

# Factors that Determine Work Precariousness - The comparison between the National and Foreign Direct Investment Industries: The case of Celaya Guanajuato México

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**Abstract-** In 2012, the reform of the Federal Labor Law was implemented in Mexico, arguing that it was necessary to make the legislation more flexible, in order to position Mexico as a viable country to attract Foreign Direct Investment (FDI). However, there has been little monitoring on the real effects of these changes. The objective of this research was to analyze the factors that determine the precarious working conditions in the city of Celaya Guanajuato Mexico with the use of a quantitative approach of a non-experimental cross-sectional design. The results identified that precarious working conditions are correlated with the gender, age, schooling, economic sector and origin of the investment. The implications for management are: The legal flexibility for attracting direct foreign investment according to this research, has been an appropriate strategy, since it pressures labor markets to improve their conditions to be competitive, because the industry with direct foreign investment is governed by the Law, on the other hand, the national industry reflects labor practices well below the legal minimums.

**Key Words:** work precariousness; Global/international HR Practices; Global/International Strategies ; Foreign Direct Investment; Managing in emerging and less developed economies.

**JEL:** J81; J88; J78; E24; 365

## 1. INTRODUCTION

The Economic Commission for Latin America and the Caribbean (CEPAL, 2016)[7] indicates that the benefits generated by Foreign Direct Investment (FDI) must be demonstrated and not just assumed. Furthermore, the World Economic Forum (WEF) suggests that it is not enough to consider the benefits of FDI only in economic terms, but also to include social development as an indicator. This can be represented through various elements where one of the main factors is the experience of the population to benefit themselves from the economic prosperity of the country in which they reside (WEF, 2016a)[36]. This is directly related to the quality of jobs. The objective of this research was to analyze the factors that determine the precarious working conditions in the city of Celaya Guanajuato Mexico, that is why the following questions are proposed: What are the factors that determine job precariousness in Celaya Guanajuato? And what role does the origin of the investment play? The World Economic Forum (WEF, 2017) [40] expressed the need to seek socially inclusive approaches to achieve economic development; nevertheless, insists that it is still necessary to generate referential frameworks that guide the creation of policies. Within its proposal, it outlines Heading 6: Employment and Labor Compensation as a

key element for economic development. This research seeks to generate information from the perspective of a developing country in order to understand the phenomena framed within this heading. The results identified that precarious working conditions are correlated with the gender, age, schooling, economic sector and origin of the investment.

## 2. MATERIAL AND METHODS

### 2.1 Design

This research aims to: analyze the factors that determine precarious working conditions in the city of Celaya Guanajuato Mexico.

A quantitative approach of a non-experimental cross-sectional design with a temporal limitation from May to June 2016 was used and it was applied in the city of Celaya, Guanajuato, México.

### 2.2 Data collection

According to the National Institute of Statistics and Geography (INEGI), Celaya has a population of 340,387 inhabitants of which (PEA) 54.8% are labor active, therefore our study population is 186532 (INEGI, 2011)[23] and a sample of 384 workers was obtained. This gave us an error rate of 5% and a reliability level of 95%.

## 2.3 Measures and coding

The following hypothesis were determined.

Hi1: Work precariousness (CL) can be explain from the following variables, Age, Gender, Schooling, Origin of investment and Economic sector;

Hi2 There is a difference between CL means among Mexican and foreign companies;

Hi3: There is a difference between CL means among men and women;

Hi4: There is a difference between CL means according to age;

Hi5: There is a difference between the means of CL by schooling;

Hi6: There is a difference between the means of CL by sector.

For this research, an ordinal Thurstone scale was used, which measures the opinions of the attitudes (Elejabarrieta, & Iñiguez, 2000)[12] with levels from 1 to 5. It was based on the elements presented by the European Commission (2004), in its ESOPE proposal: time dimension, contractual dimension, economic dimension and social dimension. In addition, the applicable regulations were adapted, which in this case is the one marked in the Federal Labor Law (LFT).

Thus, generating an instrument that showed a Cronbach alpha of  $\alpha = .764$  a suitable level according to Werts et al. (1974)[35], with 9 items that integrate the dimension: Labor conditions (CL), is constituted by: access to decent salaries, social security, bonus, profit sharing, formal contracting and indeterminate time, overtime and access to health and safety program, health program. In addition, demographic data was collected: age, gender, and schooling, and regarding organizational characteristics, data about the origin of the investment and the sector it belongs to.

