# 

International Workshop on the Integrated Use of International Trade Statistics and Economic Statistics

#### **Linking Trade and Business**

Statistical infrastructure: Business and Trade registers of Mexico

#### $\bullet \bigcirc \bullet$

Virtual meeting hosted by the National Bureau of Statistics of China, 23-25 November 2021

#### 







Main features<br/>of the<br/>Mexican<br/>Statistical<br/>Business<br/>RegisterTrade Registers<br/>of Mexico

Relevance and usefulness of linking business and trade in Mexico Conclusions and final remarks

4



Main features of the Mexican Statistical Business Register



# Legal framework

LEY DEL SISTEMA NACIONAL DE INFORMACIÓN ESTADÍSTICA Y GEOGRÁFICA

Ultima reforma DOF 14 - 07- 14

Article 23

The Mexican Law on National System of Statistical and Geographic Information (SNIEG, by its acronym in Spanish) establishes that the information infrastructure will contain a Geostatistical Framework and a Directory of Economic Units

The Directory as well as the economic classifications that are part of it, are mandatory for the organization of administrative registers from which Information of National Interest can be obtained



# Legal framework

Agreement for the use of the North American Industry Classification System (NAICS) in the collection, analysis and presentation of economic statistics

TECHNICAL STANDARDS



Technical Standard to update and incorporate information into the Mexican Statistical Business Register, SBR (RENEM by its acronym in Spanish)

Technical Standard on geographic addresses



# International recommendations





# The Mexican Statistical Business Register (RENEM)

It is the backbone of the economic statistics production processes, containing information on the characteristics of the economic units located in the country and it is periodically updated

It is one of the few business registers that link statistical information to digital cartography



# Statistical Units in the Mexican SBR

**Establishments** 

#### Enterprises: Uni-establishment and multi-establishment





### Sectoral Coverage (based on NAICS)

11 Agriculture, animal husbandry and exploitation, forestry, fishing and hunting (Categories **1125 y 1141**, Aquaculture and Fishing).

21 Mining.

Production, transmission, distribution and commercialization of electrical energy, supply of water and natural gas through pipelines to the final consumer.

- 23 Construction.
- 31-33 Manufacturing industries.
- 43 Wholesale trade.
- 46 Retail trade.
- 48-49 Transport, mail and warehousing.
- 51 Information in mass media.
- 52 Financial and insurance services.
- 53 Real estate and rental services of movable and intangible property.
- 54 Professional, scientific and technical services.
- 55 Corporate.
- 56 Business support and waste management services, and remediation services.
- 61 Educational services.
- 62 Health and social assistance services.
- 71 Cultural and sports entertainment services, and other recreational services.
- 72 Temporary accommodation and food and beverage preparation services.
- 81 Other services except government activities.

93 Legislative, governmental, justice administration and international and extraterritorial organizations activities (Subsector 931, Legislative, governmental and law enforcement activities).

# Basic variables of the Mexican SBR

Identification (Name and company name of the establishment, company to which it belongs)

Location (Address and geographical coordinates)

Economic (Employed personnel, Revenue, Economic Activity)

Demographic (Year of commencement of activities, for deaths: definitive closing date, historical record of changes: address, company name, company to which it belongs)

Control (Date and updating source), likewise the Business Statistical Code (CLEE by its acronym in Spanish) is a key variable



## Relevance of the Business Statistical Code

• It is the unique code for statistical identification, exclusively assigned by INEGI to each one of the establishments and enterprises in Mexico, which will be used for the exchange of information with other government agencies



# Usefulness of the Business Statistical Code

- Identifies each establishment and enterprise
- Links the establishments from the same company, indicating the type of economic unit (parent, branch or unique)
- Registers the changes in the locating data, economic activity and size, through a dynamic part
- Allows the control and monitoring of the movements of some variables used on business demography analysis
- It is shared with other government agencies for the exchange of information



## Structure of the Business Statistical Code

Establishment identifier

(Location, code of activity, municipal consecutive and size)



## Goals of the Mexican SBR

To be the integrating element for the different sources of information in such a way that the statistical capacity as a whole is maximized, creating and harnessing synergies

To be the only updated source of information on economic units that provides directories and sampling frames for INEGI's various economic statistics projects

To be a bridge between the different internal and external sources of information that allow enhancing the exploitation of data from all sources, generating new or more timely economic statistics

Follow-up on each of the economic units, keeping a historical record of their changes



# Updating process of the Mexican SBR





Annual on-field updating for the segment of the most important establishments and enterprises.



