



El papel del sector informal en dos economías de América Latina: México y Guatemala

The Role of the Informal Sector in Two Latin American Economies: Mexico and Guatemala

O papel do setor informal em duas economias latino-americanas: México e Guatemala

Ana Luz Ramos Soto

Universidad Autónoma Benito Juárez de Oaxaca, México

analuz_606@yahoo.com.mx

<http://orcid.org/0000-0001-8167-2631>

Resumen

Este texto tiene como objetivo general analizar el papel de la economía informal en dos países de América Latina, a saber, México y Guatemala. Dentro de los objetivos específicos, se establece realizar un perfil socioeconómico de las áreas de estudio, así como analizar los factores económicos y sociales que inciden en el crecimiento de la economía informal. La hipótesis que se trabaja en esta investigación es que la informalidad en economías como las de México y Guatemala reproduce la pobreza y absorbe la mano de obra. Asimismo, a través del modelo de análisis factorial, se identifican los factores económicos y sociales que inciden en el crecimiento de la economía informal en ambas economías. Estos factores son los siguientes: las políticas públicas implementadas por parte de los Gobiernos en ambas economías, el desempleo, los niveles de pobreza, la falta de capacitación, los niveles bajos de educación, el sector formal de la economía que se apoya en la informalidad para que distribuyan sus recursos, la falta de apoyos por parte del Gobierno y la falta de financiamiento para registrarse en la formalidad.

Palabras clave: informal, economía, social.

**Abstract**

The general objective of this paper is to analyze the role of the informal economy in Latin American economies. Within the specific objectives was to make a socioeconomic profile of the areas of the study and to analyze the economic and social factors that affect the growth of the informal economy. The hypothesis that we worked in this research is that the informal economy in economies such as Mexico and Guatemala reproduces poverty, and absorb labor from jobs that does not generate the productive apparatus. Through the factor analysis model, the economic and social factors that influence the growth of the informal economy in both economies were identified, these being the eight: public policies implemented by governments in both economies, unemployment, poverty levels, the lack of training, low levels of education, the formal sector of the economy that relies on them to distribute their resources, the lack of support from the government and the lack of funding to register in the formality.

Keywords: informal, economics, social.

Resumo

O objetivo geral deste texto é analisar o papel da economia informal em dois países da América Latina, o México e a Guatemala. Dentro dos objetivos específicos, estabeleceu-se um perfil socioeconômico das áreas de estudo, bem como analisar os fatores econômicos e sociais que afetam o crescimento da economia informal. A hipótese desta pesquisa é que a informalidade em economias como o México e a Guatemala reproduz a pobreza e absorve o trabalho. Além disso, através do modelo de análise fatorial, são identificados os fatores econômicos e sociais que influenciam o crescimento da economia informal em ambas as economias. Esses fatores são os seguintes: políticas públicas implementadas pelos governos em ambas as economias, desemprego, níveis de pobreza, falta de treinamento, baixos níveis de educação, setor formal da economia que depende da informalidade. para distribuir seus recursos, a falta de apoio do Governo e a falta de financiamento para se registrar na formalidade.

Palavras-chave: informal, economia, social.

Fecha Recepción: Enero 2018

Fecha Aceptación: Marzo 2018



Introduction

This research was born in the Center of Urban and Regional Studies of the University of San Carlos of Guatemala. This center was created in November 1975 by resolution of the Higher University Council as an interfaculty unit of the university. It is made up of the Faculties of Agronomy, Architecture, Engineering, Economic Sciences and Legal and Social Sciences (USAC, 2017). Its general objective is to apprehend and explain in a scientific and multidisciplinary way the set of phenomena, elements and relationships that determine the particular form of organization of the territory, as well as its influence on social, political, economic and cultural dynamics. Therefore, based on this, the proposal was made by the Faculty of Accounting and Administration (FCA) of the Benito Juárez Autonomous University of Oaxaca (UABJO) to conduct a short research stay on the subject of the informal sector and poverty in Guatemala compared to Mexico.

In coordination with the teacher José Florentín Martínez López, director of the Center for Urban and Regional Studies, it was agreed to work with the doctor Ana Luz Ramos Soto of the FCA on the role of the informal economy in the economies of Mexico and Guatemala. This stay was made in the year 2017.

The work is developed in three sections. In the first, the problem is described; in the second the theoretical-conceptual framework, the methodology and the areas of study, and in the third and last, the results of the field work and the conclusions.

Problematic

For a long time the concept of the informal sector includes not only the use of unregistered economic units, where the business and the person are the same thing, as is the case with street traders, the preparation of food and other services offered in the public road, as with the cottage and craft industries; but now incorporates all the work not registered with social security, whether or not operating in typical economic units of the informal sector.

World Bank studies on Latin America and the Caribbean (Perry, 2007) describe workers in the informal sector in two groups. On the one hand, independent informal workers, who constitute a percentage of urban employment; and on the other, informal salaried workers, who represent approximately the total urban percentage of the region.



The first group, the informal independent sector, includes owners of micro-enterprises and independent professionals, as well as artisans, crafts workers, construction workers, taxi drivers and street vendors. The informal salaried sector includes domestic employees, unpaid family workers, workers in microenterprises and those who work in larger companies under informal labor arrangements. For both groups of informal workers a heterogeneity of motives and demographic characteristics is observed

The International Labor Organization (ILO), in its study *Panorama Social 2012*, reported that Mexico is one of the economies of Latin America that presents the highest rates of informality. This study reports that 59% of productive Mexican population is in that sector.

Similar declarations made by the National Institute of Statistics and Geography [Inegi] (2012): in the third quarter of 2012, the population of the informal sector added 29.3 million people, of which 14.2 million made up the occupation in the informal sector, 2.1 million they were paid domestic service, 6.2 million belonged to the agricultural sector and another 6.8 million to companies. In the calculation made of the rate of labor informality (TIL), or informal employment, presented values in 2005 of 59.3%. Also, at the beginning of the series of the National Survey of Occupation and Employment (ENOE), in the first quarter of 2012, 60.1% was registered.

