The Views of University Professors of East Timor about Entrepreneurship
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Abstract:
Entrepreneurship has been recognized as a source of sustaining basis in fostering innovation, creating opportunities, local sustainability and socio-economic development of a country, since is a transforming process from an innovative idea to an enterprise. Entrepreneurship has been argued as the most effective economic power in the global economics and social history. The Strategic Plan for Development of East Timor from 2011 to 2030 reports that since 2007 only 9% of the population had economic conditions to leave the so-called “poverty line” and that 41% of East Timorese are still classified as poor. Given this diagnosis, the government of East Timor defined the private investment in Small and Medium Enterprises (SMEs) as one of the four pillars of the economic framework by 2020. To ensure the growth of the private sector in rural and urban areas, government established a development program with several initiatives such as legislative changes, creation of financial support, and faster process enterprise creation. Being private sector a social priority, and given the limitations of existing employment in East Timor, it is necessary to recognize the individual attitude of entrepreneurship and promote this new dynamic of job creation. Authors believe that universities, especially the state university, the East Timor National University (National University of Timor Lorosa’e) should assume a leadership role in promoting entrepreneurship among its students. For East Timor, it is critical to highlight the mission of universities and professors in their role of education and preparation of young people, providing them with an entrepreneurial attitude that allows them to succeed in creating their own employment. This is even more important because there is no formal teaching entrepreneurship at academic level in East Timor. The paper presents results from an ongoing research that aims to contribute to the discussion of the theme of entrepreneurship in East Timor. The survey EmpreendeTIMOR: UNIVPROF intends to study the perception that East Timor academics have in relation to entrepreneurship. Based on a sample of 123 Timorese university professors, from five Timorese universities, the survey analyzes how professors perceive entrepreneurs and entrepreneurship, what is their risk predisposition, how they perceive the skills and competences of their students, and how they perceive the role of the University and its professors in promoting entrepreneurship. Results suggest a good image of entrepreneurship and entrepreneurs but require further analysis since professors recorded contradictory results in two negative statements. Professors present a low risk predisposition. In relation to their students’ skills and capacities, professors reveal a high confidence in the abilities and skills of their students to be successful in their own business and in their technical or financial preparation. Regarding the role of universities and its professors in promoting entrepreneurship, the professors expressively recognize its importance and relevance, and agree with a more proactive role in promoting entrepreneurship.

Keywords: Entrepreneurship; University professors; Attitudes; Survey; East Timor

1. Introduction
The Restoration of Independence of East Timor took place twelve years ago and the country’s economic development has been very slow, concentrated in urban areas and not reaching rural areas. Traditionally, East Timor is an economy based on subsistence agriculture, with a scattered and living near the poverty line rural population. Aware of the situation, and based on the Strategic Development Plan 2011-2030, the Timorese government plans a major investment in rural development, agriculture, petroleum, tourism and private sector (RTDL, 2010).

Currently, entrepreneurship emerges as an important point of strategic and political agenda of many countries, with the initiative of self-employment to show a positive effect on the development of their economies. In addition to measures defined by the Timorese government, the Timorese private sector can be stimulated by encouraging the definition of support entrepreneurship programs.
This research aims to contribute to the theme of entrepreneurship by the inclusion of education as a key player in promoting it. It is essential to highlight the role of schools, including universities, in their role of educating and preparing young people by providing them with an entrepreneurial attitude that allows them to succeed in creating their own employment. As there is no formal academic teaching of entrepreneurship in East Timor, university professors can be at the forefront to encourage their students to seek solutions for their professional future. How Timorese professors perceive entrepreneurship? Are they prepared to take on a more active role?

This paper is organized into five sections, besides the introduction. Section 2 examines the importance of education in promoting entrepreneurship. Section 3 gives a brief review of the Timorese economic development. Section 4 presents the results of the study designed to understand the perception of Timorese university professors about entrepreneurship. Finally, Section 5 presents the main conclusions.

