

# **AN EXAMINATION OF POTENTIAL FOR A DOCTORATE IN ECONOMICS AND BUSINESS IN PUEBLA, MEXICO**

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## **ABSTRACT**

*This paper examines if a market exists for a doctorate degree in business and economic in the center-south region of Mexico. This study is part of a strategic planning project. A survey was conducted to determine supply and demand for such a degree. The objective is to identify the market for development and implementation of a postgraduate program that can fulfill market requirements, students' interests, and be suitable for the poorest regions of Mexico.*

**JEL:** I21, R13, M53

**KEYWORDS:** Strategic Planning, Regional Development, Competitiveness Education

## **INTRODUCTION**

In this paper, we examine if a market exists for a doctorate degree in business and economics in the center-south region of Mexico. This region is one of the poorest in Mexico. The study is part of a strategic planning project for the implementation of a postgraduate course that meets market requirements. Allocation of resources to implement a quality graduate program depends on its ability to meet social, cultural and academic needs and its ability to contribute to the economic and sustainable development of the region where it is offered. It must also align with the objectives of the National Development Plan (PND), as well as the institutional development Plan (PID) of the Benemérita Universidad Autónoma de Puebla (BUAP). Finally, the analysis relies on strategic planning to create a work plan to identify a market that could have a doctorate program in economics and business administration. The remainder of the paper is organized as follows. The next section provides a literature review. The following section provides a discussion of the methodology used in this study. Next, we present the result of the study. The paper closes with some concluding comments and suggestions for further research.

## **LITERATURE REVIEW**

### Strategic Planning

Strategic forecasting embodies the notion of the organizations future and destiny. How will the organization deal with challenges and opportunities? How will it make long-term decisions to achieve the planned goals and what actions are needed for goal achievement? Henry Fayol's (1916), classic theory of Administration, argued planning is critical. Fayol (1916) considered forecast/planning as a first element of the

administrative process. Currently, planning is the foundation for development and consolidation of any organization. Planning develops into strategic planning, which some authors, such as Chiavenato (2011), argue is "...the deliberate and systematic decisions making process that will affect or should affect the entire company in the long-term. Strategic planning involves longer deadlines, it is broader, and it is developed at the highest hierarchical levels of the company or institutional level. It is a continuous process of strategic decision-making that does concern with future decision, but rather with the impact that today's decisions will have in the organization's future." (Chiavenato, 2011). Hernández (2014) viewed strategic planning as synonymous with strategic direction, strategic management and Global management. He argued planning is a process. It is a series of stages that are integrated by concepts such as: diagnosis (description of external and internal environment), vision-mission, objectives, strategies, budget, evaluation of results and feedback (Hernández, 2014). Porter (1992) contended that companies must carry out strategic actions to achieve competitive advantages. This can be done by gaining competencies such as cost leadership (being more efficient than their competitors) or through differentiation (making and maintain products and services in a different way. "A company can overcome its rivals only if it can make a difference that it can keep (Porter, 1992)." Only then, will they be able to overcome the competitive challenges of the market and the technological revolution of today. The fundamental of the core competencies is that they are promoted and developed at the corporate level and define the basis of the competitive strategy for the whole firm" (Hax, 2004).

### Competitiveness

According to the Mexican Institute for Competitiveness (IMCO), based on World Economic Forum (WEF), Global Competitiveness Index 2017 (IGG), Mexico holds the same level of competitiveness as 2016, where Mexico was located in position 51 of 137 countries. This ranking was based on macroeconomic indicators and a survey of entrepreneurs and executives on issues such as corruption and innovation or perceptions of the labor market. For the first time in 10 years, there were signs of economic recovery at the global level. Switzerland ranked first in worldwide competitiveness, followed by the United States and Singapore. At the regional level, Europe was the world leader with six countries (Switzerland, Holland, Germany, Sweden, the United Kingdom and Finland). In Latin America, Mexico was the fourth-best-rated country after Chile, Costa Rica, and Panama. Mexico was 131st in costs for entrepreneurs due to insecurity (safety issues), 127th in confidence in the political process, and 118th in government efficiency in resolving labor disputes. However, corruption continues to be a major obstacle for doing business in Mexico (IMCO, 2017).

