

## Article

# Social Enterprise in Mexico, a New Business Classification

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**Abstract:** Social Enterprise (SE) is an increasingly important sector for generating employment and distributing wealth in market structures. The social business type two (SB2)—a very specific type of SE—is a category that has challenged orthodox theoretical elements in its main assumptions and behavior in the markets. SB2 is mainly classified within the category of microenterprises because they have a very small number of employees. A new official business classification is important to differentiate enterprises not only by size, but also by type of behavior. There is a new indicator that compares the profit levels of microenterprises with the poverty line as a representative tool to classify Mexican microenterprises into profit seekers and SB2. When these outcomes are contrasted with a discrete choice model under the logistic functional form, the probabilities that this indicator classifies a microenterprise with entrepreneurship by necessity, installed capacity maximization and no profit seeking as SB2 is 80% for microenterprises up to ten workers, and goes up to 92% for microenterprises with one person. With such a new classification, better policies could be promoted to support SB2, and help address both the lack of opportunities from the market economy and poverty menace.

**Keywords:** social business; business classification; microenterprises; profit maximization; maximization of installed capacity



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## 1. Introduction

This article reviews the different business stratification approaches and criteria used to represent the heterogeneity of firms in markets, both in advanced and developing countries. With evidence from the economic literature on the need to continue the development of classification variables, this article distinguishes enterprises not only by size but also by market behavior, with special emphasis on social enterprises, specifically type two social businesses (SB2) [1], known in Mexico as microenterprises.

With the current official stratification, social enterprises in Mexico lack a special classification and are commonly categorized within the microenterprise sector, based on the number of employees. In view of this, a new business categorization is proposed that distinguishes microenterprises into two groups: for-profit and social enterprises. This would allow the current regulations to be strengthened.

Thus, the research question is: How can a business classification be implemented to classify microenterprises into social or profit businesses, which considers variables of business behavior in the market?

The hypothesis to be tested is that by using an indicator that compares the profit levels of microenterprises with the monetary amount of the poverty line [2], it is possible to classify profit microenterprises and social microenterprises. Profit microenterprises arise mainly from market opportunities and produce for profit, compatible with the objectives of profit maximization and market share. Social microenterprises respond to the characteristics of entrepreneurship by necessity, maximization of installed capacity and without profit.

With the research question in mind, the article is divided into six sections. The second section analyzes the business classification variables. The third section presents evidence on the importance of the economic and social analysis of the microenterprise sector in order to understand its dynamics and impacts. The fourth section presents the methodology detailing the construction of a classification indicator and defines a discrete choice model, under the logistic functional form, to estimate the probabilities of a microenterprise being classified as social, based on a series of characteristics related to the additional stratification variables. The fifth section discusses the results of the model and, finally, the sixth section presents the conclusions and scope/limitations.

## 2. The Context of Understanding Microenterprises in the Mexican Economy

The predominance of microenterprises in the Mexican economy has been the subject of intense debate about their role in economic and regional growth and business development.

Microenterprises have always represented more than 95% of the total number of businesses in Mexico, although the economic system has moved through different economic policy models and approaches, and many times to the disadvantage of microenterprise development. With the national model initiated in the 1980s, the economic priority was to orient productive and market efforts towards the exterior, promoting exports and foreign investment by large multinational companies and the generation of bilateral and multilateral trade agreements between different regions of the world. The aim was for Mexico to move towards a significant increase in the labor demand of large companies in technological sectors, the consolidation of development poles, and the reconfiguration of a business culture based on international competitiveness and economic growth. Given this paradigm, economic policymakers bet on the reduction of the contribution and importance of the microenterprise sector, both in terms of the concentration of enterprises and employment, stating that these were inefficient and highly unstable businesses in the market.

Although the business support policy was only directed towards larger-scale enterprises, the low levels of economic growth during the last decades reflect the inefficiency of the economic objectives established in this model. The major inefficiency, however, is in the social field, where it has not been possible to improve the population's wellbeing indicators. More than 50% of society currently suffers some level of poverty [3].

Some of the causes of the high levels of income concentration and great economic, regional and social inequalities are due to the export-oriented productive model. It is based on mechanisms that create insufficient well-paid jobs and prioritizes the establishment of policies to reduce costs, mainly in wages, in order to increase business competitiveness. This has generated a readjustment in the labor market with constant self-employment in the form of microenterprises. Even in regions with a high specialization in the export sector, microenterprises have had a sustained weight in their contribution to total employment. They have assumed the important role of supporting the working population when larger-scale enterprises linked to global value chains enter into strong imbalances [4].