Also the Inegi (2012) reports that in 2012 there were 9.2 million micro-business owners. Of these owners, 84.5% were self-employed workers. The educational level of the microentrepreneurs, on the other hand, was the following: 74.1% had a schooling up to secondary school, 25.8% had an educational level of upper and upper middle and the remaining 0.1% did not specify their schooling. Regarding the reasons they had to start a microenterprise, they were distributed as follows: 25.7% wanted to supplement their family income; 21.9% wanted to obtain a higher income; 11.7% said it was the only way they found to get an income; 6.4% referred to the family tradition, and 34.3% specified another reason.

The states with the lowest rates in the informal sector were Baja California (41.6%), Chihuahua (42.8%) and Nuevo León (43%). While those with higher rates corresponded to Oaxaca (80.8%) Guerrero (80.8%) and Chiapas (76.5%).

On the other hand, the National Survey of Employment and Income [ENEI] (2016) registered in Guatemala a total of 4 467 917 people inserted in the informal sector, which means 2.2% in relation to the population that was located in that sector in



2015. Nearly 70% of the employed population at the national level is employed in the informal sector of the economy. According to the occupation sector, according to sex, 8 out of 10 women are in this sector.

By economic activities, in Guatemala the agricultural sector absorbs 36.9% of the employed population in the informal sector, 12.2% in manufacturing industries, 27% in commercial activities, accommodation and food services and in other services 10.7%. The four activities absorb 86.8% of the population occupied in the informal sector.

For all the aforementioned, it is necessary to design public policies aimed at solving this problem that has become a sponge that absorbs the population that moves from the countryside to the city, and that, at the same time, offers employment to the population. population that the productive apparatus is not capable of absorbing.

And said the previous thing, this work has like purpose to give answer to the following question of investigation: What role plays the informal economy in the economy of Mexico and Guatemala?

Marco teórico conceptual

According to Sequeda (2014), among the developing economies, in 2012, the one with the highest gross domestic product was Colombia. However, this achievement was accompanied by high rates of informality. According to the same Sequeda (2014), there are four currents of the theory of the informal sector: 1) the dualist school, 2) the structuralist, 3) the legalist and 4) the integrated approach. In this work the structuralist current will be taken, since it analyzes the informal sector subordinated to the formal sector.

The Inegi (2012), meanwhile, defines the informal sector as follows:

[It is] a subset of a larger phenomenon of informalization of labor relations, which includes agricultural activities and paid domestic service, as well as employees who participate in the processes of fully formal economic units, without them recognizing a link labor and the obligations that this entails. Informality has surpassed the Informal Sector of microbusiness in many



countries of the world, while it has appeared in developed countries that did not even have a moderately significant informal sector.

It should be noted that the ILO recommends replacing the term informal sector with the informal economy, considering that companies and workers who work outside of formality are defined more precisely (Prado, 2016).

It is equally necessary to differentiate the terms informal legal sector and illegal informal sector. It includes within the first those of low profitability and high profitability; the high profitability ones are those that have stalls in the established streets and pay a fee to the municipal offices; those with low profitability are sellers or providers of ambulatory services, for example, those who clean the windshields and sell fried foods, among others. While the second, that is, the illegal informal sector, includes the drug trafficking and kidnapping industry.

In addition, within the characteristics that the ILO gives to the informal sector, is that of being an escape valve for the population that has no education or that their educational level is low, that is, there is an inability on the part of the formal sector to create jobs or to present itself as an option in the face of unemployment. Also, as part of the criteria mentioned to measure informality are the pattern of a microenterprise with fewer than ten workers, the self-employed worker, the domestic service worker and the unpaid family helper (Juan Alberto Castillo M & Cubillos , 2018).

Pérez (2005) argues that informality arises from an economy that does not generate well-paid jobs: in the formal sector low wages are reflected, which causes the employed population to supplement their monetary income through the informal sector. It should be noted that the area of study analyzed by Pérez (2005) is the Mexican economy and explains this factor, the lack of well-paid jobs, makes that economy is characterized by precariousness, including small and medium enterprises that are established as a survival strategy for the unemployed.

Based on the foregoing, the hypothesis with which this work is based is that the informal economy in countries such as Mexico and Guatemala reproduces poverty and absorbs labor from jobs that the productive apparatus does not generate.



Methodology

The design of this research was descriptive and correlational. The municipality of Oaxaca de Juárez in Mexico and the municipality of central Guatemala were taken as samples by the Central American country and a socioeconomic profile of both was made with information from secondary sources. A random questionnaire was applied in the center of the municipality of Guatemala to the population that works in the informal sector, with the purpose of giving answers to the research question and the hypothesis. Through the SPSS 20 program, the variables of the questionnaire were operationalized, to later correlate them and, according to the result, arrive at the conclusions.

Socioeconomic profile of the study area

Regarding the Mexican economy, the National Council for the Evaluation of Social Development Policy [Coneval] (2013) reported that in 2012 there were 53.2 million poor people, of which 41.8 million lived in moderate poverty and 11.5 million in poverty extreme One of the most backward regions was that of the southeast, where Oaxaca, Guerrero and Chiapas are located: 61.9%, 69.7% and 74.7% of the population of poverty, respectively.

Tabla 1. Pobreza y sector informal

| País | Pobreza extrema | Pobreza | Sector informal |
|-----------|-----------------|---------|-----------------|
| Guatemala | 55.4% | 40% | 69.8% |
| México | 9.5% | 46.2% | 60.0% |

Fuente: Guatemala, ENEI 1- (2016); México, Coneval (2014)

In Table 1 it can be seen that in the Republic of Guatemala, in estimates of the ENEI of 2016, 55.4% of the population was in extreme poverty; 40%, in poverty, and 69.8% of the employed population was in the informal sector. While in the economy of Mexico, in 2014, 9.5% of the population was in extreme poverty; 46.2%, in a situation of poverty and 60% of the employed population, were immersed in the informal economy.