## 3. THEORY

It is presumed that when a country becomes more competitive, productivity increases. Therefore, salaries increase as part of this development (WEF, 2014), yet,

there are controversies on this subject (Olney, 2013)[30]; Figueroa (2011)[14]; Guadarrama, Hualde and López (2012)[18] express that there is no conclusive evidence on the labor benefits generated by the attraction of FDI based on what is known as RTB (Race to the Bottom), which is the attraction of FDI through flexible labor legislation to generate economic benefits to the host country. On the other hand, Carrillo and Gomis (2012)[6]; García & Nuñez (2014)[15] indicate that they have found theoretical evidence in which the possibility of developing countries to accumulate experiences of industrialization is proposed as an advantage of FDI. However, ECLAC states that, although the countries known as BRICS (Brazil, China India and Russia) have been able to attract FDI, research and development activities have been maintained in developed countries (CEPAL, 2016)[7].

The importance of developing this research in Mexico, according to Kearney (2012)[24] is that investors are optimistic about investing in America and position Mexico as a preference in the 9th place. Another ideal condition for doing this research in a Mexican city is that Mexico is classified as a developing country. According to Rogers & Rogers (1989)[31] developing countries are characterized by insecure jobs, low salaries and the existence of various forms of abuse.

Carrillo; Martinez & Galhardi (2014)[5] indicate that the cost of labor in Mexico has varied and has consistently competed with Asian countries. Nowadays Mexican salaries are considered higher than Chinese, Vietnamese and Indonesian salaries. The Global Competitiveness index (WEF, 2017)[40] showed the following ranking (see Table 1), it shows that Mexico has a high position in flexibility; however, the impact is not reflected in productivity. On the other hand, the International Labor Organization (ILO) shows that Mexico had an unemployment rate of 3.4 in 2007 and is projected to be 4.3 in 2017, although the G20 countries considered as developing countries have higher unemployment rates in 2007 5.1 and by 2017 it is expected to be 5.6 (ILO, 2016).

Table 1 Labor market rank

	México	Indonesia	China	India	Brazil	Russian
Flexibility of wage determination	48	99	89	104	121	88
Labor market efficiency	105	96	38	75	114	60
Pay and productivity	84	22	26	33	89	57
Competitiveness	51	36	27	40	80	38
*137 countries participate in the rank						

Source: Own elaboration based on Global Competitiveness Index 2017-2018 (World Economic Forum, 2016)

In 2012 a labor reform is implemented in Mexico with the objective of improving national productivity and making the country more appealing for the attraction of FDI (DOF, 2012), (Gobierno de México, 2017)[17]. According to García & Nuñez (2014)[15], this link between labor flexibility and development is only a discourse and that, on the contrary, poverty is worse; in addition, they cite the case of Argentina and Peru, which

in previous years assumed flexible labor legislation, and yet they have not achieved the development objectives.

Carrying out this research in the city of Celaya due to the importance of attracting FDI mainly in the automotive manufacturing sector represents an opportunity to study this phenomenon, FDI in Mexico increased by 18% in 2015 as a result of the reinforcement of automotive manufacturing (WEF, 2014)[38].

According to Contreras & Molina (2016)[9], Celaya belongs to the Laja Bajio area, which is experiencing a process of metropolization where its local specialization index (IEL) is focused on leisure, cultural services, and manufacturing.

The economic development of this region has been secured by public policies of attracting FDI. According to the Government of the state of Guanajuato, in the last 4 years, more than 180 thousand jobs have been generated, of which approximately 70 thousand are related to the automotive sector (Gobierno del Estado Guanajuato, 2016)[16]; however, the quality of these jobs is not clarified.

Due to the FDI boom in this region and the positions found on the impact of attractive policies based on RTB, a suitable context is generated, which justifies deepening the relationship between the precarious working conditions. That is why this context is considered as the ideal for research.

In order to enrich the research, it was decided to incorporate the demographic variables that cause inequality and employment discrimination proposed by the National Commission to Prevent Discrimination (CONAPRED, 2012)[8]; Szekely (2007)[33], Neuman (2011)[28]; WEF, (2016 b)[37]; MacCann(2012)[25] and Álvarez, Hernández & Ruiz (2015)[1], which are: age and gender. Age is an element that limits access to decent jobs due to the phenomenon of age discrimination. This type of behavior occurs mainly within the working field and is experienced through limitations in the recruitment processes due to demographic characteristics. Furthermore, it predisposes individuals to accept precarious jobs, in order to obtain income that allows subsistence.