These systematic factors bring with them the academic and institutional challenge of studying and understanding human behavior and the logic that motivates microentrepreneurship. It is important to continue the study of the structural conditions that foster the informality in which these businesses are commonly carried out, and why, despite the poverty in which the owners live, they defend their right to be entrepreneurs [5]. In modern market economies, the issue of decent employment is one of the most severe to be faced now and in the future, because modern global companies require fewer and fewer workers. This scenario is associated with the context and emergence of microenterprises as an alternative to frequent unemployment, low wages, or economic recessions. Although the scenarios and initial conditions for opening a business are not optimal, but they are the only options for obtaining a subsistence income, in what is known as recession push [6].

This has led to microenterprises being seen as enterprises that contribute little to economic growth. The owner carries out most of the business activities, their employees tend to come from within the family, and there is no separation between the family and

the business. However, even when the productive contribution in terms of value added is limited, it is a business segment of great contribution to economic development. It is a source of mitigation of economic cycles that helps assure that income distribution does not worsen [7].

With the emergence of the concept of social business, materialized in microenterprises, the debate associated with the issues of development and the fight against poverty has been renewed. Social business merges the necessary experience required to perform in the market, with the creativity and solidarity of entrepreneurs to influence the design and distribution of goods and services that also contribute to increasing the welfare of vulnerable populations [7].

Next to global enterprises, social businesses are economically sustainable value systems in the market, and much more efficient than charity in addressing community problems [8]. Their presence demonstrates that the economically rational principles of human selfishness are not absolute and can co-exist with the socially rational principles of human selflessness in favor of others. Social businesses perform on the basis of respect and not only charity. This is capitalism with a human face, something globalization promised with great fanfare at the end of the 1990s it would bring to the welfare of the 21st century [4].

For a large sector of society, microenterprises are the only legitimate and accessible way to overcome unemployment and low wages, since the small size of their profits barely protects them and their families from the threat of poverty. Based on evidence gathered in the last year in Mexico, about 50% of the personnel employed in microenterprises have a basic level of education (elementary or high school). Thirty percent have middle school education. 17% have professional studies and 3% have no schooling at all. Regarding economic activity, 70% are in the service sector, 17% in manufacturing, 7% in construction, and the rest in the primary sector. Regarding market permanence data, 75% of the microbusinesses have a survival period of less than 2 years. However, the survival period increases to 8 years once they exceed 2 years of operation [9]. This last data shows evidence to suppose that the high dynamism of opening and closing of microenterprises brings with it a learning process for the owners of these businesses [10]. In this sense, it has been shown that some microenterprises that arose out of necessity manage to develop entrepreneurial skills that allow them to move to a more consolidated business structure, whether it is another type of social enterprise or even a profit enterprise [11].

Understanding these circumstances would justify the incorporation of business development policies and programs for microenterprises, providing training and support so that these businesses can survive longer in the market as a mechanism for entrepreneurship. With these conditions, microenterprises could achieve incomes even higher than the precarious salaries of larger-scale business sectors and would contribute great value from the economic development paradigm. At the same time, existing evidence shows the need to encourage human capital formation with more formal schooling because the more knowledge they have, the better decisions they will make. If microenterprises do not last long in the market, it is largely due to their lack of education and expertise in the business world. A strong training process and adequate financing would allow these entrepreneurs to understand the market and survive better [6].

However, the consolidation of support programs for these social businesses requires a targeting instrument that distinguishes between enterprises that follow conventional profit-making behaviors and those that follow social objectives, with a great impact on the welfare of the most vulnerable sectors.

### 3. Microenterprises and Business Classification

Microenterprises are a sector with particular characteristics in all the economies of the world. In Mexico, according to data from the National Institute of Statistics and Geography (INEGI), 4 out of every 10 micro-businesses are run by women. In this sector, 50% of employees are women, while in larger-scale enterprises there are 3 women for every 10 people employed [9].