The Institute for Management Development (IMD) reported that despite the reforms approved in 2013 and 2014, Mexico suffered a setback. Competitiveness due to Government efficiency and Development of infrastructure and education were instrumental in the country setback. Support for education continues to be a concern and expected budget cuts could affect education. From 38 countries assessed, Mexico showed the lowest educational performance, which opened huge gaps with the other OECD members. The OECD index for a better life places Mexico at the lowest level of well-being after South Africa. If Educational reform and other reforms are not implemented, Mexico will not be able to leave the "trap" of low competitiveness. It will not offer a better quality of life to its citizens, noted Arturo Briz, Director of the Competitiveness Centre IMD World (the financier, 2016). Success of business management can be measured by the stakeholders' point of view (customers, shareholders, suppliers, employees, society, Government, etc.), as well as the generation of economic returns and long-term business endurance. These elements are integrative entrepreneurial goals that impact businesses (Hax, 2004).

### Local Offering of Doctorate Degrees in Economics and Business Administration

At the national level, the National Council of Science and Technology reports two doctorate options in business administration, with National Register of Quality Postgraduate Studies recognition. The two doctorate programs are located in the north of the State of Puebla and in the central area of the country. The

closest to a metro area is located at Universidad de San Nicolás de Hidalgo. Their doctorate program website reports only nine students enrolled in their business administration doctorate program, five male and four female students (UNH, 2016). Universidad Autónoma de Coahuila also offers a doctorate degree in business administration and management. This program is recognized and included in the National Register of Quality Postgraduate of CONACYT (UA of C, 2016). The institution reports that it has fourteen students enrolled with scholarships in this doctorate program (CONACYT, 2016). The State of Puebla, has doctorate degree granting institutions, but they are not in business administration, economics, or management. However, some of the doctorates could be substituted for doctorate degrees in economics and business administration. In Puebla, doctorate granting programs are offered by different institutions. Table 1 presents a list of the most important programs recognized by the National Council of Science and Technology (CONACYT), through the National Program of Quality Postgraduate (PNPC), (CONACYT, 2016).

Table 1: List of Doctorate Programs Offered in Puebla by Institutions Recognized by CONACYT

Program	Institution Offering the Degree	PNPC Recognition	Number of Students
Doctorate in development political economics	BUAP	Yes	24 (CONACYT, 2016)
Doctorate in strategic planning and technology management	UPAEP	Yes	112 (CONACYT, 2016)
Doctorate in public administration	IAP -PUEBLA	No	No available (IPA, 2016)
Doctorate in international business and management	UPAEP	No	Not available (UPAEP, 2016)
Doctorate in economics and sector strategic development	UPAEP	No, I had until 2013	Not available (UPAEP, 2016)
Doctorate in organizational management	UPAEP	No	Not available (UPAEP, 2016)
Doctorate in management and finance	UPAEP	No	Not available (UPAEP, 2016)
Doctorate in management and marketing	UPAEP	No	Not available (UPAEP, 2016)
Doctorate in business administration	IBERO PUEBLA	No	Not available (Ibero Puebla, 2016)
Doctorate management	UVP	No	Not available (UVP, 2016)
Doctorate in finance	UDLAP	No	Not available (UDLAP)
Doctorate in organizational studies	UAM	Yes	Not available (UAM, 2017)
Comprehensive postgraduate course administration	UAM	No	Not available (UAM, 2017)

Table 1 shows a list of doctorate-granting institution in the State of Puebla. Data was collected from each institution's official website. Data included type, doctorate degree concentration, granting institution, if the program is recognized by the PNPC and number of students enrolled.