Tabla 2. Correlaciones

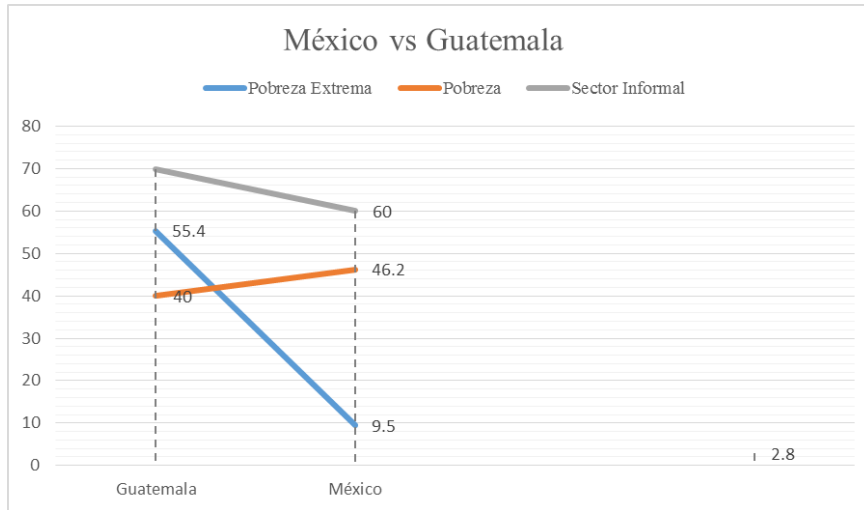
| | | PE | P | SI |
|---|------------------------|----------|----------|----------|
| PE | Correlación de Pearson | 1 | -1.000** | 1.000** |
| | Sig. (bilateral) | | . | . |
| | N | 2 | 2 | 2 |
| P | Correlación de Pearson | -1.000** | 1 | -1.000** |
| | Sig. (bilateral) | . | | . |
| | N | 2 | 2 | 2 |
| SI | Correlación de Pearson | 1.000** | -1.000** | 1 |
| | Sig. (bilateral) | . | . | |
| | N | 2 | 2 | 2 |
| **La correlación es significativa al nivel 0.01 (bilateral) | | | | |

Fuente: Elaboración propia

Through the Pearson correlation, the three variables were correlated: extreme poverty, poverty and the informal sector. The result obtained was a perfect positive correlation of (1,000) with 99% confidence in the variables of extreme poverty and the informal sector. That is to say: as extreme poverty increases, the informal economy increases. The variables of poverty and the informal sector, on the other hand, obtained a result of a perfect negative correlation of (-1,000) with 99% confidence, which means that as the informal sector decreases, poverty levels increase. Therefore, the informal sector has a relationship with poverty (see figure 1)



Figura 1. Comparativo de las dos áreas de estudio.

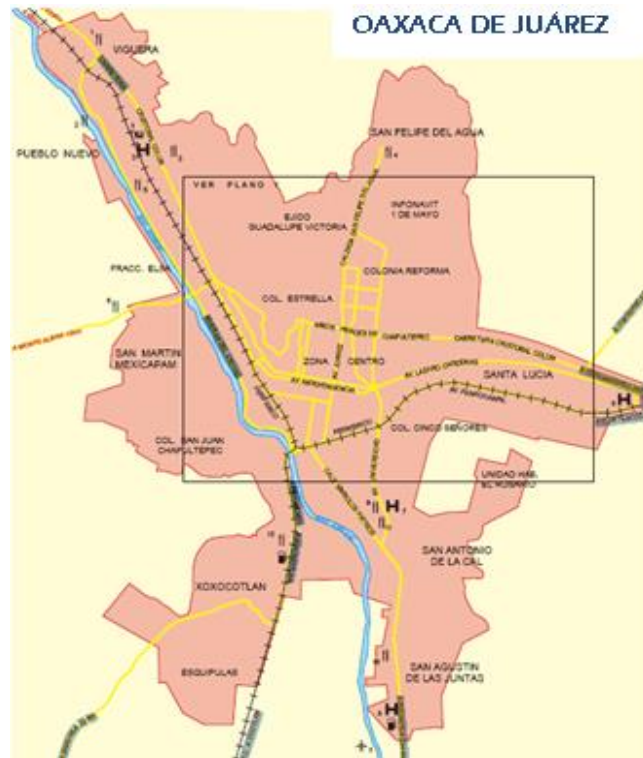


Fuente: Elaboración propia

Geographic areas

The state of Oaxaca is made up of 570 municipalities, which, in turn, form eight geographic regions. The municipality of Oaxaca de Juárez is located in the Valles Centrales region, a region that encompasses 21 municipalities in total. Oaxaca de Juárez is a center of convergence for different ethnic groups, namely the Amuzgos, Cuicatecos, Chatinos, Chinantecos, Chochos, Chontales, Huaves, Ixcatecos, Mazatecs, Mixes, Mixtecos, Nahuatlecos, Triques, Zapotecos, Zoques and popolocas. According to Inegi (2015), it has 264 651 inhabitants.

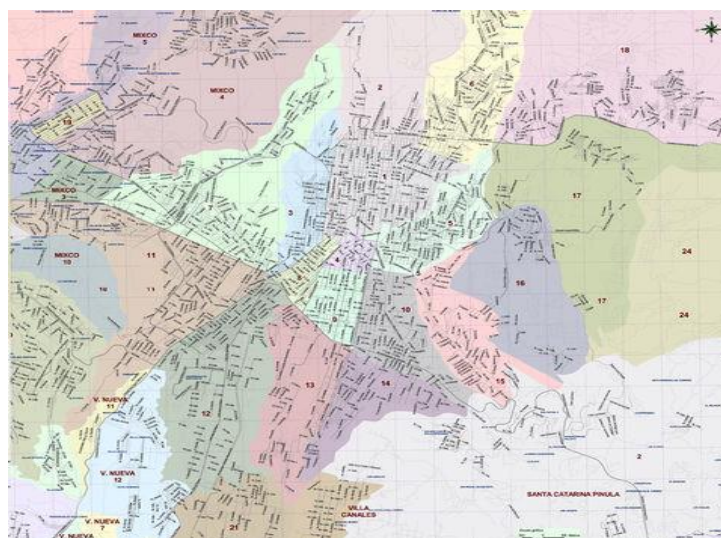
Figura 2. Municipio de Oaxaca de Juárez, México



Fuente: Google Maps

The municipality of Guatemala, on the other hand, is one of the 340 municipalities of the Republic of Guatemala and is the departmental capital of the department of Guatemala. It has an area of 228 km². According to data from the National Institute of Statistics of Guatemala [INE] (2015), it has a population of 994,078.

