, given the characteristics of the information sources, that are, EC and the FTD, there are two information gaps. One comes from the EC since there is not information for Agriculture and, on the side of the FTD, there are no data for Services.

To solve these two gaps and ensure that the Exporter Focus is complete with respect to the level of exports of goods and services, the level of exports by product and / or service corresponding to each type of activity involved is directly imputed. That is, for agriculture, the level of exports is the same as

the production level of the Export focus. For all services, the value of the Non-Factorial Services of the Balance of Payments is imputed.

It should be emphasized that, to have more arguments for the characterization and/or behavior of some economic activities, the processing of the information is accompanied by a hemerographic analysis that allows to strengthen the behavior of the industries. The production, their participation in foreign sales, as well as the foreign direct investment that the industries have received or not received over the years are observed.

Description of the type of production

The economic analysis of the production observes the way in which the different types of establishments carry out activities that generate goods and services that can be supplied to other economic units, either for intermediate use or for final use.

To obtain such production, the economic unit must combine intermediate and primary inputs in a certain way or with a certain technology, establishing differentiation that allows classifying or grouping the establishments based on the nature of the goods and services and the modes of production to, finally, define classes of economic activity or industries. (INEGI, System of National Accounts of Mexico, Supply and Use Tables, Sources, and methodologies, 2013, p.12). In the case of the ESUT, the Non-Exporter focus is opened by type of production in Formal and Informal.

Type of production specific criteria

Scheme 1.2 shows category A.1, which derives from the first extension of the SUT (Exporter Focus), and where establishments stratified as non-exporters are opened according to their type of production. On the other hand, Figure 1.5 describes the characteristics for each type of production that make up the non-exporter establishments.

Type of production for the Exporter Focus

Figure 1.5

Integrated by economic units constituted in society or quasi-societies, whose operations are under the institutional legal framework dedicated to production of goods and services.

Integrated by economic units not constituted in society. Mainly owned by households that do not cover at least one percent of the institutional legal framework:

• Accounting records
• Benefits
• Federal taxpayer registration

Source: INEGI, System of National Accounts of Mexico, Supply and Use Tables, 2013.

The Informal Sector consists of production accounts, income generation accounts and paid and unpaid jobs required by unincorporated enterprises owned by households, which are not covered by the legal and institutional framework (social security, social benefits, other registrations) and are engaged in the production of goods and services.

Type of production data processing

The universe of study is made by all those non-exporters determined economic units, identified from the Economic Census in the previous stage. From the total number of establishments characterized as non-exporters, the level of those considered as part of the Informal Sector is extracted and the remaining establishments make up part of the Formal Non-Exporter Sector.

It is important to emphasize that the breakdown of this focus takes the treatment of the Measurement of the Informal Economy (MEI, by its acronym in Spanish)) for its distribution in Informal Non-Exporter Sector, without any additional processing or treatment of this information.

Ownership Focus description.

Nowadays, the economic units are part of the productive chains and are immersed in the dynamics of economic globalization. The number of economies that are interconnected is increasingly important. For this reason, there is a need to generate statistics from a macroeconomic perspective aimed at their integration and harmonization.

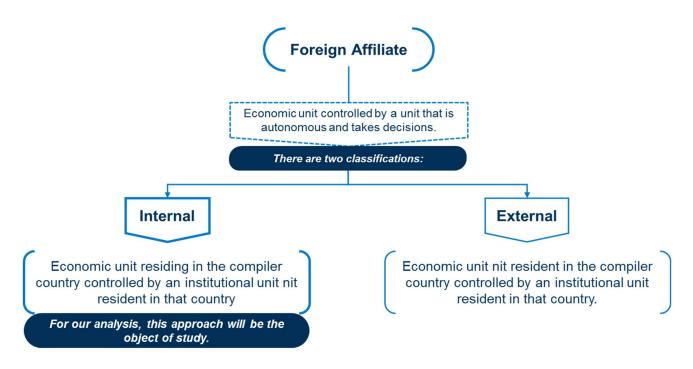
Therefore, in this focus characterizes the establishments in controllers and subsidiaries, through the linkage of the micro data and the information of the Economic Census 2019.

Affiliates and their classification

A subsidiary economic unit is one that is controlled directly or indirectly by a parent company. According to the Foreign Affiliates Statistics (FATS) Recommendations Manual issued by the Statistical Office of the European Union (EUROSTAT) the definitions are retaken, and the following groups are identified:

Foreign Affiliates classification

Scheme 1.3



Source: INEGI based on EUROSTAT data, methodologies & working papers, 2009.