The microenterprise scenario in Latin American (LA) countries is not different from that observed in Mexico. On average, more than 93% of total enterprises in LA are microenterprises, concentrated in commercial and service branches with low value added. Consequently, these businesses generate around 16% of the productivity of large enterprises. In advanced countries, the productivity of microenterprises is over 40% of that of large enterprises. More than 11% of microbusinesses in advanced countries participate in the international market with some kind of export or import activity. In LA only 0.1% of microenterprises participate in international trade [12].

Most microenterprises in LA have a family organization. The owner is the one who provides the capital, directs and organizes the business through a mostly empirical administration. The workers come from the family circle. In addition, the market they dominate, and supply is small, either local or regional, and their production is not sophisticated [13].

Although the criteria for classifying enterprises are different in each country, in general there are three indicators commonly used to establish their size: employed personnel, total sales, and fixed assets; however, there is no uniformity among countries with respect to which variable is primary in their measurements and standards. Regarding developing countries, a study by the Organization of American States (OAS) established that Argentina and Panama use the level of sales to classify their business universe. Colombia and El Salvador consider employed personnel and level of assets. Bolivia, Guatemala, Costa Rica, Chile, Venezuela and Mexico use employed personnel as the main variable, although the range varies from 5 to 10 workers for microenterprises, depending on the country [14].

In advanced countries, the European Union and the Organization for Economic Cooperation and Development (OECD) recognize two approaches for determining stratification criteria: one approach for legal and administrative purposes, and the other for statistical purposes. For the first, most European countries use the variables of employed personnel, annual sales and annual balance sheet results, although some use only employed personnel and annual sales, and others, such as Spain, the Netherlands and France, consider only the criterion of employed personnel. In the United States, employed personnel and annual income variables are used. For statistical purposes, only the employed personnel variable is relevant.

In Mexico, efforts to generate business classification legislation began in 1978, leading to the current legislation established in 2009, in which microenterprises are considered to be those with up to 10 workers. A small enterprise in commercial activity has from 11 to 30 workers, and industrial and service enterprises have from 11 to 50 workers.

The variable “employed personnel” is defined as: “personnel hired directly by the company, which may be permanent or temporary, regardless of if they are paid or unionized, who work for the economic unit, subject to its management and control, covering at least one third of its working day” [15]. Therefore, this measurement includes owners, partners, family members and workers. It excludes fee or commission workers as well as personnel hired to provide services.

Specifying this concept of employed personnel is relevant because it makes it possible to establish the criteria for assessing changing phenomena associated with the dynamics of the productive sector itself. This is relevant to the case of outsourcing and corresponds to employed personnel who are not dependent on the company’s name. According to data from the 2009 to 2020 economic censuses, in México, this type of employment increased from 2003 to 2008 by 14.3% per year, while from 2008 onwards the rate slowed to 5.5% per year. Nonetheless, by 2018, 17.3% of the total employed population corresponded to a subcontracting category [16]. Considering these workers as part of the employed personnel where they operate their services rather than as subcontractors, would greatly modify the current statistical picture regarding business classification in Mexico.

In the global academic arena, important advances have been made to consider different business classifications, covering different dimensions and objectives, beyond mere size of the enterprise. Efforts to consolidate a method of business classification in line with the demands of the dynamism of the sector in recent years have focused not only on concrete

processes (inserting new intervals, indicators, income amounts, etc.) but also on processes and conceptual terms (new definitions of variables and companies). The latter has been observed in academic circles, but even organizations such as the OECD has recognized the evident heterogeneity observed in the microenterprise sector, highlighting the importance of social businesses [17].

From the social perspective, literature has distinguished between a profit enterprise, socially responsible enterprise and social business. The profit enterprise follows a single mission of profit maximization. Its success indicators are measured by the amount of profits obtained in the short term and the market share achieved in the long term. Socially responsible companies (also called corporate social responsibility) are companies that can have different missions. The companies pursue profit, social, environmental objectives or a combination of these. A social business has only social objectives. This business classification emphasizes the differentiation between enterprises dedicated to the creation of social value or to the creation of economic value. A social business is only focused on solving social or environmental problems [17,18].

Social businesses arise from entrepreneurial initiatives focused on solving a social problem in a sustainable manner. To do so, the business must be oriented like any other business in the market, trying to optimize resources, but selling its goods and services at a minimum competitive price necessary to cover costs and stay in the market. From this perspective, two types of social business can be identified: type one (SB1), which can be an enterprise of any size that arises to provide a social benefit, rather than maximizing profits for the owners; and type two (SB2), which are microenterprises whose owners are located in areas of marginalization and poverty, and where income is used to reduce levels of social and economic vulnerability. In this sense, a large number of microenterprises are social businesses because, although they may obtain some monetary gains, their greatest achievement is to overcome the poverty in which they find themselves [1,4].