Figura 3. Municipio de Guatemala



Fuente: Google Maps



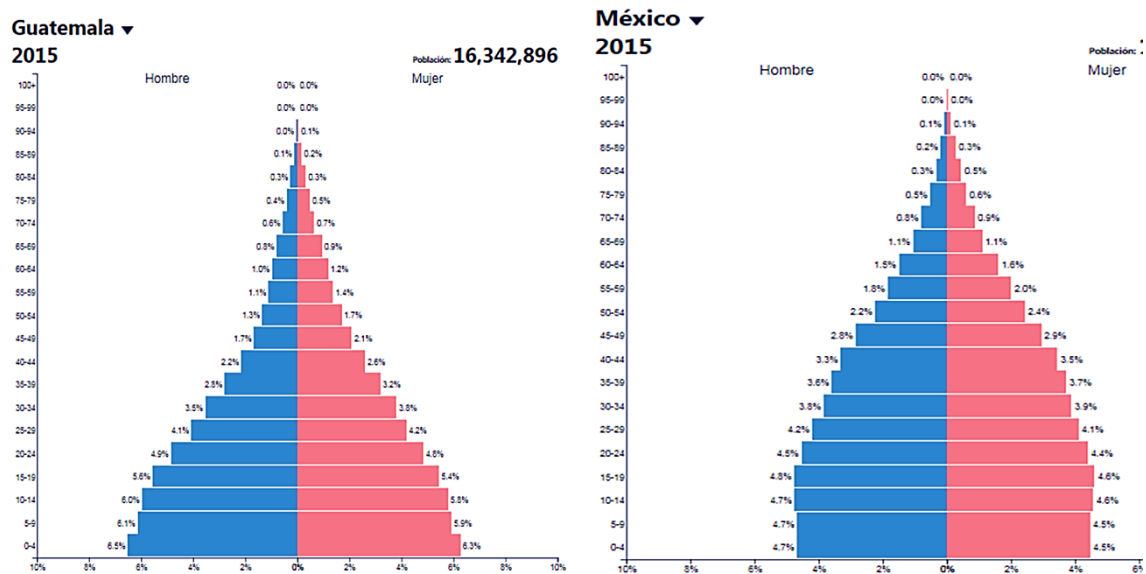
Tabla 3. Población en el año 2015 del área de estudio

| México | Estado de Oaxaca | Municipio Oaxaca de Juárez | Guatemala | Departamento de Guatemala | Municipio de Guatemala |
|-------------|------------------|----------------------------|------------|---------------------------|------------------------|
| 119 530 753 | 3 967 889 | 264 651 | 16 176 133 | 3 134 276 | 994 078 |

Fuente: Encuesta Intercensal del Inegi (2015); INE (2015)

Within the three types of pyramids that exist, the one of Mexico is of regressive type, since it is wider in the superior groups than in the base, due to the decrease in the birth rate and the continuous aging of its population; it is for this reason that their future perspective is one of descent. The Guatemalan country is of a progressive type: it has a broad base compared to higher groups that are reduced, as a consequence of a high birth rate and progressive mortality, according to age. Indicates an eminently young population structure with growth prospects (PitBox.Blog, 2017).

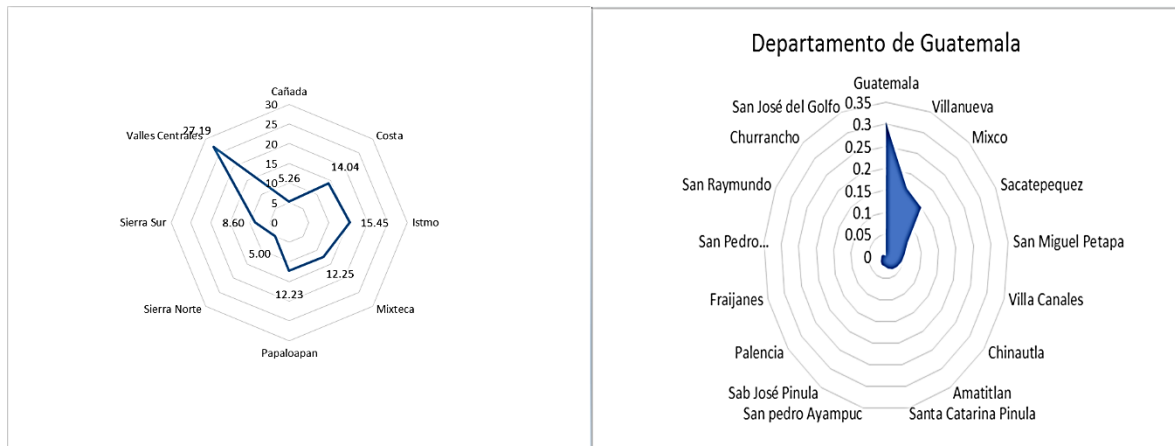
Figura 4. Pirámide poblacional Guatemala y México



Fuente: INE (2015); Inegi (2015)



Figura 5. Población por regiones y departamentos



Fuente: Elaboración propia con base en Inegi (2015); Martínez (2013); INE (2013)

According to figure 5, in the state of Oaxaca, the Valles Centrales region absorbs 27.19% of the population; La Cañada, 5.26%; the Coast, 14.04%; the Isthmus, 15.45%; the Mixteca, 12.25%; Papaloapan, 12.23%; the Sierra Norte 5%, and the Sierra Sur 8.60%. Thus, the Valles Centrales region, where the city of Oaxaca de Juárez is located, the unit of analysis in this study, concentrates the highest percentage of the population. In the Department of Guatemala the same behavior occurs as the municipality of Oaxaca, given that the population is mostly concentrated in the municipality of Guatemala with 31%. The department that follows in number of inhabitants is Villanueva, 16%, and subsequently Mixco, 15%.