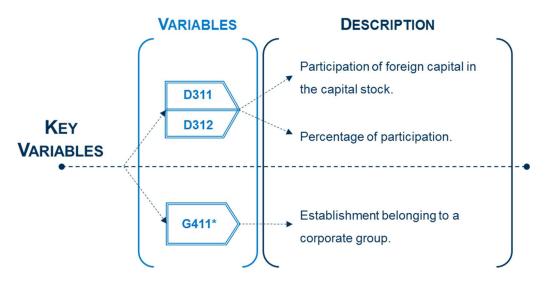
Ownership focus, data sources.

The Foreign Affiliates Internal are the object of study of this extension, and there is information available, in addition to the fact that their impact is intended to be reflected in the national accounts. So, in our case, the following four classifications were obtained: Domestic Owned, Domestic Owned Affiliate, Foreign Owned and Foreign Owned Affiliate. It should be noted that the information from the EC 2019 is the basic source of information for the development and breakdown of this focus.

Ownership focus, specific criteria.

Census Variables used by category

Scheme 1.4

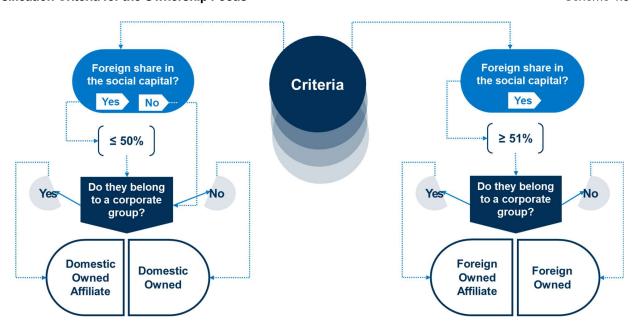


^{*}Questionnaire for Corporate Groups (CSC, in its Spanish acronym) identifies this variable as the naming Z301. Source: INEGI based on Economic Census, 2019.

The next scheme specifies the criteria considered for the classification of economic units by category.

Classification Criteria for the Ownership Focus

Scheme 1.5



Source: INEGI based on Economic Census, 2019.

Ownership focus, data processing.

Conformation of the universe of study

With the previously defined Database, the census variables described in scheme 1.5 are compiled, under which it is guaranteed that the establishments have foreign capital participation within the capital stock and define the percentage of this participation, as well as whether they belong to any corporate group. Under these characteristics it is possible to classify the establishments of the Exporter Focus in the four categories that make up the Ownership Focus: Domestic Owned, Domestic Owned Affiliate, Foreign Owned and Foreign Owned Affiliate.

Calculation of coefficients

From the universe of study generated, proceed to obtain the establishments' production and inputs, so these are classified by type of activity to estimate the distribution coefficients with census information (production) for the various extensions for the four disaggregated levels of this focus. This calculation was carried out for both Supply and Use.

Size of the economic unit focus description

For the users, it is important to know the size of the economic unit due to, this factor is relevant to have a perspective about the impact these establishments could in the total economy.

In the most of countries use statistics based on administrative records; in this sense, they consider the stratification of companies or establishments by workers, or the number of employed personnel considered the main indicator. In the European Union (EU) and the OECD, they recognize two major aspects that determine the stratification criteria to be used:

- For legal and administrative purposes: The criteria to be used to identify SMEs are the variables of employed personnel, annual sales, and the results of the annual balance sheet.
- For statistical purposes: The general criterion for classifying SMEs only considers the total employed personnel that work in these establishments.

Chart 1.1 shows a summary of the characteristics and criteria that differentiate this measurement concerning some countries with which our country has greater interaction. Mexico's case this extension will be through the registration of employed personnel mainly.

Country	Criteria	Micro	Small	Medium	Large
MEXICO	Annual Sales (Million pesos)	Until \$4.00	From \$4.01 to \$100.00	From \$100.01 to \$250.00	Greater than \$250.00
	Employed Personnel	0 to 10	11 to 50	51 to 250	More than 250
EUROPEAN UNION	Annual Balance Sheet (MD€)	Fewer than € 2.00	Greater than €2.00 and fewer than € 10.00	Fewer than €43.00	Greater than €50.00
	Employed Personnel	Until 9	Until 49	Until 249	250 or more
CANADA	Gross Annual Income CAD (Million)	N.A.	Until \$ 5.00	N.A.	N.A.
	Employed Personnel	1 to 5	6 to 100	100 to 499	More than 500
U.S.A	Other criteria	Small Business Administration (SBA) stablished two standard widely used for size with 500 employments for most of manufacturing and mining industries and \$7 millions about average annual receipt for most of non-manufacturing industries.			
	Employed Personnel	N.A.	Until 250	From 250 to 500	More than 500

Source: INEGI, 2018.