On its behalf, the World Economic Forum (WEF, 2016 b)[37] in its gender report on 2016 indicates that Mexico ranks 122th place out of 144 in reference to women's economic participation and in 128th place in reference to salary equity between men and woman so it is important to analyze whether gender determines precarious working conditions.

Schooling is among the elements that need to be assessed in order to determine the type of employment and their level of precariousness, according to Oliveira (2006)[29]. This author indicates that the level of education is different between young salaried workers and self-employed workers who are under more precarious conditions; for Oliveira, economic sectors should be considered to analyze labor precariousness.

The global trend is characterized by the impoverishment of working conditions (Benencia, Herrera & Levine, 2012)[4]. This loss can be generated by companies, but also by the States that establish the regulations that make working relations more flexible. Even though, precarious working conditions are accepted by the inhabitants due to the processes of impoverishment that force the labor insertion in unfavorable conditions. Work, according to the authors is capable of generating high profits for the

entrepreneurs but these are not shared with the workers, which generates deep inequalities.

According to Beck (2015)[3], we are currently migrating to a political economy of insecurity, where the precarious working conditions are one of its main characteristics; people are replaced by technologies, flexibility is demanded as the ability of the employer to dismiss workers more easily. In other words, a risk society is created.

According to Guaderrama et al., (2012)[18], precarious work has a high content of subjectivity, due to the fact that the regulations in each country are different; however, there is criteria proposed by different authors regarding the concept of precariousness in work and the elements to be considered for its measurement.

For Rodger and Rodgers (1989)[31] precarious work is the combination of factors such as labor instability, absence of social protection and economic vulnerability, where its main elements are: employment certainty, control of the working conditions, social protection, vulnerability to poverty and social insecurity. In the case of Marshall (1990), he refers to work precariousness as to employment instability when referring to the duration of the job relationship and the intensity of the contractual ties. Rubio (2010)[32] describes the labor practices that generate precarious work and proposes elements to measure it: Level of labor status: It consists of the percentage of workers without a contract, the percentage of workers with a temporary contract, the percentage of workers in wage insufficiency (those who earn two or less minimum wages), the percentage of workers without access to public health system and workers without other benefits; he establishes the following dimensions: temporality, insufficiency of wages and lack of protection in the workplace.

Guadarrama et al. (2012)[18] proposes that precarious work is classified in objective and subjective dimensions, and describes some practices that replicate it such as: temporary employment, underemployment, quasi self-employment, casual employment and work by "calls". According to Millán and Zambrano cited by Rubio (2010), precarious work exists both in formal and informal jobs. Saucedo and Salinas (2017) establish that, one way of understanding the characteristics of labor relationships is to know the labor density, the labor permanence, the size of the formal economy and the economic inequality.

Benencia et al. (2012)[4] adds to the definition of precarious work the concept of inequity and inequality, where workers do not compete fairly for access to commodities, spaces, practices and optimum working conditions. These causes exposure to social vulnerability, low salaries, drastic reduction of social benefits, insecurity and unhealthy working conditions; growing instability, little opportunity for professional development, long working hours, temporary employment, the elimination of labor unions, subcontracting, informality of labor relations and mono-



political control of labor markets through intermediation networks.

Dubet (2015)[11] proposes a compression of the inequality phenomenon, in which it cannot be assumed that inequality emerges solely from economic mechanisms since this position would isolate the individual from having a solidarity and fraternal participation, as a result of increasing inequalities.

According to the European Commission (2004)[13], in its report Precarious Employment in Europe: A Comparative Study of Labor Market Risks in Flexible Economies (ESOPE), there are practical standards and normative standards regarding working conditions. This research proposes considering normative standards where these rights are determined by the legislation. According to this commission, precarious employment refers to forms of work that do not meet or are below the normative standard, in other words, precarious.

Hernández (2006)[20] proposes an approach to the compression of work phenomena under a theory of

subjective configuration which includes understanding the work reality as a construction that is composed of cognitive elements, value, everyday reasoning, sentimental and aesthetic. In this setting, the perception of the precarious working conditions are sought to be measured where the subjective configuration of the worker himself is measured.

