MEASUREMENT OF THE INFORMAL ECONOMY

FROM BASIC TO DERIVED STATISTICS

The National Institute of Statistics and Geography (INEGI by its acronym in Spanish) through the System of National Accounts of Mexico (SCNM by its acronym in Spanish), incorporates the advances and best practices of economic measurements in the global context, and as a proof of that, the Measurement of the Informal Economy has been presented as an integral part of the System from year 2014 onwards.

The Informal Economy is a complex phenomenon, with a significant economic importance due to its presence in numerous productive activities. In Mexico, under the vision and framework of the System of National Account 2008, its measurement has been made explicit through the quantification of its Value Added, as well as the number of people employed under conditions of informality, thus identifying its contribution to the Gross Domestic Product (GDP) and its impact on the economy.

The Measurement of the Informal Economy provides the elements of the existing informal relations among diverse sectors and economic agents that intervene in all phases of the economic cycle, according to the System of National Accounts central framework, giving elements to formulate, design and evaluate public policies that contribute to its regulation and/or decrease.

This type of measurements can be made due to the statistical framework and the information infrastructure that INEGI possess, given the projects for the generation of basic statistics (Economic Census and Household Surveys) that allow the identification of the economic dimension and the number of people who carry out productive activities in an informal setting, to then express it in terms of the National Accounts.
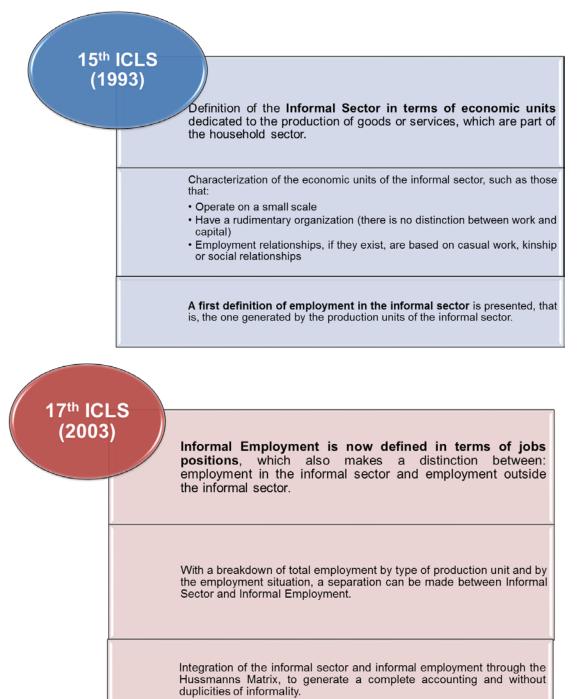
To carry out the Measurement of the Informal Economy, it is important to highlight that the work is articulated to the set of norms and recommendations presented by the International Labour Organization (ILO), the Delhi Group, as well as other international organizations, in order to respond the requests for document analysis from institutions such as the OECD, the IMF, EUROSTAT, among others.

Conceptual Framework

For the estimation of the Informal Economy, we consider the 2008 System of National Accounts (SNA 2008) conceptual and methodological framework, the Manual for Measuring the Non-Observed Economy (OECD, IMF, ILO, ISTAT 2002), Measuring informality: A statistical manual on the informal sector and informal employment (ILO2012), as well as the ILO recommendations issued in the International Conference of Labour Statisticians (ICLS) 15th, 17th and 19th (ILO 1993, 2003 and 2013).

INEGI

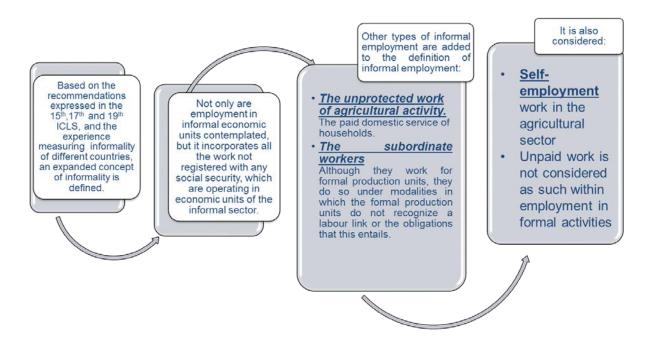**Resolutions of the International Conferences of Labour Statisticians (ICLS) convened by the ILO**

15th ICLS (1993)

Definition of the **Informal Sector in terms of economic units** dedicated to the production of goods or services, which are part of the household sector.