2. The importance of education for the promotion of entrepreneurship

Entrepreneurship is the creation of a new business, such as self-employment or the development of new opportunities in existing businesses or organizations. By contributing to the creation of a dynamic culture, entrepreneurship plays a central role in public opinion that is translated into a growing political concern over the issue and with the renewed media interest (Amoros and Bosma, 2014). Entrepreneurship is the key factor to promote economic and social development of a country. Therefore, members of the Organization for Economic Cooperation and Development (OECD) give priority in its policy entrepreneurship as an alternative to solve the economic crisis that countries go through (OECD, 2009).

Moreover, policy makers believe that higher levels of entrepreneurship can be achieved through education and especially through entrepreneurship education. Authors such as Curteis (1997), Dolabela (2002) and Sarkar (2010) reinforce the idea that the growth of the entrepreneurial capacity of a country depends on the education and cultural knowledge of entrepreneurship on the part of all citizens. Entrepreneurship can thus develop as a cultural phenomenon linked to the development of education. Other authors, such as Rajiman (2001) and Askun and Yildirim (2011) argue that education provides the general skills, training and knowledge that facilitate access to the business world. Education enables individuals to assess the extent of the labor market, the type of goods or services that are sought after by clients and even organize the business. For Carayannis et al. (2003) there is no doubt that entrepreneurship education seeks to build knowledge and skills, and also increase the likelihood of business success. Souitaris, Zerbinati and Al-Lahan (2007) and von Graevenitz, Harhoff and Weber (2010) add that entrepreneurship education increases the intention of starting a new business.

Education is fundamental to the entry of young people and citizens in the labor market and the successful integration and participation in society. However, many young people leave the education system without having acquired the skills needed for a smooth transition to employment (CEC, 2007). To reduce this phenomenon, the European Commission proposed a new Open Method of Coordination (OMC) in the field of education centered in the following long-term strategic problems: Lifelong Learning and Mobility, Quality and Citizenship, Innovation and Creativity as well as a new approach to suit the needs of the labor market and skills in the XXI century (CEC, 2009).

The entrepreneurship education is a key to increase the entrepreneurial spirit in individuals and make them aware of the fact that business failure is the starting point for a new beginning (CEC, 2007). For knowledge in entrepreneurship, education systems should ensure an effective and relevant education in a lifecycle perspective, stimulating the individual potential for creativity and autonomy, while avoiding mismatches in relation to the labor market. The implementation of entrepreneurship education in primary, secondary and higher education should provide a better basis for the acquisition of skills and capabilities to be able to later develop autonomy and entrepreneurship. A formal, thorough and good quality education will open immediately the path to specialized training that will make this more effective spirit (OJEU, 2006; CEC, 2008).

Entrepreneurship is an essential skill, as it helps young people to be more creative and self-confident in whatever they undertake and to act in a socially responsible manner (CEC, 2006). Promoting entrepreneurship in any country is essential in order to support the creation of micro and / or small and medium-sized innovative companies, enabling economic and social renewal (OECD, 2009). In this sense, it is essential to promote the role of schools, including universities, in its role to educate and prepare young people for the
future. Giving them an entrepreneurial attitude enables them to use tools for success upon its entry in the labor market (Sarkar, 2010). It is also important that the educator acts as being sensitive to the business world in order to help promote measures to support entrepreneurship.

The development of entrepreneurial mindsets requires the participation of teachers among all levels of study. This implies changes in school culture and in the way professors approach their role. They need to be equipped with the right skills, knowledge and attitudes to facilitate the professional development and entrepreneurial behavior of their students (European Commission, 2011).

3. East Timor: some insights
Economic growth is the ideal backdrop where the private sector can thrive and consolidate its presence. However, economic growth can only exist in a combination of several factors, including political and social. Societies with democratic governments, social institutions, fair, high educational, housing and health level, combined with low crime rates, are more stable and productive, creating better conditions for economic development.