Despite these definitions used in the economic literature, they have not been taken into account in the operational classification processes of national statistical institutes. Yet, it is crucial for classifying microenterprises by type of behavior in the market, making a division between those that follow a profit behavior and those that follow a social behavior to combat poverty, the latter known as type two social businesses, commonly grouped within the microenterprise classification, due to their operating conditions. Another way to classify type two social businesses presents some particular characteristics in (a) the type of entrepreneurship and (b) economic objectives. This defines their behavior in the markets and makes them different from conventional enterprises, called profit enterprises. For example, in the type of entrepreneurship, social businesses start in a context of crisis, in a situation of self-employment, in search of complementary income that is not offered by jobs in larger-scale enterprises. In contrast, for-profit businesses are associated with taking advantage of the opportunities offered by the dynamics of market growth to consolidate a new business [6,19]. Thus, the objective of the social business is the maximization of installed capacity, with a fixed and limited stock of material and financial resources. The profit businesses always seek to maximize profits, assuming perfect factor substitution [16,17]. With respect to cost levels, although both types of business seek to produce at the minimum level of their cost function, social enterprises seek to cover their production costs, thereby trying to increase their competitiveness and permanence in the market, while for-profit enterprises try to increase the highest possible margin between the selling price and unit costs [4]. However, to date, there is no empirically validated measure to distinguish between type two social businesses versus for-profit businesses.

#### 4. Methodology

In order to generate empirical evidence to statistically distinguish type two social businesses within the microenterprise universe, an indicator is generated that stratifies microenterprises by type of behavior.

The proposed indicator is structured based on net business profits and the income poverty line (PL). The National Council for the Evaluation of Social Development Policy (called Coneval in Mexico) defines as that monetary amount per person that equals the total value of the food and non-food basket, i.e., it is that minimum amount of money to satisfy the basic needs of food, transportation, housing, education, clothing and health [2].

The indicator is:

$$BI = P_{it}/PL_{ot} \quad (1)$$

where, BI = behavioral indicator.  $P_{it}$  = Net entrepreneurial profit of microenterprise  $i$  in period  $t$ .  $PL_{ot}$  = Poverty line in period  $t$ .

If  $BI \leq 1$ , then it is considered a type 2 social business, and if  $BI > 1$ , then it is considered a profit business.

Based on this classification, a discrete choice model in its logistic functional form (logit) is used to estimate the probability that the enterprise considered as a social business presents characteristics of entrepreneurship, maximization objective and profit level associated with this category.

The logit model was developed by Berkson in response to the probabilistic model, called the probit model. Both models are widely used in the economic literature to estimate probabilities of events from a set of conditioning characteristics. The main difference between these models is that the probit model uses the normal probability distribution, statistically also called GAUSS distribution. The logit model uses the logistic probability distribution as its basis [20].

The generalized equation of the logistic model has the functional form of the logit model, given by the equation:

$$P_i = E(Z_i|X_i) = \frac{e^{\alpha_0 + \beta_1 X_i}}{1 + e^{\alpha_0 + \beta_1 X_i}} = \frac{1}{1 + e^{-(\theta_i)}} \quad (2)$$

$$\theta = Y_i = \alpha + B_1 X_j \quad (3)$$

where  $P_i$  is the probability of the occurrence of an event  $Z$ .  $E(Z_i|X_i)$  is the expected value of event  $Z$ , given that  $X$  occurs. Thus, because  $Z$  can take values from minus infinity to plus infinity, the probability of occurrence of  $P$  ranges from 0 to 1. However,  $P$  is nonlinearly related to  $X$ , so the coefficients  $\alpha_0$  and  $\beta$  do not represent direct changes in probability. This means that once the coefficients are estimated, they must be substituted from the functional form of the model.

From the generalized Equation (2), the logit model is specified to the objective of this manuscript by substituting  $\theta$  for an equation with the analysis variables.

Thus, Equation (3) takes the following variables:

$$Y_i = \alpha + B_1 X_1 + B_2 X_2 + B_3 X_3 \quad (4)$$

$Y_i$  = Microenterprise  $i$ .  $\alpha$  = Intercept.  $X_1$  = Enterprise type variable.  $X_2$  = Objective type variable.  $X_3$  = Profit level variable.