Characterization of the economic units of the informal sector, such as those that:
• Operate on a small scale
• Have a rudimentary organization (there is no distinction between work and capital)
• Employment relationships, if they exist, are based on casual work, kinship or social relationships

A first definition of employment in the informal sector is presented, that is, the one generated by the production units of the informal sector.

17th ICLS (2003)

Informal Employment is now defined in terms of jobs positions, which also makes a distinction between: employment in the informal sector and employment outside the informal sector.

With a breakdown of total employment by type of production unit and by the employment situation, a separation can be made between Informal Sector and Informal Employment.

Integration of the informal sector and informal employment through the Hussmanns Matrix, to generate a complete accounting and without duplicities of informality.

19th ICLS (2013)

The **self-consumption production** should be considered, specifically for the **agricultural sector** (self-employed workers)

It does not consider among the other **non-remunerated** those that perform self-consumption production that deals in **certain services that can not really be considered as a productive activity** despite fulfilling the condition of being a job that third parties can perform.

Evolution of the Informal Employment Concept according to the ICLS 15th, 17th and 19th

Based on the recommendations expressed in the 15th, 17th and 19th ICLS, and the experience measuring informality of different countries, an expanded concept of informality is defined.

Not only are employment in informal economic units contemplated, but it incorporates all the work not registered with any social security, which are operating in economic units of the informal sector.

Other types of informal employment are added to the definition of informal employment:

• **The unprotected work of agricultural activity.** The paid domestic service of households.

• **The subordinate workers** Although they work for formal production units, they do so under modalities in which the formal production units do not recognize a labour link or the obligations that this entails.

It is also considered:

• **Self-employment** work in the agricultural sector
• Unpaid work is not considered as such within employment in formal activities

Due to the evolution in the concept and measurement of informality, the need to present labour informality statistics under a new integral and extended perspective arises, in order to adapt statistical procedures to international standards.

The adoption of the recommendations and their application to the particular case of the Measurement of the Informal Economy in Mexico, according to the characterization of the phenomenon using the information from the Economic Censuses, the National Occupation and Employment Survey (ENOE by its acronym in Spanish), the Households Income and Expenditure Survey (ENIGH by its acronym in Spanish) and the Micro-Business National Survey (ENAMIN by its acronym in Spanish) and the flow of goods that takes place in the balancing process of the Supply and Use Tables, derived in the publication of the Measurement of the Informal Economy 2003 - 2012 Base Year 2008 on July 30th 2014. Since then, the data corresponding to the previous year is published annually and the base year is updated every 5 years, in accordance with the update cycle of economic information guidelines.

The Measurement of the Informal Economy in Mexico is composed of the Informal Sector (IS) and the Other Modalities of Informality (OMI), where:

Informal sector. - Includes all economic activities carried out by unincorporated companies owned by households dedicated to the production of goods and services for the market; which operate outside the legal and institutional framework (lack of fiscal registration, social security payments, social benefits, bookkeeping); that is, it corresponds to economic units constituted by microbusinesses that do not have the basic registrations to operate, with rudimentary organization and the employment relationships, if they exist, are based on occasional work or kinship.

Other Modalities of Informality. - Corresponds to the Value Added generated by the work that does not have the protection of the legal and institutional framework (social security payments, social benefits, bookkeeping) and that is carried out in:

- Formal activities
- Agricultural activities, including self-consumption
- Paid domestic work in households

Sources of information.

- The Economic Censuses (CE) allows to characterize, from the variables captured in the basic questionnaire, the cost structures associated with the production of goods and / or services and, through the specification of the type of establishment (fixed, semi-fixed or with economic activity within the household) and employed personnel, to identify sectoral coverage.

- The National Occupation and Employment Survey (ENOE) determines the first data on coverage by NAICS economic activity and the levels of employed personnel by occupation position (salaried worker, own account workers, employers, unpaid workers and other workers).

- The National Micro-Business Survey (ENAMIN) supports the identification of coverage and cost structures.

- The National Household Income and Expenditure Survey (ENIGH) determines the first data on the income of the employed population in the informality.

- The employment statistics from the Mexican Social Security Institute (IMSS for its acronym in Spanish) supports the specific coverage of OMI.

- The Supply and Use Tables (SUT). The SUT are carried out by type of production, and from the flow of goods to balance supply and use, the final values that the Informal Sector will have for the base year are determined.

- The Goods and Services accounts. The Informal Sector is followed up as part of the series and provides elements for OMI follow-up.

Information processing.

Economic Censuses. - A filter is made to the information collected in the basic questionnaire considering all the economic activities that are reported, the filter considers an extraction of the information that meets the following criteria.