Since the criteria for identifying the size of the establishment are not homogeneous at the international level, this stage is calculated based on the available sources of information.

As in the previous focuses, the intensive exploitation of the Economic Census 2019 is the ideal tool for the development of this extension, since this offers information regarding the number of employees, this variable being the most sustainable for the stratification of the size.

Size of the economic unit specific criteria

With the use of the Economic Census as a base source for this extension, the possibility of making this opening was generated for all economic activity and not only for the economic units oriented abroad.

To breakdown this focus on Mexico's ESUT and considering the intrinsic characteristics of the establishments, it was determined that the Total Employed Personnel (TEP) variable is consistent for applying the criteria, which are shown in the following figure:

Size of the economic unit specific criteria

Figure 1.6



Source: Own elaboration, 2014 Economic Census.

It is important to mention that de TEP variable in the EC is composed as follows:

Total employed personnel conformation

Chart 1.2

H000 + 1000		
H000	1000	
Total dependent personnel.	Total non-dependent personnel.	

Source: INEGI based on Economic Census, 2019.

Therefore, our objective will only consider the employed personnel dependent on the company because the non-dependent personnel are associated with an expense as part of intermediate consumption.

It is necessary to emphasize that given the heterogeneous behaviour of the national economy, as well as some specific treatments given by the economic census to certain sectors of economic activity, other sources of information were required to calculate a vector of coefficients that allows the distribution by size of the economic unit. Such is the case of the Agricultural and the Public Sectors, which use complementary or differentiated variables for their disaggregation.

Specific criteria by sector

A. Private sector and parastatal

Most of the establishments that make up the national economy are classified in these sectors so that through the census information establishments are characterized and grouped by size according to their class of census activity, whereby the corresponding distribution coefficients are obtained.

B. Agricultural sector

For the processing of this sector, a source of information different from the EC was used, because it is an activity with a specific treatment and the Economic Census does not have all the information required for its breakdown. In this sense, the National Agricultural Survey (NAS) 2019 was used, moreover, we have to take into account that the occupied personnel aren't an adequate variable to estimate the size of this sector. So, with the support of experts in the theme we use other variables of NAS that allow us to establish criteria under the following assumptions:

- Hectares for crops.
- Heads for poultry, cattle bovine, and porcine.

The use of these parameters as an ideal reference is due to consultations and agreements made with the personnel working with the NAS as well as, with the personnel in charge of measuring this sector in the SUT for the Base Year Change. It is important to emphasize that these units of measurement are more stable in comparison to the personnel employed in this sector.

Finally, the information of the NAS considers the following parameters analysed, by sector specialists:

Parameters for the measurement of size in units of the agricultural sector, crops

Chart 1.3

Crops		
Size	Hectares	
Small	0 to 5	
Medium	From 6 to 20	
Large	More than 21	

Source: INEGI based on NAS, 2012.

Parameters for the measurement of size in units of the agricultural sector, cattle

 Cattle (Heads)

 Size
 Bovine
 Porcine

 Small
 1 to 10
 1 to 15

 Medium
 11 to 120
 16 to 150

 Large
 More than 120
 More than 150

Source: INEGI based on NAS, 2012.

Parameters for the measurement of size in units of the agricultural sector, poultry

Poultry (Heads)		
Size	Heads	
Small	1 to 900	
Medium	More than 900 to 10 000	
Large	More than 10 000	

Source: INEGI based on NAS, 2019.

To give greater consistency than the measurement of this sector concerning the 2013 Base Year Change, the calculation of poultry is included under the criteria defined in Chart 1.5, in the same way, these criteria are made based on consultations and agreements with the personnel responsible for the NAS.

C. Public sector

Chart 1.4

Chart 1.5

In the Mexican case, all public activities are not included in EC, this only registers Sector 93 – Legislative, governmental, justice administration activities and activities of international and extraterritorial organizations-, so It is necessary to include all activities where the government is present, the next chart shows the sectors with public economic activity:

Sectors with public activities

Chart 1.6

Public Sector				
54	Professional, scientific, and technical services			
61	Educational services			
62	Health care and social assistance services			
71	Culture and supporting recreation services and other recreation services			
93	Legislative, government and justice administration activities, and activities of international and extraterritorial organizations			

Source: INEGI, 2018.