Considering precarious work theories, this research will adjust to the elements regulated by the Federal Labor Law (LFT) of Mexico and on the basis of the worker's perception and experience.

## 4. RESULTS

First, the results generated by the proposed model are shown, according to the results of the Durbin Watson test with a value of 1,743 (see table 2) the proposed model is acceptable, since it is close to 2 suggested by Hill & Flack (1987); Which indicates an independence of errors.

Table 2 Multiple linear regression model  
Summary of the model

Model	R	R square	R corrected square	Estimation typographic error	Durbin-Watson
1	.27a	.07	.06	1.00	1.74

a. Predictive variables: (Constant), ECONOMIC SECTOR, SCHOOLING, AGE, ORIGIN OF INVESTMENT, GENDER

b. Dependent variable: LABOR CONDITIONS

The model explains 76% of the variance of working conditions (see table 2).Based on the result shown by the model, an ANOVA with  $p = .000$  lower than .05 it is determined that the prediction of (CL) with a value of  $F = 6.081$  is significantly improved (see Table 3).

Table 3 ANOVA of the model

Model	Square sum	gl	Squared mean	F	Sig.
1 Regression	30.54	5	6.11	6.08	.00b
Residual	371.77	370	1.00		
Total	402.32	375			

a. Dependent variable: LABOR CONDITIONS

b. Predictive variables: (Constant), ECONOMIC SECTOR, SCHOOLING, AGE, ORIGIN OF INVESTMENT, GENDER

The statistical data of the coefficients of the model (Table 4) is presented below.

Table 4 Coefficients

Model	Non standardized coefficients		Typographic Coefficients		t	Sig.	Co-linearity statistics	
	B	Error typ.	Beta				Tolerance	FIV
1	(Constant)	3.67	.42		8.73	.00		
	AGE	-.00	.00	-.05	-1.08	.28	.97	1.02
	GÉNDER	.20	.11	.09	1.82	.06	.91	1.09
	SCHOOLING	.01	.01	.07	1.45	.14	.99	1.01
	ORIGEN OF THE INVESTMENT	.41	.12	.16	3.26	.00	.98	1.01
	ECONÓMIC SECTOR	-.27	.09	-.14	-2.75	.00	.92	1.08

From the results of Table 4 the following equation is established:

$$CL = \beta_0 + \beta_1 \text{ Age} + \beta_2 \text{ Gender} + \beta_3 \text{ Schooling} + \beta_4 \text{ Origin of investment} + \beta_5 \text{ Economic sector} + \varepsilon$$

$$\text{Labor conditions} = 3.670 - 0.005 \text{ Age} + 0.201 \text{ Gender} + 0.015 \text{ Schooling} + 0.414 \text{ Origin of investment} - 0.273 \text{ Economic sector}$$

The co-linearity statistics show values below 10 and all have values close to 1, therefore the factor of inflated variance FIV indicates that the model meets the assumptions of non-multi co-linearity values between 1.24 and 1.99

For the coefficients of the regression model regarding  $t$  value, it is identified that the origin of the investment is the one that shows higher levels with  $t = 3.262$  therefore

Table 5 Average of the origin of the investment  
LABOR CONDITIONS

NATIONAL	N	Valid	313
		Loss	0
	Average		3.56
	Mode		4
FOREIGN	N	Valid	88
		Loss	0
	Average		4.05
	Mode		4

a. There exists various modes. The lowest of the values will be shown.

it is the variable that contributes the most to the prediction model (see table. 4)

Therefore H1: Working conditions (CL) are associated with the origin of investment and the sector, gender, age and schooling, is accepted.

Once the model is determined, it is time to identify the differences related to the average labor conditions between Mexican and foreign companies (see table 5), with this result it is identified that the average CL of Mexican companies is lower than foreign firms, this implies that although there is controversy over whether to increase flexibility on the legislation in order to attract FDI, these companies maintain better CL than the Mexican ones.

It can be observed in Table 6 that Mexican investment firms have a 42% precarious working conditions rate, while those of foreign origin have only 6.7%.