Data from the National Institute of Statistics and Geography [21] were used to construct the variables with information from companies with up to 10 workers (see Table 1).

The dependent variable  $Y_i$  is a dichotomous variable that is constructed by stratifying the microenterprise by type of behavior (profit or social). In this regard, according to Coneval, the urban PL is \$3105 pesos per month [2] (about 154.4 USD, with exchange rate in July 2021). Thus, based on Equation (1), those microenterprises that registered a BI indicator below unity are considered social businesses, so the variable takes the value of 1. The rest of the microenterprises, considered beneficial, take the value of zero.

When the dependent variable is dichotomous, the estimation of the model cannot be performed under the Ordinary Least Squares method, since it is not possible to calculate the inverse of the variance as a weighting of the model. Therefore, the maximum likelihood method is used.

**Table 1.** Logit Model Variables.

Variable	Acronym	Measuring Method	Measure	Classification
Dependent Variable				
Behavior classification	$Y_i$	Monthly business profits	$BI \leq 1 \rightarrow 1$ $BI > 1 \rightarrow 0$	Microenterprise: social (1) profit (0)
Independent Variable				
Venture type	$X_1$	At the beginning of the business, did you invest in equipment?	No $\rightarrow$ (1) Yes $\rightarrow$ (0)	by necessity (1) by opportunity (0)
Objective type	$X_2$	During the operation of the business, have you needed financing for asset growth? And if so, have you obtained it?	No $\rightarrow$ (1) Yes $\rightarrow$ (0)	Installed Capacity Maximizer (1) Profit Maximizer (0)
Profit	$X_3$	Balance (Bal): Revenues (Rev) less production costs	$Bal \leq 0 \rightarrow$ (1) $Bal > 0 \rightarrow$ (0)	Non Profit (1) Profit (0)

The independent variables also take dichotomous values. For the variable associated with the type of enterprise, since they are generated in times of economic crisis and unemployment, microenterprises that did not have any type of initial investment in equipment and fixed assets are considered to be enterprises of necessity, which take the value of 1, while those that did have an investment take the value of zero.

The variable by objective type considered that microenterprises that present a shortage of financing to acquire new productive factors (capital, materials, etc.), with a limited stock of assets, cannot carry out perfect factor substitution. Their business behavior does not fit the assumptions of traditional theory, and therefore follow installed capacity maximization objectives [22,23]. These microenterprises take the value of 1, while the rest take the value of zero.

For the profit level variable, the differences between sales revenues and production costs of the main products of each business were collected. Thus, those microenterprises that have the same or a negative balance in this difference take the value of 1, as they are considered social microenterprises, while those that have a positive balance take the value of zero, as they are considered profit microenterprises.

The model is estimated twice. Firstly, all microenterprises with up to 10 workers are considered. Secondly, only single-person microenterprises, i.e., businesses where only the owner works, are considered. The logit model offers the probabilities that a microenterprise classified as social with the proposed indicator (BI), presents some of these characteristics of entrepreneurship by necessity, optimization of installed capacity and non-profit scope.

## 5. Results

Tables 2 and 3 show the coefficients obtained by the maximum likelihood method in both model estimations. Based on the z-test statistic, the degree of individual significance of all coefficients is statistically significant at 99%. To test the overall significance, the Chi-square test shows that both model estimates are statistically significant in the established manner. These coefficients are substituted into the logistic functional form (Equation (2)), and the probabilities of interest are obtained (see Table 4).

**Table 2.** Results of the Logit Model, microenterprises with up to 10 workers.

Variables	Coefficient	Standard Deviation	Z Statistic	p Value
Intercept	−1.67077	0.148303	−11.2659	0.00001
Non Profit	1.66881	0.167037	9.9907	0.00001
By Necessity	0.690571	0.166138	4.1566	0.00003
Installed Capacity Maximizer	0.709036	0.196789	3.6030	0.00031
Chi <sup>2</sup> Statistic	157.589 [0.0000]			

**Table 3.** Results of the Logit Model, single-person microenterprise.

Variables	Coefficient	Standard Deviation	Z Statistic	p Value
Intercept	−1.37462	0.218996	−6.2769	0.00001
Non Profit	2.0405	0.240247	8.4933	0.00001
By Necessity	0.732963	0.237734	3.0831	0.00205
Installed Capacity Maximizer	1.00109	0.287388	3.4834	0.00050
Chi <sup>2</sup> Statistic	114.258 [0.0000]			