The census information corresponding to the public sector only provides the number of employed personnel, that is, it does not record production, inputs, value added, etc., nor other required variables, so for this sector the coefficients were calculated exclusively with the TEP provided by the Economic Census

Considering that the information about occupied personnel from the Economic Census is used to establish sizes by economic unit, this processing is very consistent with the results of EC about this breakdown, so can be consulted through the results of the EC 2019. now, it is important to note that, the observation unit used in the ESUT is the establishment, while in the census information a part of the information is measured through economic units formed with both establishments and companies that share the same corporate name in activities such as Construction; Transportation; Financial and insurance services; Electricity, water and gas; telecommunications; among others.

Therefore, it is understood that, due to this difference in the content of the information, the number of establishments and economic units may not coincide and, therefore, neither their participation in the value of production.

Size of the economic unit data processing

Calculation of coefficients

The general processing developed in this extension is through the total employed personnel by economic activity and size of establishments, thus determining the structure of the distribution coefficients that are applied to Supply and Use. In the case of the private and parastatal sectors, the distribution coefficients are calculated based on the share of census production value by activity class and size of the economic unit (2018).

For the agricultural sector, the calculation is based on the complementary criteria of hectares for crops and per head for cattle and poultry as shown in chart 1.5 below.

For the public sector we use the census information of the sectors listed in Chart 1.6, where the calculation of coefficients is made only with the Employed Personnel that each establishment registers under the criteria for the Size of the Economic Unit.

Integrated Focus description

Some of these advantages of Extended Supply and Use Tables can be translated, for example, through the first extension profile, which allows us to know the volume of production of those establishments that are oriented to cover foreign requirements. We can analyze the production behavior of both domestic and foreign-owned affiliates in the mining sector through the second approach too; or, with the last extension, we could know the structure of the Gross Value Added at the total level of economic unit according to their size.

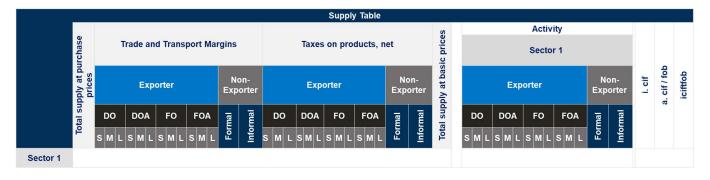
Given the characteristics and objectives of the ESUT on accessing more granular information on our country's relations with the rest of the world, as well as being able to know the extent of each of the sectors of the economy that participate in globalization in an integrated manner, an even more specific vision is offered for the analysis. For example, it is possible to know the volume of intermediate consumption of medium-sized economic *units that have foreign control and have an export focus.

In this sense, an Integrated Focus was developed for the Exporter Focus to support the specific analyses, since it allows the three extensions described above to be observed jointly.

For the conformation of this focus, the results of the Ownership Focus were used as a starting point; in addition, the criteria of the Size of the economic unit were used as a basis, where the establishments that make up each of the extensions of the Ownership Focus are stratified by size.

The integrated structure of ESUT for both supply and use are presented below:

Integrated Supply Table Chart 1.7



DO: Domestic owned.
DOA: Domestic Owned Affiliate.
FO: Foreign owned.
FOA: Foreign owned affiliate.

S: Small M: Medium L: Large Source: INEGI, 2018.

Integrated Use Table Chart 1.8



DO: Domestic Owned.
DOA: Domestic Owned Affiliate.
FO: Foreign Owned.
FOA: Foreign Owned Affiliate.

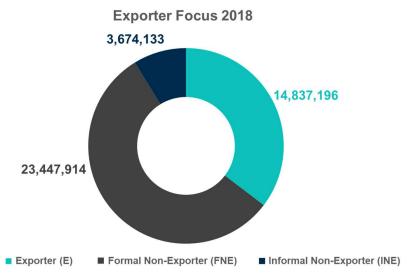
S: Small M: Medium L: Large

Source: INEGI, 2018

Main results

In 2018, the Formal Non-Exporter category accounted for 56% of the total supply of the economy, followed by the Exporting establishments category with 35% and finally with 9% the Informal Non-Exporter category.