Annual on-field updating for the segment of the most important establishments and enterprises.



Annual segmen establis

- Births, deaths and survivals are identified through the updating process.
- On-field updating in intercensal periods is carried out by directory, but no exhaustive on-field collection is done.



### The SBR as the basis for longitudinal studies



Identifying survivals, deaths and births in the SBR in the period 2014-2019 has allowed to perform longitudinal studies with different economic and geographic breakdown levels.

### SBR as bridge between different sources



- INEGI works with several government agencies
- The possibility of statistical exploitation increases
- The main progress is with the Federal Electricity Commission (CFE) and the Tax Administration Service (SAT)





# The SBR contains data on geographical coordinates for every establishment

Ways of obtaining and updating:

1. At the establishment's address, during the project's on-field operations performed to collect economic information

2. On deskwork, through the use of a computer application that allows obtaining the establishment's coordinates when it is located on digital cartography

#### The National Statistical Directory of Economic Units as public part of the Mexican SBR

SBR

### **Variables disseminated in DENUE**

 $\bullet \bigcirc \bullet$ 

Identification (Name and company name)

Localization (Address and geographical coordinates)

Economic (Strata on the number of employees and economic activity code according to NAICS)

Contact (Telephone numbers, web page, e-mail address and social networks)

Control (Business Statistical Code – CLEE)



# Usefulness of DENUE: Locating the establishments in the place where their economic activity is developed



## Versions of DENUE

#### **DENUE** Directorio Estadístico Nacional de Unidades Económicas



#### Maintenance of the Mexican SBR and DENUE using data from administrative sources



### Challenges for maintaining the Mexican SBR: Standardization and Linkage

INEGI works with several administrative sources on:

- Conceptual and computer Standardization
- *Cleanliness*: Preparatory work for doing matches through company name, address, neighborhood, economic activity, etc.
- Linkage: Association of SBR information with data from external sources that refer to the same economic unit with the purpose of assigning the unique identifier in the various sources (Business Statistical Code, CLEE), in order to include in the SBR and publish it in DENUE



# Trade registers of Mexico

#### Legal framework

Pedimento El formato de pedimento, es un formato dinámico conformado por bloques, en el cual únicamente se deberán imprimir los bloques correspondientes a la información que deba ser declarada

Este formato deberá presentarse en un ejemplar destinado al importador o exportador, tratándose de Las operaciones previstas mais en las registavas destinted en importado e valocados, remolques y semirremolques; 2.5.2, tratándose de vehículos usados, remolques y semirremolques; 3.118, segundo párrafo, fracción II, 3.5.1, tracción II, 3.5.4, 3.5.6, 3.5.6, 3.5.8, y 3.5.11, así como las de vehículos usados per estados en las registavas de vehículos usados, remolques y semirremolques; 3.118, segundo párrafo, fracción II, 3.5.1, tracción II, 3.5.4, 3.5.6, 3.5.6, 3.5.8, y 3.5.11, así como las de vehículos usados per estados en las registavas de vehículos estados per estados en las de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, 3.5.6, 3.5.8, y 3.5.11, así como las de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, 3.5.6, 3.5.8, y 3.5.11, así como las de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, 3.5.6, 3.5.8, y 3.5.11, así como las de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, así de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, así de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, así de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, así de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, así de vehículos párrafo, fracción II, 3.5.1, tracción II, 3.5.4, tracción II, 3.5.4 realizadas al amparo de una franquicia diplomática, de conformidad con el artículo 62, fracción I de la Ley. A continuación se presentan los diferentes bloques que pueden conformar un pedimento, citando la obligatoriedad de los mismos y la forma en que deberán ser impresos.

Cuando en un campo determinado, el espacio especificado no sea suficiente, éste se podrá amplia agregando tantos rengiones en el apartado como se requieran.