Table 6. Precariousness in work frequency based on the origin of investment

ORIGIN OF THE INVESTMENT			Frequency	Percentage	Valid Percentage	Accumulated Percentage
NATIONAL	Valid	Precarious working conditions	85	27.2	42.9	42.9
		Optimum working conditions	113	36.1	57.1	100.0
		Total	198	63.3	100.0	
	Loss	System	115	36.7		
		Total	313	100.0		
FOREIGN	Valid	Precarious working conditions	4	4.5	6.7	6.7
		Optimum working conditions	56	63.6	93.3	100.0
		Total	60	68.2	100.0	
	Loss	System	28	31.8		
		Total	88	100.0		

With a value of  $U = 8844$ , the average range table (see table 7) shows that jobs in Mexican companies are more precarious at 71.14 points in reference to foreigners.

Table 7 Ranges by origin of the investment

	ORIGIN OF THE INVESTMENT	N	Average Range	Range Sum
Working Conditions	NATIONAL	313	185.26	57985.00
	FOREIGN	88	257.00	22616.00
	Total	401		

The Hypothesis Test Hi2: There is a difference between CL means among Mexican and foreign companies, this is indicated by  $\rho = .000$  therefore the research hypothesis is accepted (see table 8).

Table 8. Hypothesis 2 verification

	WORKING CONDITIONS
U from Mann-Whitney	8844.00
W from Wilcoxon	57985.00
Z	-5.13
Sig. asintót. (bilateral)	.00

a. Grouping Variable: ORIGIN OF THE INVESTMENT

In order to address the inequity posed by the WEF (2016b)[37] in the gender ranking, the hypothesis that considers demographic factors related to gender was established: Hi3: There is a difference between the means

of CL among men and women. It was found that men have a slightly higher mean than women, therefore it is identified that the female gender has more job vulnerability access regarding working conditions than men (see table 9).

Table 9. Average by gender  
WORKING CONDITIONS

FEMALE	N	Valid	164
		Loss	0
	Average		3.52
	Mode		4 <sup>a</sup>
MALE	N	Valid	233
		Loss	0
	Average		3.76
	Mode		4

a. There exists various modes. The lowest value is shown. However, analyzing table 10, this shows that precariousness is suffered not only by women with

42.1%, but also by men with a 29.3%, as the magnitude is observed, it varies based on gender, yet not excluded from any of them.

Table 10. Precarious Working Conditions by gender

GENDER			Frequency	Percentage	Valid Percentage	Accumulated Percentage
FEMALE	Valid	Precarious working conditions	45	27.4	42.1	42.1
		Optimum working conditions	62	37.8	57.9	100.0
		Total	107	65.2	100.0	
	Loss	System	57	34.8		
	Total		164	100.0		
MALE	Valid	Precarious working conditions	43	18.5	29.3	29.3
		Optimum working conditions	104	44.6	70.7	100.0
		Total	147	63.1	100.0	
	Loss	System	86	36.9		
	Total		233	100.0		

Table 11 Hypothesis 3 verification

	WORKING CONDITIONS
U from Mann-Whitney	16747.50
W from Wilcoxon	30277.50
Z	-2.09
Sig. asintót. (bilateral)	.03

a. Grouped Variable: GENDER

Based on the information presented by Szekely (2007)[33], Neuman (2011)[28], CONAPRED (2012)[8] and MacCann, (2012)[25], Álvarez, Hernández & Ruiz (2015)[1] Hi4 was proposed: There is difference between CL means by age.

According to the results of Table 12, it is shown that all ages are subject to precariousness in work.

A very marked tendency was detected where the elderly undergo precarious working conditions; this verifies the information presented by the theorists.

Even more serious, of the few minors who participated in the sample, 100% indicated having precarious working conditions.

It should be clarified that in Mexico, children working under the age of 16, is considered illegal. The people who were interviewed ranged between the ages of 17 and 18. Although these workers are in full use of their right to exercise work, their labor inclusion to employment is under precarious working conditions.

Table. 12 Precarious Working Conditions by age  
Grouped conditions average

RANGED BY AGE			Frequency	Percentage	Valid Percentage	Accumulated Percentage
Minor	Valid	Precarious working conditions	4	80.0	100.0	100.0
	Loss	System	1	20.0		
	Total		5	100.0		
Young adult	Valid	Precarious working conditions	43	18.3	27.7	27.7
		Optimum working conditions	112	47.7	72.3	100.0
		Total	155	66.0	100.0	
	Loss	System	80	34.0		
	Total			100.0		
Adult	Valid	Precarious working conditions	34	23.4	40.0	40.0
		Optimum working conditions	51	35.2	60.0	100.0
		Total	85	58.6	100.0	
	Loss	System	60	41.4		
	Total			100.0		
Elderly	Valid	Precarious working conditions	6	60.0	66.7	66.7
		Optimum working conditions	3	30.0	33.3	100.0
		Total	9	90.0	100.0	
	Loss	System	1	10.0		

	Total		100.0		
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Regarding the verification of Hi4: There is a difference between the means of CL by age, this is indicated by  $p = .002$  therefore the research hypothesis is accepted (see table 13).