Supply value. Exporter Focus Graph 1.1



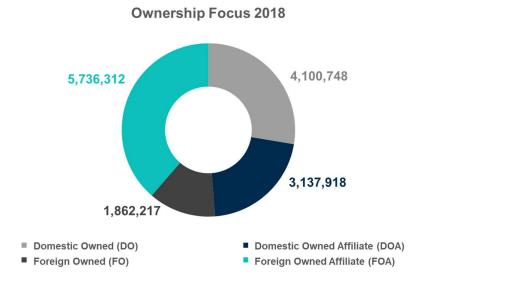
Source: INEGI, 2023

The Ownership Focus, which is derived from the Exporter Focus, shows that in 2018, 39% of supply is

accounted by Foreign Owned Affiliates establishments and 13% by Foreign Owned establishments.

Supply value. Ownership Focus

Graph 1.2

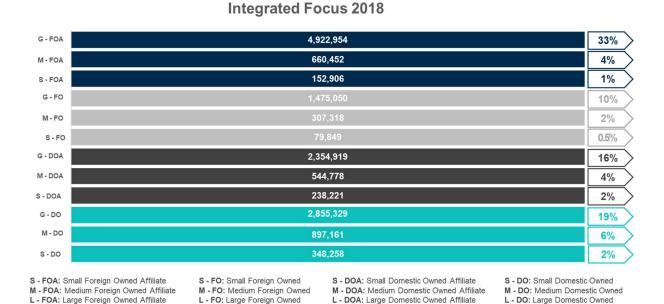


Source: INEGI, 2023

Now, in the next graph 1.3 can you see the top 3 categories with the highest percentage of supply (considering size and ownership) are: large foreign owned affiliates with 33%, followed by large domestic owned with 19%, and finally large domestic owned affiliates with 16%.

Supply share and values. Integrated Focus

Graph 1.3



The behavior of the supply by size of the economic unit of the total economy show that large establishments represent with 53%, followed by small establishments with 29% and finally medium establishments with 18%.

Supply share and values. Size of Economic Unit Focus

Graph 1.4



Source: INEGI, 2023

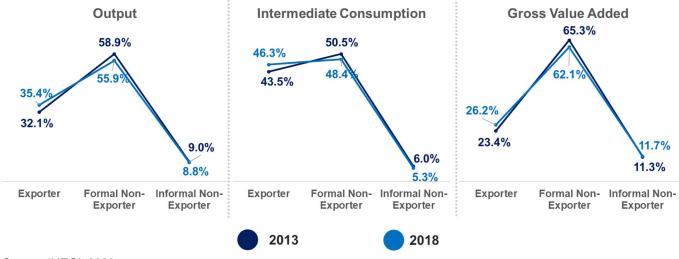
ESUT Base Year 2013 vs 2018 comparison

This last section presents a comparison of results between, about the two publications, the ESUT Base Year 2013 vs 2018 for a better understanding.

Exporter Focus. Exporting establishments showed an increase in production of 3.3 percentage points and 2.8 in intermediate demand from 2013 to 2018, while informal non-exporter establishments recorded a slight decrease in production of 0.2 points and intermediate demand of 0.7. In terms of Value Added, the Formal non -exporter category is the most representative in both years, showing a slight decrease of 3.2 percentage points from 2013 to 2018. While exporting establishments increased their percentage of Value Added by 2.8 points.

Exporter Focus 2013 and 2018

Graph 1.5

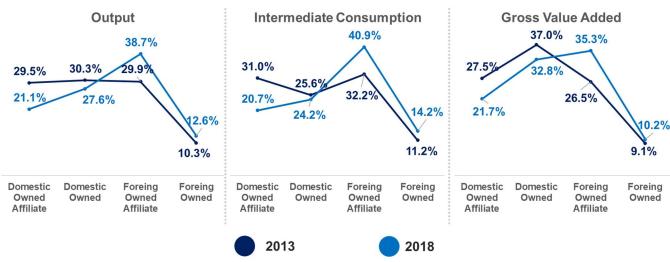


Source: INEGI, 2023

Ownership Focus. From 2013 to 2018, foreign owned affiliate establishments increased their production by 8.8%, while domestic owned affiliate establishments decreased with 8.4 % meanwhile their intermediate demand decreased with 10.3%. For 2018, the value added of the Foreign Owned Affiliate category is the most representative, with an increase of 8.8 percentage points from 2013 to 2018. While the Domestic Owned category moved from 37% to 32.8% during 2018.