## DATE AND METHODOLOGY

To estimate the demand of a doctorate degree in economics and business administration, a survey was conducted, to graduates, as well as to students of the last period of the mastery that imparts the FCP of the BUAP, in a non-experimental survey, in the same faculty. This research project is divided in two parts. Part one analyzes the results of a survey applied to a sample of 30 students. Part two analyzes the same survey apply to 325 students. This paper presents the result of part one. Using a non-probabilistic sampling technique, a sample of 325 students were selected from the Master of Business Administration (MBA) program at Benemérita Universidad Autónoma de Puebla (BUAP) for the study. From this sample, a group of 30 students were selected to run a pilot test to verify questionnaire reliability. A questionnaire was applied to the students to estimate future demand for a doctorate in Economics and Business Administration.

### Population and Sample

We consider the total enrollment in the Master program at Benemérita Universidad Autónoma de Puebla (BUAP). The sample size was estimated using equation 1.

$$n = \frac{(z \times s)^2}{E} \tag{1}$$

Where:

E = Margen of Error

Z = confidence interval

s = Deviation of the sample (from the pilot sample).

Normal distribution: Z = 1.96

Using equation 1, a sample size of 325 students was calculated. We consider master’s students close to graduation and student already graduated. For the first analysis, many students were unwilling to participate. We were unable to track many of the graduated students. Therefore, part one of this study is conducted with approximately 10 percent of the estimated survey sample (30 students). The questionnaire was administered to three groups at the Faculty of Public Accountancy. Two groups were from the Master of Business Administration program and one from the Master in Taxation program. All groups were senior level or already graduated. We excluded all freshman, sophomore and junior students. The surveys were taken between November 18 and 23, 2017, in the classrooms and the postgraduate building. The students completed the survey anonymously. A note regarding licenciatura degree. In many countries a licenciatura degree is an intermediate degree between a bachelor’s degree and a master’s degree. In other countries a licenciatura degree is considered an undergraduate degree. In still other countries it is considered a postgraduate degree. Therefore, we will use the term licenciatura with no translation to English as it applies to the Mexico Educational system.

## RESULTS AND DISCUSSION

The results show that 60% of the students who were about to finish the master’s degree were women. Thus, females represent a large portion of the responders. Respondents were master’s students close to graduating or already graduated. When analyzing age, the dataset presented wide spread data with a few outliers. The minimum age was 26 years of age and the maximum 55 years of age. The average age was 34.6 years. We infer that future doctorate students will be younger than current generations (see Figure 1).

Figure 1: Average Age of Students Who Are Close to Graduating from a Master's Degree

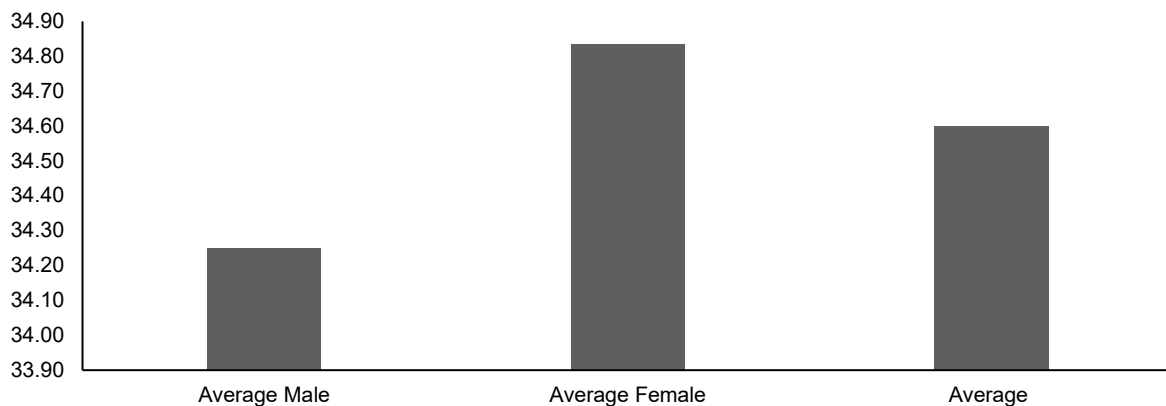


Figure 1 presents the average age for our sample data. The sample was comprised of master’s students who were close to graduation. The average age was 34.6 years, with 26 years as the youngest and the oldest 55 years.