Table 13. Hypothesis 4 verification

	WORKING CONDITIONS
Chi-squared	14.84
gl	3
Sig. asintót.	.00

a. Kruskal-Wallis test

b. Grouped variable: AGE RANGE

One of the factors considered to be covered is schooling, an inconsistency was identified in the table, the less education the more access to precarious work, and when schooling level increases precariousness decreases, but when reaching Ph.D. level again the precarious working conditions rise.

Table 14. Precarious Working Conditions and schooling level

Precarious Working Conditions	
SCHOOLING	Valid percentage
PRIMARY	66.7
MIDDLE SCHOOL	37.7
HIGH SCHOOL	35.4
CAREER	22.9
MASTER'S DEGREE	37.5
PH. D.	50.0

Regarding the verification of Hi5: There is a difference between the means of CL by schooling, this is indicated by  $p = .002$  therefore the research hypothesis is accepted (see table 15).

Table 15. Hypothesis 5 verification

	WORKING CONDITIONS
Chi-squared	18.47
gl	5
Sig. asintót.	.00

Another element considered in the model is the sector in relation to this data, it was found that the tertiary sector has more precarious working conditions since 50% of its organizations presented these characteristics. The secondary sector presented relatively healthy working conditions behavior (see table 16).

Table 16. Precarious Working Conditions and economic sector

ECONOMIC SECTOR		Frequency	Valid percentage
PRIMARY	Precarious working conditions	3	42.9
	Optimum working conditions	4	57.1
	Total	7	100.0
SECONDARY	Precarious working conditions	16	14.4
	Optimum working conditions	95	85.6
	Total	111	100.0
TERTIARY	Precarious working conditions	70	50.0
	Optimum working conditions	70	50.0
	Total	140	100.0

In reference to Hi6: There is a difference between the means of CL by sector was accepted since it showed a value  $p = .000$  (see table 17).



Table 17 Hypothesis 6 verification

	WORKING CONSDITIONS
Chi-squared	45.29
gl	2
Sig. asintót.	.00

a. Kruskal-Wallis test

b. Grouped variable: ECONOMIC

SECTOR

## 5. DISCUSSION

With the data obtained it was identified that precarious working conditions and human resources practices that do not respect the Federal Labor Law are a reality; however, the arrival of companies in a region puts pressure on labor markets making them more competitive where companies that offer precarious jobs could suffer from greater staff turnover. According to Manpower group (2015)[26] it is necessary to compete with other organizations to attract and retain the best candidates. This finding needs to be analyzed according to context, because data behavior could change in developed countries, and maybe in this case the increased flexibility of the law can deteriorate working conditions.

It is not enough to denounce the inequalities, it is necessary to generate solidarity structures that allow the implementation of positive actions that balance working conditions and generate decent jobs for those without favorable options, where inequality is related to characteristics linked to merit and not to demographic situations that are not within control of the individual, such as age and gender.

It is proposed to generate qualitative research with the purpose of finding cultural categories that allow to explain why Mexican capital organizations present more precarious working conditions than the foreign ones?

It is also suggested to go deeper into the topic of simulation, since a recurrent practice was detected, to provide social security benefits, thus the salary decreases when it is received.

Due to the findings of precarious work in minors and the elderly it is necessary to carry out an investigation with emphasis on the association of age and levels of precarious work.

## 6. CONCLUSIONS

Based on the results it is identified that precarious work exists and the main predictor of this is the investment, where Mexican capital organizations show more precarious working conditions.

The findings confirm that women experience more precarious working conditions than men.

Age is determinant for experiencing precarious working conditions, the elderly and young adults are the most affected.

It can be concluded that the manufacturing or secondary sector have presented less precarious behaviors than the primary and the tertiary.

Based on the results, it can be said that the actions of the Government of the state of Guanajuato and the city of Celaya are assuming the less precarious working conditions by opting for the attraction of the FDI of the automotive industry.

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