Ownership Focus 2013 and 2018

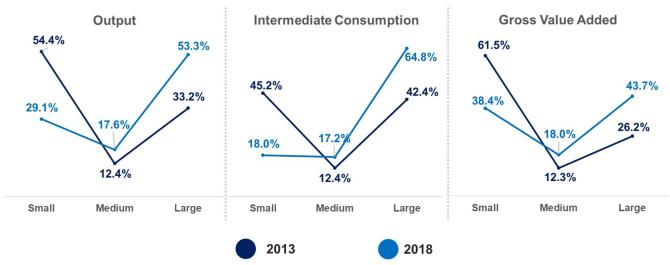
Graph 1.6



Size of the Economic Unit: The Large establishments located in the country grew their production in 20.1 percentage points and their intermediate demand with 22.4. The Medium-sized establishments grew their production with 5.2% respect to 2013. Meanwhile, there is a decrease in production of small establishments of 25.3%. In both base years, the Value Added of large establishments are the most representative, and in this case this increasing 17 percentage points from 2013 to 2018, on the other hand, the behavior of small establishments showed a decrease of 23% in the same period.

Size of Economic Unit Focus 2013 and 2018

Graph 1.7

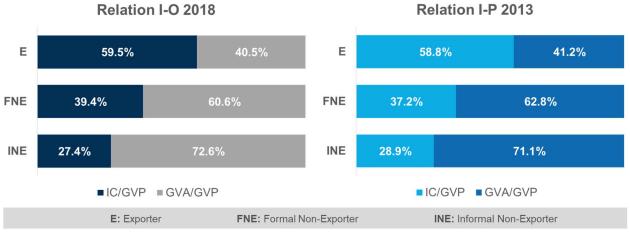


Source: INEGI, 2023

Finally, the following graph shows of the input-output relations and the Value added of the Exporter Focus, Ownership Focus and Size of Economic Unit, that is, showing the proportion of Intermediate Consumption (IC) and Gross Value Add-ed (GVA) with respect to the Gross Value of Production (GVP).

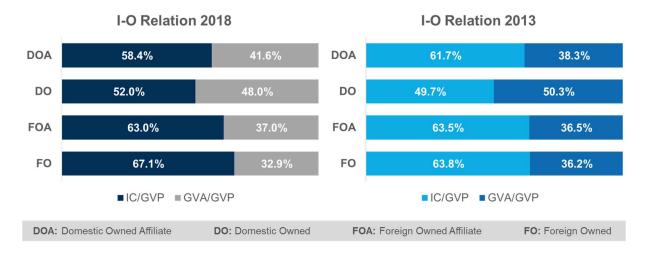
Exporter Focus Input-Output and Value-Added Relation

Graph 1.8



Ownership Focus Input-Output and Value-Added Relation

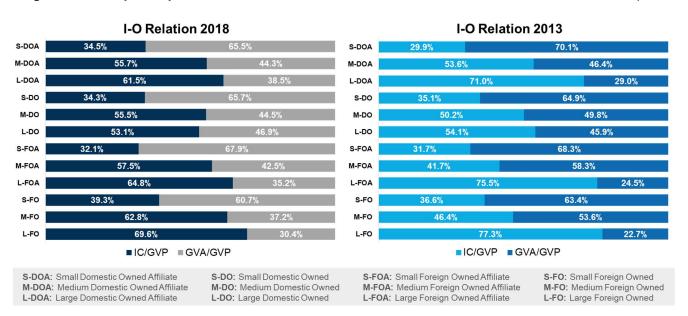
Graph 1.9



Source: INEGI, 2023

Integrated Focus Input-Output and Value-Added Relation

Graph 1.10





Source: INEGI, 2023

Conclusion

The comparison shows the importance of the ESUT compilation, given the different paths of inputs and GVA that each Focus or layer in the domestic economy of Mexico Shows. In this sense the ESUT enlighten the structural change in the economies.

There are ways forward, for example, to improve the process of information to differentiate between inputs/outputs relations between the different layers of the economy. This work is expected to be continued in the years ahead.

Bibliography

- Terms of Reference, OECD Expert Group on Extended Supply-Use Tables, 2016.
- Sistema de Cuentas Nacionales de México: fuentes y metodologías: año base 2013 / Instituto Nacional de Estadística y Geografía. México: INEGI, c2018.
- Sistema de Cuentas Nacionales de México: fuentes y metodologías: año base 2018 / Instituto Nacional de Estadística y Geografía. México: INEGI, c2023.
- Encuesta Nacional Agropecuaria (2019). / Instituto Nacional de Estadística y Geografía. México: INEGI, 2020
- EUROSTAT data, methodologies & working papers, 2009.