Master’s students at the Faculty of Public Accountancy work while going to school. It is important, because in Mexico, rural youth have less expectation than those of the urban environment, and it is especially evident around graduate studies (De Garay y Miller, 2014). The 90 percent of the students worked and only 10%

of them do not work. In most instances, the costs of pursuing a master’s degree (tuition, and related materials) was covered by the students themselves, so it is not surprising that 90 percent of master’s students have to work. This result was consistent with the Faculty of Public Accountancy student profile. Of those students who worked, we analyzed the type employer they work for. We found that 60 percent of the students worked for companies and educational institutions, follow by government and offices. Figure 2 shows the results.

Figure 2: Place Where Master’s Students Work

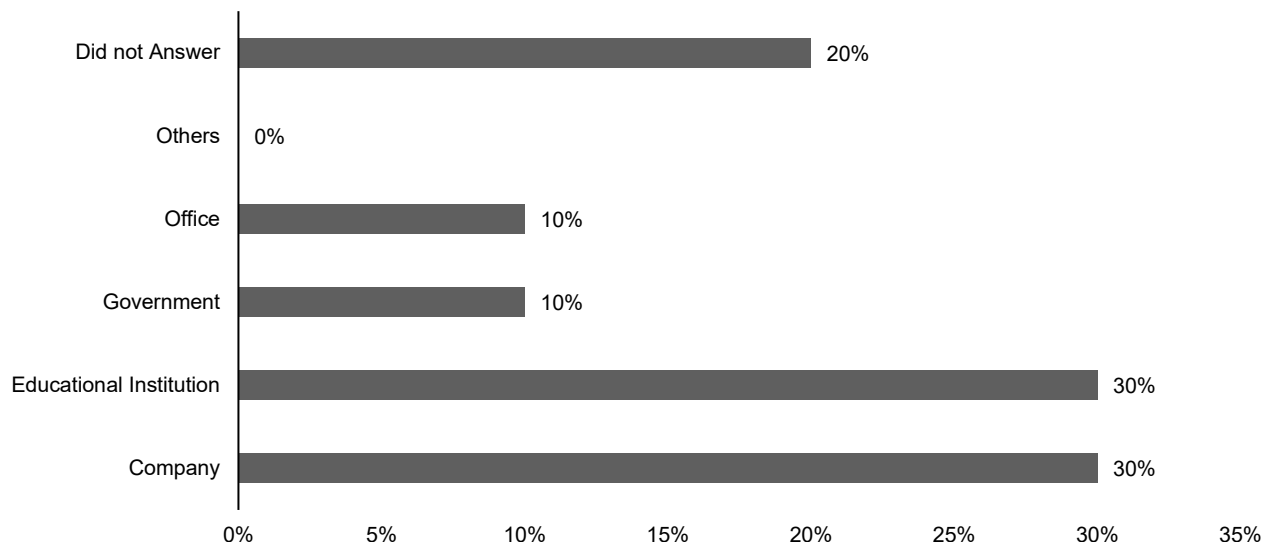


Figure 2, shows that most master’s students worked in companies and in educational institutions and a minority worked in government and offices.

We analyzed the educational background of licenciatura students taking the Master’s degree. Results show that 80 percent of the students had an administration economics degree prior to starting their master’s degree (See Figure 3).