To define coverage and cost structures of the Informal Sector:

- All semi-fixed establishments and where the economic activities are carried out within the household;
- Staff employed in strata of 0-15 people for manufacturing activities and 0-5 people for the rest of the economic activities.
- They did not make payments to social security and social benefits,

To define the sectoral coverage and the measurement elements of the Added Value generated by informal employment in formal activities:

- From the special questionnaires (opposed to basic questionnaires), the employed personnel that do not have social benefits are identified.
- Average remunerations and labour productivity are taken by employed personnel for the measurement of Gross Value Added.

Household Surveys.- From the ENOE, a sub-sample is extracted that corresponds to the informal sector and identifies the work done in formal activities, but does not have health services or social benefits (OMI); with the ENAMIN, an exhaustive review of the registries corresponding to the conditions of the Informal Sector is carried out to strengthen the coverage and support the cost structures to carry out its production.

With all of the above, NAICS economic activity coverage is obtained by comparing the coverage of each of the sources and a first level of cost structures that will allows production accounts to be generated.

IMSS employment statistics.- Information is reviewed and activities that are formal and the associated employment are identified, giving a first approximation to personnel who do not have social security in formal activities (OMI), by subtraction against employed personnel in formal activities reported by the ENOE.

Labour Matrices

From ENOE's transformed data that considers the expanded concept of informal economy, it's possible to obtain the subsample of employed personnel, that reported having worked in informal economic units. The measurement is developed in three phases:

1. Elaboration of the jobs matrix .- Generated from a modified Hussmanns matrix, disaggregated by economic activities and occupation categories, which corresponds to the jobs of the total economy, a transformation into an economic matrix of employment equivalent to full days is done, taking into consideration the hours worked, both in the main job and in the secondary one.

2. Determination of the per capita income by position in the occupation.- The ENOE captures information on the amount of income. However, the statistics shows an information bias, so a process of imputation of data provided by the ENIGH is carried out, which allows to generate annual per capita income levels by position in the occupation and activity of people employed in Informality.

3. Elaboration of production accounts and income generation by economic activity.- Production Accounts, Primary Income Generation Accounts, as well as Job Positions and Implicit Price Indices for publication are then generated.

Production Accounts for the Base Year

Production Accounts are set up based on the estimation of the **Gross Production Value (GPV_IS)** and the **Intermediate Consumption (IC IS)** of the informal sector. The estimate is calculated from the processed information of the Production Accounts and the Economic Census, specifically the information corresponding to the Basic Questionnaire and the information corresponding to the size of the microbusiness by stratum of employed personnel from 0 to 5 or 0 to 15, according to the activity.

Since the IC IS reflects all the expenses of raw materials, supplies and services that the economic units of the Informal Sector carry out for the development of their activities, a disaggregation is made by the components of the IC IS, that is, the breakdown of expenses and variation in stocks for the Economic Censuses.

The Gross Value Added of the Informal Sector (GVA_IS) is obtained by the difference of the Intermediate Consumption of the Informal Sector applied to the Gross Value of the Informal Sector Production.

The Added Value in the Other Modalities of Informality for the base year.

In the case of Other Modalities of Informality, INEGI obtains a measurement from a labour perspective. Given that it's not possible to assign an Intermediate Consumption, for the construction of the Production Account it is considered that the Gross Value Added is equal to the Gross Production Value.

The **Gross Value Added of Other Modalities of Informality (GVA OMI)** represents the contribution to the production process by the employed population in conditions of informality in the economic units not belonging to the Informal Sector, as in the Informal Sector.

To perform the calculation, the information sources are exhaustively analysed to define the coverage of the OMIs by occupation position and the value added that the OMIs generate from the characterization of the payment to the labour factor and mixed income by occupation position reported by the formal production accounts, and the participation of the paid and unpaid employed personnel identified as OMI with respect to the total employed personnel.

Series update.

Using the annual information obtained from the Labour Matrices, the identification of informality within the households' institutional sector and making explicit the data on informality contained in the Goods and Services Account, the series is updated in current and constant values for the Production Accounts and the Primary Income Generation Account, as well as the Jobs and the Implicit Price Indices that are published annually.

Where are we going…

In order to keep the conceptual framework on informality issues updated for its application to the Mexican case, the 20th ICLS Resolution is being reviewed and the results of the Household Surveys results will be analysed derived from the process of continuous improvement. In addition, with the new questions incorporated in the basic questionnaire (survey of micro, small and medium establishments) of the 2019 Economic Censuses, we will be able to identify workers who do not have social benefits and social security, as well as establishments that do not have bookkeeping, information that will allow to strengthen the measurement of this phenomenon.