**Table 4.** Probabilities of microenterprises in subsistence conditions.

Microenterprise	Prob. of Social Business (%) up to 10 Employees	Prob. of Social Business (%) Single-Person
With 3 characteristics (X <sub>1</sub> , X <sub>2</sub> , X <sub>3</sub> )	80	92
With 2 characteristics	43–67	80–84
Non profit	49	66
By necessity	27	34
Installed Capacity Maximizer	28	41

Table 4 shows that if a microenterprise with up to 10 workers has characteristics associated with entrepreneurship by necessity, maximization of installed capacity and non-profit income, it will have an 80% probability of being classified as a social business through the proposed indicator. When the microenterprise has two of the three characteristics, the probability will range from 43% to 67%, depending on the combination of the variables.

When studying the three characteristics separately—that is, considering that the microenterprise has only one of the three variables—it stands out that the one associated with the profit conditions shows the highest probability with 49%. This is particularly the case when a microenterprise, at some point in its productive cycle, exhibits no profit scope, but arose from a business opportunity and seeks to maximize profits. Then, it will have a 49% probability that the BI stratification tool will consider it as a type two social business. The other variables show probabilities of 27% and 28% for necessity entrepreneurship characteristics and installed capacity maximization objectives, respectively.

When an additional filter is used and only single-person microenterprises are considered, the probability that the BI stratifies as a social business with all three characteristics increases to 92%. With two characteristics, the probability varies from 80% to 84%. In these individual economic units, the probability associated with the absence of profit continues to be the highest, at 66%, while those with characteristics of entrepreneurship by necessity and maximizing installed capacity present an individual probability of 34% and 41%, respectively.

The results demonstrate the relevance of the BI indicator for grouping the proposed classification variables. Its efficiency is supported by the fact that it shows that the probability of classifying a microenterprise as a social business is low when it presents only one of the three characteristics, and considerably higher for microenterprises that maintain all three variables.

The consolidation of a business classification that recognizes social enterprises, particularly type two social business, contributes to efforts to generate efficient legal and policy frameworks that promote social development. The incorporation of poverty indicators in our study is an innovative element in business classification. There is enough evidence that points to the importance of the development of social enterprises as a valuable instrument to address poverty in societies [1,5,8,10,19]. Moderate poverty is explained, among other factors, by low wages. Extreme poverty is explained, to a large extent, by lack of employment. Both dynamisms are strongly related to the entrepreneurial behavior of the regions. It is important to have a business classification that accounts for type of market behavior.

It has been argued that in order to solve extreme poverty, very strong participation of civil society in new efforts is necessary to compensate for what the market has proven to be unable to solve, nor the government to contain. There are people suffering from



hunger and lack of education. However, if a medium and long-term sustainable strategy to overcome these difficulties is desired, it is necessary to create the sources of employment and income required by this population. There are two ways to do this: find a well-paid job in the labor market or find one's own source of income generation [4].

This is a very important challenge for the new generations, because it is necessary to understand that large enterprises are focused on the development of technology for their processes, which makes them employ fewer and fewer people. This is why there must be an alternative to develop broader business bases. It is necessary to move the paradigm of seeking employment, as this dynamism puts downward pressure on salaries. It is better to look for an institutional framework that encourages the formation of opportunities to start a social business and create people's own employment.

Social microenterprises are an efficient mechanism for escaping poverty. Social entrepreneurship, at the microenterprise level, has been the option for a large part of Mexico's population to improve their levels of well-being. It would seem that it is socially and economically strategic to consider the poor as active agents and support them in the creation of their own enterprises. On the contrary, if the poor are considered only passive beings, paternalistic policies are implemented that are not sustainable in the medium and long term [4].

Unemployment, underemployment, and poverty have been exacerbated in the last years in most global regions, particularly in developing countries. Two tendencies have contributed to this problem: the mismatch between the job markets' requirement of human capital, and the prevailing uneducated labor force. This combination leaves large segments of population out of formal and well-paid employment. People have carried social entrepreneurial activities for making a living by establishing type two social business and taking advantage of some skills learned in previous jobs or in family [24].