Figure 3: Licenciatura Student’s Educational Background Prior to Starting a Licenciatura Degree Program

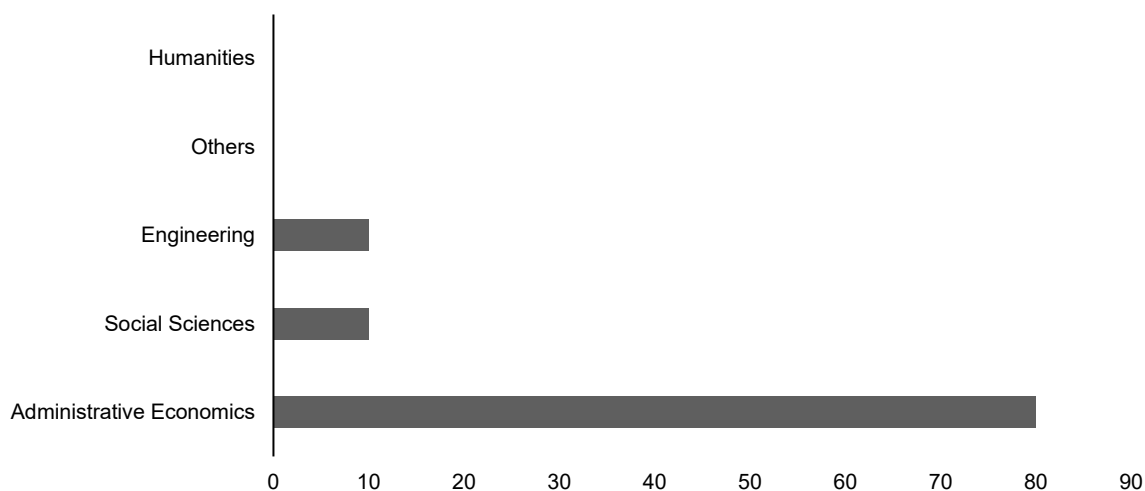


Figure 3 shows that the majority of students pursuing a licenciatura’s degree had a profile of administrative economics.

Because, our sample was selected from the Faculty of Public Accountancy at Benemérita Universidad Autónoma de Puebla, 100% of the responses showed an administration and economics as their future educational background. The 100% of students expect to be graduated from master's degree in administrative economics. Because, our sample was selected from the Faculty of Public Accountancy at Benemérita Universidad Autónoma de Puebla, 100% of the responses stated as a traditional classroom style Master's program. For future research, we, then, elected to aggregate online and videoconference to a new distance education degree type. For now, the 100% of master's students do so in person in a traditional classroom style. When we analyzed the program type, we noticed that high percentage of the students did not identify a program profile. Therefore, the results differ even though they are administrative economics master's program at Faculty of Public Accountancy at Benemérita Universidad Autónoma de Puebla. In this regard, it is important to work with students so that they have a better understanding of their academic profile upon graduation. Figure 8 shows the results.

Figure 4: Program Academic Profile

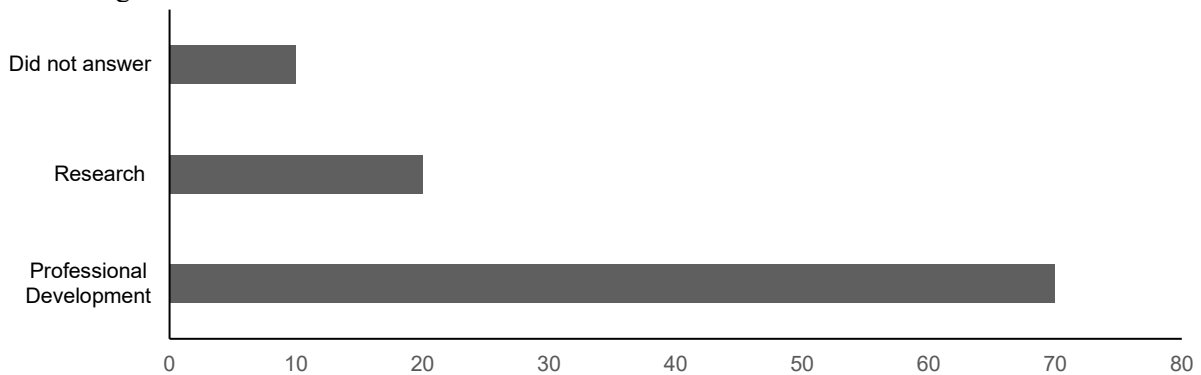


Figure 4 shows that 70% of the students considered the type of program to be professional while 20% perceived the program as research oriented.