Economic activities

The population of the municipality of Oaxaca that has 12 years and more is 215 885 inhabitants. According to the data provided by the Inegi Intercensal survey of 2015, 74.57% of the population that works does not receive a salary. These people develop the following activities: 3.82% serve a person with a disability; 85.28% are domestic employees; 6.48% care for people over 60, and 4.11% care for sick people.



Tabla 4. Actividades económicas

| Población ocupada | Sector de actividad económica | | | | |
|----------------------|-------------------------------|------------|----------|-----------|--------------------|
| | Primario | Secundario | Comercio | Servicios | No especificado |
| 112 276 | 0.64 | 16.28 | 19.31 | 61.31 | 2.46 |

Fuente: Encuesta Intercensal del Inegi (2015)

Regarding the population occupied by economic activities, it is reported that there are 112 276 people, of which 0.64% perform activities of the agricultural primary sector; 16.28% exercise industrial activities in the secondary sector; 19.31%, in commerce, and, in service activities, 61.31%. About 3% does not specify the activities that it develops.

For minimum wages, it is reported, within the employed population, that 6.56% receive a minimum wage. The employed population that receives more than one salary, up to two minimum wages, is 20.12%; those who receive more than two minimum wages, 60.31%, and the one who does not specify, 13.01%.

In the Guatemalan economy, following the data provided by the ENEI, agricultural production is the one that absorbs the greatest amount of labor force with 32%; following in the activity in the trade with 29%; the industrial sector with 14%. These data show the process of tertiarization of the economy, presenting the same behavior in the Mexican economy.

Results of fieldwork

The method used to choose the sample was simple random, given that it complies with the characteristic that the population is homogeneous and since it was applied to the employed population in the informal sector of low profitability, that is, those who do not pay an amount of money for the floor where they are working. The number of applied surveys was 30. The results are shown below:



Tabla 5. Sexo de los encuestados en Guatemala

| | | Frecuencia | Porcentaje | Porcentaje válido | Porcentaje acumulado |
|----------------|-------|------------|------------|----------------------|-------------------------|
| Válidos | 1 | 15 | 50.0 | 50.0 | 50.0 |
| | 2 | 15 | 50.0 | 50.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Fuente: Elaboración propia

Half of the population was female and the other half male. The age of the interviewees ranged from a mean of 34.57 to a standard deviation of 17, meaning that there were both 15-year and over 70-year-old interviewees (see table 5).

Tabla 6. Estado civil de los encuestados en Guatemala

| | | Frecuencia | Porcentaje | Porcentaje válido | Porcentaje acumulado |
|----------------|-------|------------|------------|----------------------|-------------------------|
| Válidos | 1 | 8 | 26.7 | 26.7 | 26.7 |
| | 2 | 15 | 50.0 | 50.0 | 76.7 |
| | 3 | 3 | 10.0 | 10.0 | 86.7 |
| | 4 | 3 | 10.0 | 10.0 | 96.7 |
| | 5 | 1 | 3.3 | 3.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Fuente: Elaboración propia

Regarding the marital status of the interviewees, 26.7% were married; 50%, single; 10%, widower; 10%, in free union, and 3.3% did not answer (see table 6).

The number of children of the respondents showed an average of 3 children per family: 26.7% do not have children; 16.7% have 1 child; 10% have 2, 3, 4, 5 or 6 children, and 3.3%, 12 children.

Tabla 7. Originarios de los encuestados en Guatemala

| | | Frecuencia | Porcentaje | Porcentaje válido | Porcentaje acumulado |
|----------------|-------|------------|------------|----------------------|-------------------------|
| Válidos | 1 | 7 | 23.3 | 23.3 | 23.3 |
| | 3 | 23 | 76.7 | 76.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Fuente: Elaboración propia

On the other hand, 23.3% of the interviewees were from Guatemala City, while 76.7% came from other municipalities or departments of Guatemala, such as Totonicapán, Quiché, San Marcos, Quezaltenango, Salamán Baja Verapaz, Santa Rosa, San Marcos and Malacatán. Santa Cruz Chinautla (see table 7).

Tabla 8. Nivel escolar de los encuestados en Guatemala

| | | Frecuencia | Porcentaje | Porcentaje válido | Porcentaje acumulado |
|----------------|-------|------------|------------|----------------------|-------------------------|
| Válidos | 1.0 | 6 | 20.0 | 20.0 | 20.0 |
| | 2.0 | 10 | 33.3 | 33.3 | 53.3 |
| | 2.2 | 2 | 6.7 | 6.7 | 60.0 |
| | 2.3 | 5 | 16.7 | 16.7 | 76.7 |
| | 2.5 | 2 | 6.7 | 6.7 | 83.3 |
| | 3.0 | 1 | 3.3 | 3.3 | 86.7 |
| | 4.0 | 3 | 10.0 | 10.0 | 96.7 |
| | 5.1 | 1 | 3.3 | 3.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Fuente: Elaboración propia

In the area of education, 20% of the interviewed population did not know how to read or write; 33.3% had primary school completed, 6.7% only studied the second year of primary school; 16.7% the third year of primary school; 6.7% the fifth year of primary school; 3.3% finished high school; 10% studied the basic one with specialty in medicine, secretary and personal relationships, and 3.3% the first semester of the university (see table 8).



In training, 86.7% answered not having received any type of training; 13.3% yes to have received it in the army. They were asked if they would like to receive training courses and 100% of respondents mentioned that they did not have time and did not need them for the activities they are doing.

Likewise, the total number of respondents answered that they do have work and it is in the area of sales commerce in the streets of Guatemala City. The products they sell are typical sweets, bags, atole and bread, accessories, fruit, jewelry, ice cream, sandals, seeds, lottery tickets, shoe bolero, bags, costume jewelery, clothing, wood articles. It should be noted that one of them answered that when he does not have to sell, he sells drugs.