As larger firms, type two social business require a package of services to subsist in the market, particularly the provision of human-capital-related services. Education can be considered a public good because of its large external effects and its provision has been either totally or partially subsidized, or also provided by the market. Persons require an investment to acquire education and training for their livelihoods, most of it taking the form of opportunity cost. Poor people are not able to cover this investment and must rely on basic education, in-job training, own experience, and some skills learned in their lives. A great deal of the most general skills, knowledge, and information required to succeed in markets is simply absent in these people's assets, making their provision a basic right and component of human development [24].

Schemes should be developed in order to provide basic business development services off the market in order to get more social businesses into the market. The legal structures implications could be particularly important to developing countries, where resource constraints require policy innovation and the design of strategies to improve the efficiency of resource allocation to reach development goals through social business. It is necessary to create public policy complementing industrial policy with specific programs to increase social business.

The world of type two social business is a path of humanitarian economic development. This is the world of those who struggle as microentrepreneurs to solve their poverty problem or those who undertake sustainable businesses in the marketplace to solve social problems that everyone only talks about. These entrepreneurs are not just profit oriented.

A significant step forward in formal and legal terms is to start visualizing type two social business as a special, different and very important business sector. To this end, it is important to generate an appropriate business classification.

## 6. Conclusions

In an effort to represent the business heterogeneity that exists in markets and to classify them according to their size, it is observed that the national statistical institutes of advanced and developing countries converge in considering variables such as employed personnel,

level of sales and fixed assets. However, there is still no consensus among countries to establish equivalent definitions and intervals for each of the variables.

Business classification is mainly determined according to the size of the enterprise based on the indicator of the number of employees. However, some countries have used certifications as a complementary mechanism to differentiate companies according to particular characteristics, either in their operation or mission. For example, it is common for socially responsible companies to be identified on the basis of certifications (e.g., B-corp, ISOs, etc.). These certifications can be granted by public, private, national or international organizations. Some countries even provide tax incentives for companies with certain certifications. However, this effort has not been enough to consolidate a business classification for specific social enterprises, which is the starting point for developing official statistical data, targeted analysis and differentiated legal and formal structures.

Based on the economic literature, this paper has offered additional variables by type of enterprise, objectives and profit levels, which can validate a complementary stratification. This has made it possible to demonstrate that it is insufficient to represent business heterogeneity only by size, since evidence has been presented to affirm that an important group of microbusinesses do not respond to the general behavior assumed for businesses in economic theory. Consequently, it is proposed to re-categorize microenterprises with the indicator which we present. It accounts distinguishes the microenterprise that does not manage to generate a net profit greater than the economic amount of the Poverty line and so can be considered a social business.

Additionally, and based on a discrete choice logistic model developed, we show that with the proposed indicator, a microenterprise of up to 10 workers with entrepreneurship by necessity, maximization of installed capacity and without profit, has an 80% probability of being classified as a social business, and rises to 92% for single-person microenterprises.

This research indicates that a new official business classification is required to differentiate microenterprises not only by size as usual, but also by type of behavior, in order to distinguish social business as Yunus defines [25] from profit maximization microenterprises for the Mexican cases. The hypothesis that a new indicator that compares the profit levels of microenterprises with the poverty line, was central to reaching that conclusion.

Furthermore, the conclusion is more robust, when those outcomes are contrasted with the discrete choice model, under the logistic functional form. The probability that this indicator classifies a microenterprise with entrepreneurship by necessity, installed capacity maximization and no profit seeking as SB2, increases from microenterprises up to ten workers to microenterprises with one person. With such a new proposed classification, better policies could be promoted, not only to foster profit-seeking microentrepreneurs but also to promote personal efforts made by social entrepreneurs, to face both permanent lack of opportunities from the market economy and the permanent poverty menace surrounding them.

Regarding limitations and future research, it is important to generate more studies and empirical contrasts with respect to business classifications used in other countries, in order to measure the feasibility of using them in other regions or local contexts. The classification proposed in this research is specific to a type of social business. Although the results found allow progress in the development of new business classifications, it is not sufficient for the entire range of social enterprises observed in the market. Moreover, it is important to conduct future research to measure the feasibility of making the classification range more flexible for type two social businesses. The classification proposed in this research depends on the availability of information available from official sources and from the microenterprises themselves. It is well known that the microenterprise sector lacks a systematized process for obtaining continuous and permanent information for the internal and external analysis.

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