La impresión deberá realizarse de preferencia en láser en papel tamaño carta y los tamaños de l serán como se indica a continuación:								
INFORMACION	FORMATO DE LETRA							

Encabezados de Bloque	Arial 9 Negrita u otra letra de tamaño equivalente.				
	De preferencia, los espacios en donde se presenten encabezados deberán imprimirse con sombreado de 15%.				
Nombre del Campo	Arial 8 Negrita u otra letra de tamaño equivalente.				
Información Declarada	Arial 9 u otra letra de tamaño equivalente.				
El formato de impresión para todas las fechas será:					

Es el día a dos posiciones. Dependiendo del mes que se trate, pued

ser de 01 a 31.

MM Es el número de mes (01 a 12) AAAA Es el año a cuatro posiciones

	El encabezado principal deberá asentarse en la primera página de todo pedimento. La parte derecha						
lel	encabezado deberá utilizarse para las certificaciones de banco y selección automatizada.						

PEDIMENTO						Página 1 de N		
NUM. PEDIMENTO: T. OPER CVE. PEDIMENTO: REGIMEN:					CERTIFICACIONES			
DESTINO:	NO: TIPO CAMBIO: PESO BRUTO: ADUANA E/S:							
MEDIOS DE TRANSPORTE				VALOR DOLARES:				
ENTRADA/SALI	DA:	ARRIBO:	RRIBO: SALIDA: VALOR ADUANA:					
				PRECI	O PAGADON	ALOR	1	
				COME	RCIAL:			
		DATO	DEL IMPORTA	DOR /	EXPORTADO	R		
RFC:			NO	MBRE.	DENOMINA	CION C	RAZON	
SOCIAL:								
CURP:								
DOMICILIO:								
VAL. SEGUROS	i s	EGUROS	FLETES	EME	BALAJES	OTR	OS INCREMENTABLES	
CODIGO DE ACEPTACION: CODIGO D			E BARRAS CLAVE DE LA SECCION ADUANERA DE DESPACHO:					
MARCAS, NUMEROS Y TOTAL DE BULTOS:								
FECHAS TASAS A NIVEL PEDIMENTO					ENTO			
			CONTRIB	RIB. CVE. T. TAS		SA	TASA	
CUADRO DE LIQUIDACION								
CONCEPTO	F.P.	IMPORTE					TOTALES	





Foreign Trade Rules. Annex 22. It General contains the instructions for filling out the customs declaration form





### **Categories of LIGIE**

#### • It is based on HS-2017 (comparable at 6-digit level)

#### Number of categories

Level	Digit	Categories
Section		23
Chapter	2	99
Heading	4	1 229
Subheading	6	5 395
Tariff code	8	7 859



# Basic characteristics of the Mexican Custom Declaration

Electronic form generated and transmitted in compliance with the ordinances of Mexican authority (Tax Administration Service of the Ministry of Public Finance), and it regulates the entry and exit of goods from the national territory through the 49 custom branches. It contains:

- the information related to the traded goods
- the traffic and customs regime to which they are bounded
- Data required to accomplish with the formalities of their entry or exit from the national territory

Customs Law, art. 2

# Main Custom Declaration codes used in Mexico

#### **IMPORTS**

#### **EXPORTS**

- IN. Temporary import of goods that will be subject to transformation, elaboration or repair
- □ A1. Final import
- □ F2. Introduction to tax warehouse
- □ AF. Temporary import of fixed assets
- C1. Definitive import to the northern border

- RT. Return of merchandise under the IMMEX program
- □ A1. Final export
- I1. Export and return of processed, transformed or repaired goods
- T1. Export by courier and parcel companies
- BM. Temporary export of goods for transformation, preparation or repair



# The periodic lodgment of declaration

Electronic document that allows to present to the Customs authority a single petition that covers several transactions of a single taxpayer.