To gather more descriptive data, we added questions that indirectly allows us to gather data relevant to the study. We added “Have you ever written a research paper and/or research Report?” This question was used during the full survey period. To offer a doctorate program that appeals to a large base of master's students or master's graduates, we need to determine their primary interest in pursuing a doctorate degree. Our survey shows that potential PhD students were interested primarily in professional growth and were interest in research. It is understandable because most of them work and aspire to a better position within the organization for which they work and/or better employment opportunities. Results show 50 percent of the students were interest in research, and in seeking alternatives to solve problems. The 50 percent of students were interested in their professional growth. We included questions assessing funding. Specifically, we wanted to determine the importance of having access to scholarships. Some 80 percent of the students identified receiving an CONACYT scholarship as essential to pursuing a doctorate degree. Therefore, for any future economics and business education doctorate granting institution, it is critical to secure funding from CONACYT for scholarships. The that 80% of students were interested in studying a doctorate program with CONACYT scholarship and only 20% were not interested.

Then, we wanted to evaluate student's willingness to embark in a full-time doctorate program with CONACYT scholarships. The results to the question: Are you willing to be a full-time doctorate student? The results demonstrate, that with a scholarship, 70 percent of students are willing to become full-time students. Master's Students Willingness to Become Full-Time Doctorate Students with CONACYT Scholarship the 70% of students were willing to be a full-time PhD student The fact that students were willing to devote to a full-time program was encouraging. However, it is important to note that a few students expressed a desire to seek a doctorate degree with no scholarship from CONACYT as long as they could continue to work. Thus, there are future opportunities from such student types for a doctorate

program. The next question analyzes what students want to develop during a doctorate program. Results show 50 percent of students were interest in developing projects with a social impact, follow by generating economic development opportunities at the local level and greater professional development opportunities. However, they did not consider new, better-paid job opportunities or higher incomes a result of a doctorate degree. By contrast, the search for a program that allows for professional growth. Perhaps, they don't equate professional growth with better-paid jobs. Figure 5 shows the perceived impact of the doctorate program. For the majority of the students, this impact was that they could generate research projects with social impact. Others believe that they would have greater opportunities for job growth, as well as to generate more opportunities for economic development at the local level.