Tabla 9. Salud de los encuestados en Guatemala

| | | Frecuenci a | Porcentaj e | Porcentaje válido | Porcentaje acumulado |
|----------------|-------|------------------------|------------------------|------------------------------|---------------------------------|
| Válidos | 1 | 10 | 33.3 | 33.3 | 33.3 |
| | 2 | 8 | 26.7 | 26.7 | 60.0 |
| | 3 | 10 | 33.3 | 33.3 | 93.3 |
| | 4 | 2 | 6.7 | 6.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Fuente: Elaboración propia

About 34% of the interviewed population answered that when they get sick they go to the health center of their community; 26.7%, to the private physician; 33.3% consult the pharmacy to be prescribed some medication, and 6.7% are cured with home remedies for lack of money (see table 9).

In monetary income, the average obtained from the population was 77.50 quetzales per day. Although it was observed that it is according to the streets where this population sells its products. For example, those located in the national park answered perceiving 20 to 50 quetzales per day, while those in zone 18, from 150 to 200 quetzales per day, although there was a population in the same area that answered receiving between 50 and 70 Quetzals.



Tabla 10. Vivienda de los encuestados en Guatemala

| | | Frecuenci | Porcentaj | Porcentaje | Porcentaje |
|----------------|-------|------------------|------------------|-------------------|-------------------|
| | | a | e | válido | acumulado |
| Válidos | 1 | 10 | 33.3 | 33.3 | 33.3 |
| | 2 | 16 | 53.3 | 53.3 | 86.7 |
| | 4 | 4 | 13.3 | 13.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Fuente: Elaboración propia

Of those interviewed, 33% have their own home; 53.3% live in a rented house, and 13.3% live with a family member. Within the housing services, 6.7% only have electricity; 46.7% have electricity and drinking water; 16.7% has electricity, drinking water and drainage; 13.3% have electricity, drinking water, drainage and telephone, and 10% have electricity, drinking water, drainage, telephone, television and internet service (see table 10).

Within the commercial activities, 60% answered that their products are purchased in an established business; 20% that their products take them to their position, and 10% that they make them themselves. On the other hand, 73% answered not having employees; 13.3% that has an employee, and 13.3% with two employees, of which 100% are members of the family, whether husband, wife or children. In addition, the total of the respondents answered not to have vacations nor a monthly salary insured.

As for the reasons why they work in informality, 20% answered that because they like it and 80% because they do not have a job and had to find what to sell in order to have a monetary income. The time they are working, on average, was 17.5 years; the minimum time was one year and the maximum was 70 years. Likewise, 93.3% answered that they owned the business and the remaining 6.7% answered that they were employed. The total of the respondents does not have social security or receive bonus or bonus.

Regarding work hours, the average was 12 hours a day. The person who answered to work less hours was 5 hours and the maximum was 15 hours of work per day. The total answered not having any retirement. And 80% do not belong to an organization, while 20% answered belonging to an organization, but said they do not remember the name of the organization.



The total number of respondents answered not to receive any financing for their business and when they need money to invest 20% they turn to the bank; 6.7%, to savings banks; 16.7%, to the lenders; 10% ask a family member, and 46.7% do not ask anyone. A person interviewed answered that God does not lend money (see table 11).

Tabla 11. Financiamiento

| | | Frecuencia | Porcentaje | Porcentaje válido | Porcentaje acumulado |
|---------|-------|------------|------------|-------------------|----------------------|
| Válidos | 1 | 6 | 20.0 | 20.0 | 20.0 |
| | 2 | 2 | 6.7 | 6.7 | 26.7 |
| | 3 | 5 | 16.7 | 16.7 | 43.3 |
| | 4 | 3 | 10.0 | 10.0 | 53.3 |
| | 5 | 14 | 46.7 | 46.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Fuente: Elaboración propia

Among the causes for which the population that came from other municipalities and departments answered, 33% argued that due to lack of jobs; 40% than for lack of money; 3.3% for desires to come to the city, and 3.3% for lack of employment and monetary income.

In the same way, they were asked what problems their department or municipality has. They answered the following: 16.6% violence and insecurity; 60% lack of jobs; 3.3% poverty, and 3.3% salaries so low that they pay.

The total replied that it does not receive any support from the Government of Guatemala. In that sense, to improve their living conditions, 30% of respondents requested scholarships for their children to continue studying and 70% more security so they can continue working.