The following cases apply:

- For export transactions
- For import transactions under
  Programs authorized by the
  Ministry of Economy

### Relevance of IMMEX Program

The Program for Manufacturing, Maquiladora and Export Services (IMMEX, by its acronym in Spanish) is a regulation of the Mexican Government to promote the exports and it involves almost 6,300 enterprises which account approximately 65% of the total exports





### Use of the periodic lodgment of declaration by IMMEX enterprises

- Enterprises under the IMMEX Program use these custom declarations to facilitate their transactions during specific periods
- This periodic lodgment of declaration is relevant in several industries such as the automotive and electronics ones, which are part of the IMMEX Program



# Custom Declaration fields for statistical purposes

#### **Custom Declaration fields**

- Type of transaction (imports/exports)Tariff code
- ≻Value (US Dollars)
- ≻Quantity
- Country of origin / last known destination
- Custom branch of entry/exit
- ➢Mode of transport
- Custom declaration code (document code)
- >Date

### Applicable international recommendations

- Coverage and time of registration
- Product classification
- Valuation of goods
- Partner country
- Mode of transport
- Data collection strategies
- Data quality

### Specialized Technical Committee on Foreign Trade Statistics

The Specialized Technical Committee on Foreign Trade Statistics (CTE-ECE, by its acronym in Spanish) was set up within the framework of the National System of Statistical and Geographic Information of Mexico

The main goals of this Committee are to analyze and agree on the criteria for statistical treatment associated with the use of custom declaration codes; to carry out research for improving the quality of statistical results as well as to define the dates on which the information will be published



### Working Group on Foreign Trade Statistics

Under the CTE-ECE framework, the Working Group on Foreign Trade Statistics is responsible for the production official statistics of on international merchandise trade of Mexico since the mid-1980s

# Activities of the member agencies (I)



Collects and provides the registers of the Custom Declarations

#### Central Bank of Mexico

Performs statistical processing of Custom Declarations for obtaining the international merchandise trade statistics


## Activities of the member agencies (II)

Ministry of Economy

- Establishes general rules regarding foreign trade
- Processes and disseminates regulatory and statistical information on foreign trade
- Updates and provides the catalogue of tariff codes comprised in the General Import and Export Tax Law (LIGIE)



## Activities of the member agencies (III)

INEGI

- Coordinates the analysis of conceptual and methodological criteria for statistical treatment
- Leads the activities of the Committee and the Working Group
- It is responsible for the official dissemination of international merchandise trade statistics of Mexico



Relevance and usefulness of linking business and trade in Mexico



# The microdata linking of the SBR and Custom Declarations

The linkage of the SBR and **Custom Declarations through** the Business Statistical Code (CLEE), gives the opportunity to also use data from other programs as the Economic Census and the Business Surveys for providing more characteristics of the enterprises involved in the merchandise trade of Mexico



## Microdata linking process in Mexico

- INEGI has carried out microdata linking among several sources to elaborate new products with different breakdowns by using the SBR (RENEM)
- RENEM merges statistical information from economic surveys, and several administrative registers, as well as the economic censuses
- Basic statistical unit for linking business and trade is the enterprise
- The enterprise which comprises more than one establishment, consolidates all of them under the same legal name, facilitating the linkage to Custom Declarations
- For producing subnational statistics (e.g. Exports by State), the consolidated enterprises are disaggregated by establishment





## Manufacturing enterprises by exporting and importing status 2015-2019



### Manufacturing enterprises by size (2019)



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

Microdata linking carried out in Mexico is the basis for elaborating useful statistical products for policy making and for analyzing 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 Global Value Chains. These products are:

• 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 <u>https://www.inegi.org.mx/programas/peme/</u>

# 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 <u>https://www.inegi.org.mx/temas/exportacionesef/</u>

#### • 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>



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

#### 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

https://www.inegi.org.mx/temas/coue/



## Conclusions and final remarks



### Conclusions

The institutional arrangements are the key for consolidating the statistical infrastructure, especially for strengthening the joint effort of INEGI and the government agencies to keep updated the Statistical Business Register, RENEM and for producing statistics as the international merchandise trade

Linking information with various statistical and geographic sources is strategic, since it opens the analytical perspectives, therefore it is especially useful enriching RENEM with geographic information

The combination of statistical and geographic data provides more information for the analysis at subnational level

## Final remarks (I)

- 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



### Final remarks (II)

- Some areas that should be considered (among others) in this work are:
  - Statistical unit (the relevance of establishment in addition to enterprise)
  - Sectorization of Multinational Enterprises (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:**

### Mr. Gerardo Durand-Alcantara Deputy Director General of Economic Administrative Records

### gerardo.durand@inegi.org.mx

Conociendo México

800 111 46 34 www.inegi.org.mx atencion.usuarios@inegi.org.mx

f 🔟 🗹 INEGI Informa