Figure 5: Perceived Impact of Doctorate Program on Students

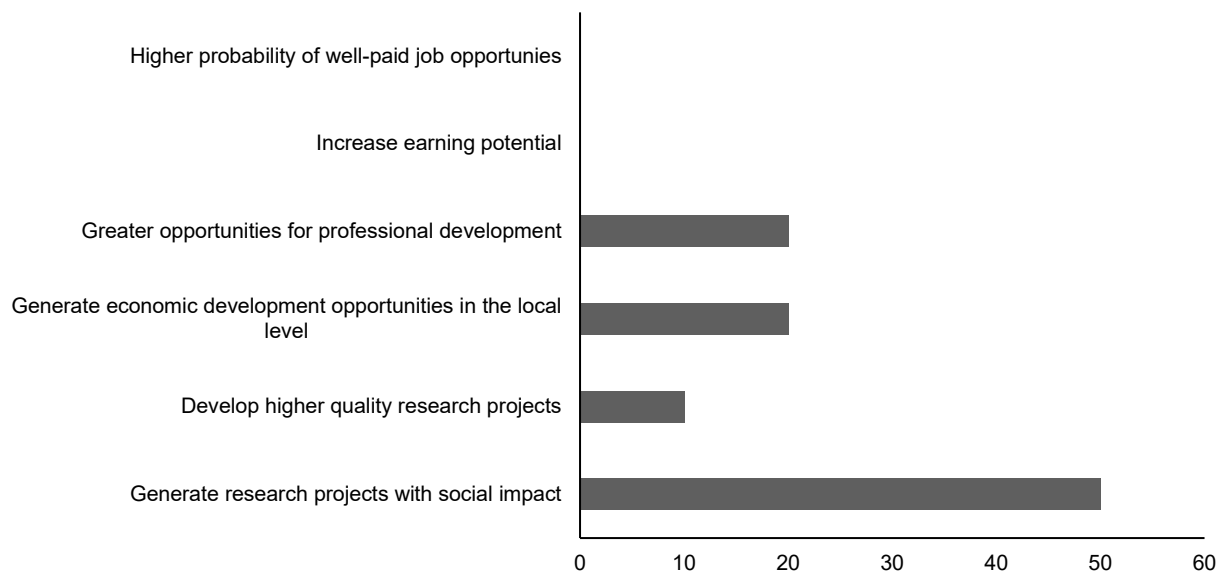


Figure 5 shows that 50% of students believed the impact of the doctorate program would be to generate research projects with social impact, 20% thought that they would have greater opportunity for job growth, as well as greater opportunities to generate economic development at the local level.

To determine the impact of a doctorate program in a place such the central part of the country, students were asked where they were from. One would hope that students from central part of the country or rural area will have a motivation to use a doctorate degree to develop and implement projects with economics and social impact in these areas. Only 20% of the respondents were from provinces or rural areas. It is important to note that 30 percent of respondents have relatives in the province. Therefore, a relative small percentage have strong interest in rural areas or provinces. However, 70% of respondents were willing to develop projects in rural and province areas with an economics and social impact. Finally, from the survey, we extracted students additional comments, among which we found that students want (1) trained professors who research and teach in their area of expertise; (2) be able to apply what they have learned to real-life issues, (3) greater academic support to guide quality products and projects, (4) continuous information and continuous work, (5) doctorate student work experience, so that they can contribute to program, (6) to start a doctorate degree in economics or taxation if they can get scholarships, (7) a doctorate program with no CONACYT scholarship that is not full-time thereby allowing them to continue working.

### CONCLUDING COMMENTS

This paper identifies the market, for a competitive postgraduate program. A survey instrument was applied to potential users of doctoral services in administrative sciences in the area. We provide an in-depth

analysis of market needs. We find that focus areas of knowledge and the strengths of the doctorate program are necessary to meet the needs of society. In addition, students need an education based on values. Postgraduate education can help them develop, as much as possible, the economy of regions that suffer from disconnection between what educational programs offer and society needs. Many graduate students do not return to their community. Thus, the goal is to develop a doctorate program with students from southern Mexico regions, who may have the desire and family roots to return to their communities. One hopes that they return to generate projects that bring economic development and growth to their communities and to create projects that take advantage of the enormous cultural and natural riches. By doing so, they can assist communities in moving away from poverty.

In addition, it is necessary to bring research projects closer to reality, to meet the needs of communities and convince the region to participate in the projects. The research projects need support from governments and organizations willing to assist in economic and regional development. Many current programs are focused on forming research specialists only. Others concentrate only on a very specific area of business. As a result, the number of doctorate graduates increases with no visible regional development results. It is important to clearly define lines of research and to focus on research projects that deal with real needs.

Research should generate greater economic development, particularly in the southern region of the country, where marginalization, unemployment and poverty are higher. As the results demonstrate, students want to work on projects that have a direct economic and social impact. Institutions should consider the students' desire to help communities. The goal is to encourage graduates to reconnect with their communities, to train leaders who can work within community and to use the resources available to generate wealth.

Finally, with advances in technology and communication, institutions may consider a mixed or hybrid program that includes distance and classroom style education for a doctoral program. However, they must be carefully developed to assure consistency within the programs and to avoid discrepancies that often occur in distance education. The results obtained identify the local market for postgraduate courses in administration. Future research might focus on international competition in the market.

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## **BIOGRAPHY**

Rufina Georgina Hernández Contreras has published articles in double-blind international journal. She has been the recipient of research award by the Institute of Business and Finance Research and the APCAM. She is ANFECA academic certified.

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