Tabla 12. Matriz de componentes

| | Componente | | | | | | | | | | |
|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|-------------|-------|-------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Sexo | .114 | -.121 | -.002 | -.442 | -.090 | .252 | .353 | -.335 | .382 | -.294 | .182 |
| Edad | .184 | -.120 | .807 | -.238 | .227 | -.046 | -.174 | .256 | .005 | -.197 | -.109 |
| Civil | -.069 | .309 | .010 | .393 | .293 | .469 | -.155 | .094 | .451 | .032 | -.127 |
| Hijos | .425 | -.263 | .706 | -.186 | -.037 | -.122 | -.119 | -.192 | -.088 | .004 | -.143 |
| Orgin | -.607 | .276 | .040 | -.410 | -.078 | .238 | .018 | -.325 | -.119 | .063 | .065 |
| Esc | .575 | -.041 | -.355 | .553 | -.048 | -.025 | .288 | -.097 | -.075 | .025 | -.241 |
| Capapa | -.469 | .112 | -.087 | -.219 | .205 | .470 | -.017 | -.093 | -.363 | -.279 | -.295 |
| Potrab | .362 | .575 | .051 | -.488 | .077 | -.164 | .259 | -.174 | -.242 | -.112 | -.051 |
| Activi | -.362 | -.575 | -.051 | .488 | -.077 | .164 | -.259 | .174 | .242 | .112 | .051 |
| Produ | -.347 | -.381 | .256 | .092 | -.248 | -.298 | .426 | .212 | .103 | -.079 | -.046 |
| Paga | -.504 | .375 | -.229 | -.273 | .230 | .140 | -.313 | .385 | -.029 | -.010 | .152 |
| Enfer | -.174 | .092 | -.015 | .029 | -.416 | .289 | .378 | .241 | -.242 | .117 | .098 |
| Ingre | .367 | .145 | -.120 | .014 | .125 | .445 | .162 | .213 | -.212 | .336 | .192 |
| Vivien | .137 | -.143 | .211 | .570 | -.356 | .193 | -.023 | -.354 | -.241 | .087 | -.050 |
| Serv | .728 | -.033 | -.007 | .277 | .069 | .414 | -.056 | -.182 | .023 | .011 | -.117 |
| Compra | -.459 | .071 | .302 | .209 | .423 | .221 | .333 | .075 | -.026 | .341 | -.056 |
| Sueldo | .176 | .041 | .334 | -.234 | -.517 | .368 | -.073 | .133 | .304 | -.007 | .145 |
| Miem | .060 | .692 | .138 | .315 | -.253 | -.272 | -.136 | .152 | .145 | -.065 | .047 |
| Porque | .357 | -.123 | -.026 | -.415 | -.565 | .073 | -.051 | .350 | -.108 | .131 | .085 |
| Tiempo | .076 | -.135 | .728 | .038 | .338 | .181 | .085 | .325 | .137 | -.254 | -.160 |
| Propie | -.010 | -.034 | -.507 | .084 | .215 | -.321 | -.178 | -.022 | .158 | -.432 | -.112 |
| Horass | .430 | -.254 | -.281 | -.346 | .489 | -.101 | -.121 | .047 | .060 | .199 | .292 |
| Integra | .186 | .426 | .095 | -.142 | .361 | -.043 | .310 | .114 | -.090 | .264 | -.332 |
| Organi | .247 | .163 | .134 | .302 | .250 | -.131 | -.267 | .136 | -.306 | .090 | .078 |
| Finan | .115 | -.100 | -.109 | -.233 | .465 | -.092 | .231 | -.059 | .439 | .340 | .010 |
| Cuando | -.496 | -.212 | .381 | .134 | .124 | -.245 | -.103 | -.165 | -.170 | .241 | .427 |
| Extras | -.386 | .496 | .241 | .076 | .027 | .225 | -.179 | -.547 | .230 | .046 | .079 |
| Proble | -.018 | -.101 | -.229 | -.396 | -.414 | .093 | -.152 | .092 | .322 | .350 | -.432 |
| Apoyo | .079 | .174 | -.106 | .303 | .087 | .182 | .574 | .222 | .111 | -.393 | .363 |
| Lugar | .627 | .292 | -.105 | -.052 | .050 | .352 | -.416 | .116 | -.118 | -.170 | .168 |
| Cursos | .705 | -.113 | .213 | -.026 | .081 | -.058 | .037 | -.245 | .147 | .130 | .244 |
| Emple | .094 | .774 | .022 | .079 | -.146 | -.382 | .059 | .087 | .179 | .142 | -.023 |
| Vaca | -.009 | .846 | .276 | .205 | -.231 | -.135 | -.031 | .019 | .148 | .041 | .055 |

Fuente: Elaboración propia



Factorial analysis

This analysis allows the information obtained from the questionnaire to be reduced to eleven variables, which makes it easy to analyze each of the relationships that exist between the variables to be studied, poverty and the informal sector. Therefore, according to this study, eleven factors give the possibility of analyzing 80.37% of the variance of all the data obtained in the survey (see table 13).

In the reduction of factors, according to each indicator, each canonical variable was given a name. The first one was called Public Policies, since the indicators that had values above 400 were: Children (.425), Esc (.575), Serv (.728), Horass (.430), Place (.627) and Courses (.705). What stands out in this factor are the characteristics of this population that works in informality, that is, the number of children they have, the levels of schooling, the services with which their homes count, the hours of work, the place of origin that the workers are and if they have received training courses.

The second factor was called Unemployment. The indicators with the highest value are Potra (.575), Integra (.426), Extras (.496), Emple (.774) and Vaca (.846). In this factor highlight the characteristics of unemployment, if the population has work, if the members of his family work with him, why he moved from his community to the city of Guatemala, the number of employees who work with you and if they have holidays.

The third was called, according to the indicators of greater weight, Conditions of poverty: Children (.706), Time (.728), by the number of children who answered have and the time they have working in informality.

The number four factor was called Education. Its indicators were Esc (.553), Activi (.488), Vivien (.570); that is to say, the level of education that the population has, the activities that they develop and if the housing where they live is their own, rented, live with a relative or is borrowed, respectively.

In the fifth factor, the most important indicators were: Purchase (.423), Horass (.489), Finan (.465), for what was called formal sector, since the questions were related to where they acquired their products, that is, if in an establishment, if they were taken to their posts or if they prepared it; In addition to working hours and financing for your business.

In factor number six, the indicators were Capa (.476), Ingre (.445), that is, if the population had received some training and the income they received; for which reason it was called Wages.

The seventh factor had the Support indicator (.574), where they were asked if they received any support from the Government; it was called Financial Aid.

The eighth and tenth factors did not have indicators with weight above .400.

The ninth factor was called Financing Necessity, given that the indicators were the civil status and if they need financial support for their businesses, Civil (.451) and Finan (.439), respectively.

The last factor corresponded to the indicator When (.427) and was called Financing. The question was about where they were going when they needed money to invest in their position (or business).

Tabla 13. Varianza total explicada

| Compo nente | Autovalores iniciales | | | Sumas de las saturaciones al cuadrado de la extracción | | |
|----------------|-----------------------|---------------------|----------------|---|---------------------|-------------|
| | Total | % de la varianza | % acumulado | Total | % de la varianza | % acumulado |
| 1 | 4.476 | 13.564 | 13.564 | 4.476 | 13.564 | 13.564 |
| 2 | 3.827 | 11.598 | 25.162 | 3.827 | 11.598 | 25.162 |
| 3 | 2.995 | 9.075 | 34.237 | 2.995 | 9.075 | 34.237 |
| 4 | 2.913 | 8.829 | 43.065 | 2.913 | 8.829 | 43.065 |
| 5 | 2.561 | 7.761 | 50.826 | 2.561 | 7.761 | 50.826 |
| 6 | 2.109 | 6.392 | 57.219 | 2.109 | 6.392 | 57.219 |
| 7 | 1.848 | 5.600 | 62.818 | 1.848 | 5.600 | 62.818 |
| 8 | 1.640 | 4.970 | 67.789 | 1.640 | 4.970 | 67.789 |
| 9 | 1.555 | 4.712 | 72.501 | 1.555 | 4.712 | 72.501 |
| 10 | 1.402 | 4.248 | 76.749 | 1.402 | 4.248 | 76.749 |
| 11 | 1.197 | 3.626 | 80.375 | 1.197 | 3.626 | 80.375 |
| 12 | .980 | 2.969 | 83.344 | | | |
| 13 | .877 | 2.658 | 86.002 | | | |
| 14 | .827 | 2.506 | 88.508 | | | |
| 15 | .709 | 2.147 | 90.655 | | | |
| 16 | .664 | 2.013 | 92.668 | | | |



| | | | | | | |
|----|-------------|-------------|---------|--|--|--|
| 17 | .616 | 1.867 | 94.535 | | | |
| 18 | .417 | 1.265 | 95.800 | | | |
| 19 | .349 | 1.056 | 96.856 | | | |
| 20 | .255 | .774 | 97.630 | | | |
| 21 | .208 | .631 | 98.261 | | | |
| 22 | .185 | .561 | 98.822 | | | |
| 23 | .115 | .347 | 99.169 | | | |
| 24 | .100 | .304 | 99.474 | | | |
| 25 | .071 | .216 | 99.690 | | | |
| 26 | .065 | .198 | 99.888 | | | |
| 27 | .027 | .082 | 99.970 | | | |
| 28 | .008 | .024 | 99.993 | | | |
| 29 | .002 | .007 | 100.000 | | | |
| 30 | 1.008E-013 | 1.025E-013 | 100.000 | | | |
| 31 | 1.000E-013 | 1.000E-013 | 100.000 | | | |
| 32 | -1.002E-013 | -1.006E-013 | 100.000 | | | |
| 33 | -1.003E-013 | -1.009E-013 | 100.000 | | | |

Fuente: Elaboración propia

Conclusions

Returning to the research question, it can be deduced that the role played by the informal economy in both units of analysis is the creation of jobs, combating the levels of poverty of the population that moves from the municipalities to the metropolitan areas, given that , not finding a job, they enter the informal economy.

Both in Guatemala and Mexico, there is a high percentage of the population that lives in conditions of poverty and is related to those who join the informal economy. According to the realization of the socioeconomic profile of the study areas with secondary sources, it was found that Guatemala has 40% of poverty levels and Mexico 46.2%. Regarding the informal economy, 69.8% of the employed population of Guatemala is immersed there, while in Mexico 60%.



When analyzing which economic and social factors affect the growth of the informal economy in both economies, with employment the factorial model, eight were found: the public policies implemented by the governments in both economies, unemployment, poverty levels, the lack of training, the low levels of education, the formal sector of the economy that relies on them to distribute their resources, the lack of support from the Government and the lack of funding to register in the formality.

Therefore, the research hypothesis with secondary information sources is accepted, since, when correlating the variables, a perfect positive correlation was obtained with 99% confidence, that is, there is a relationship with the variables poverty, extreme poverty and informality, so that the informal economy in countries such as Mexico and Guatemala reproduce poverty and absorb labor from jobs that the productive apparatus does not generate. With the field work in the factorial analysis, it was concluded that a factor that affects the growth of the informal economy is the lack of jobs, so that the productive apparatus of the Guatemalan economy, not generating enough jobs population, encourages the population to self-employ in the informal economy.

Similarly, it is corroborated that within the characteristics of the population that works in informality are the following: it has low levels of education, with no training, it is an unemployed population that comes from rural communities to cities in search of better levels of life.

Therefore, it is suggested that future surveys expand the sample of respondents in other geographical areas of Latin America to corroborate the data, since this social phenomenon of informality continues to grow due to the inability of the productive apparatus of the economies to absorb the existing workforce.



References

- Castillo, J. y Cubillos, A. P. (2018). *Trabajo informal. Mercado laboral*. Recuperado de sario.edu.co/Universidad-Ciencia-Desarrollo/ur/Fasciculos-Anteriores/Tomo-I--2006/Fasciculo-5/pdf/2006_fa05_trabajo_informal_prn/.
- Consejo Nacional de Evaluación de la Política de Desarrollo Social [Coneval]. (2013) Programa Anual de Evaluación 2013. México: Coneval. Recuperado de <https://www.coneval.org.mx/Evaluacion/Paginas/Programa-Anual-de-Evaluaci%C3%B3n-2013.aspx>.
- Guillermo E. y Perry, W. (2007). *Informalidad: Escape y Exclusión*. Washington, Estados Unidos: Banco Mundial.
- Instituto Nacional de Estadística y Geografía [Inegi]. (2012). *Boletín de Prensa Núm. 449/12*. Aguascalientes, México: Inegi.
- Instituto Nacional de Estadística y Geografía [Inegi]. (2012) *Medición del sector informal*. México: Inegi. Recuperado de http://www.inegi.org.mx/saladeprensa/boletines/2015/especiales/especiales2015_12_36.pdf.
- Instituto Nacional de Estadística y Geografía [Inegi]. (2015) *Encuesta Intercensal 2015*. México: Inegi. Recuperado de <http://www.beta.inegi.org.mx/proyectos/enchogares/especiales/intercensal/>.
- Instituto Nacional de Estadística y Geografía [Inegi]. (2015) *Encuesta Nacional de Ocupación y Empleo*. México: Inegi.
- Instituto Nacional de Estadística de Guatemala [INE]. (2016). *Encuesta Nacional de Empleo e Ingreos*. Guatemala: INE.
- OIT (2012) Panorama Laboral 2012 www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/documents/publication/wcms_195884.pdf
- Pérez, J. F. (2005). El sector informal en México. *El Cotidiano*, 31-45.
- PitBox.Blog. (2017). *Tipos de piramides poblacional*. PitBox.Blog.
- Prado, J. C. (2016). *Cobertura de la Seguridad Social*. Guatemala: ASIÉS. Proyecto Diálogo Social para el Trabajo Decente.
- Sequeda, M. T. (2014). Las nociones de trabajo informal y trabajo precario en el análisis de calidad de empleo en Colombia. *Lebret*, 29-58.

Universidad de San Carlos de Guatemala [USAC]. (2017). *Centro de Estudios Urbanos y Regionales. USAC- CEUR*. Guatemala, Guatemala: CEUR.