In any country around the world, the existence of private sector is crucial for economic growth and prosperity of its people. So the private sector plays an important role in creating jobs and wealth, offering goods and services, and contributes up to solving social problems, increasing government revenues, and a central place in training and market development.

Despite a recent past filled with conflict, in recent years, East Timor reached sufficiently high levels of political and social stability to be able to take advantage of the exploitation of natural resources and initiate rapid economic and social development. Recognizing that the future sustainability of the East Timor economy depends on building a strong private sector, the East Timorese Government has been giving priority to building a business and investment environment that supports the startup and growth of enterprises (RDTL, 2010).

Through its Strategic Development Program (PED) from 2011 to 2030, the East Timor Government considers the private sector as a development partner and has sought to encourage its growth through "Referendum Package". In addition to the strategic partnerships between the private sector and Government in urban and rural areas for the construction of small and medium sized infrastructure (RDTL, 2010), it is intended to ensure the growth of the private sector and the standardization of requirements and procedures for business registration so, that it is easier and faster to create a business in East Timor (RDTL, 2012). Still to empower the private sector, the Office of Business Development (IADE) established several Centers for Business Development with the mission of giving training in the identification, creation, improvement and expansion of businesses. The private sector is also supported by the Chamber of Commerce and Industry of East Timor, which provide advice to companies on all areas of existing business and provide training to improve the skills of human resources in the private sector (RDTL, 2010).

The economic development of East Timor is dependent on the creation of employment and income for the Timorese people. The existence of a diverse private sector and the establishment of new businesses and industries are essential to the creation of jobs for the Timorese people and to allow transition to a non-oil dependent economy.

Underdeveloped or developing countries need a sizeable population of entrepreneurs willing to take risks, deploy new business, adopt new technologies and compete, create jobs and foster growth of their economies. In this particular context, it is important to note that education is the best tool to develop knowledge about entrepreneurship of all citizens. Are Timorese professors available to help in the promotion of an entrepreneurial culture?

4. Data collection and analysis
This paper presents the preliminary results from a survey named *EmpreendeTIMOR: UNIVPROF*. The survey intends to study the perception that East Timor academics have in relation to entrepreneurship. Taking this as a convenience sample, university professors from various academic institutions of East Timor were invited to collaborate in the study. It is important to note that none of the universities in the study have entrepreneurship courses. The sample has a total of 123 respondents. The professors’ age ranges from 23 to 53 years, with a mean of 35.77 years and a standard deviation of 7.954 years. The gender distribution has male
domain, with 82.1% males and 17.9% females. In addition to gender and age, respondents also indicated their university’s affiliation and disciplines they teach (open question). Subsequently, based on the analysis of the disciplines listed, each respondent was classified in one of five teaching areas: 1) Engineering; 2) Economics and management; 3) Sciences (mathematics, statistics, physics and chemistry); 4) Education; 5) Other.

The summary of respondents’ background is presented in Table 1. The majority of respondents teach at the National University of East Timor (45.5%) or Dili Institute of Technology (24.4%). Regarding the areas of education, it notes that the respondents are mainly from the area of engineering (30.9%), economics and management (25.2%) or sciences (22.0%).

Table 1: Respondents affiliation and teaching area (n=123)

<table>
<thead>
<tr>
<th>University</th>
<th>Percentage of Respondents</th>
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<tbody>
<tr>
<td>National University of East Timor (Universidade Nacional de Timor Lorosa’e)</td>
<td>UNTL 45.5%</td>
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<tr>
<td>Dili Institute of Technology (Instituto de Tecnologia de Dili);</td>
<td>DIT 24.4%</td>
</tr>
<tr>
<td>Eastern University of East Timor (Universidade Oriental de Timor Lorosa’e)</td>
<td>UNITAL 12.2%</td>
</tr>
<tr>
<td>University of Dili (Universidade de Dili);</td>
<td>UNDIL 11.4%</td>
</tr>
<tr>
<td>Institute of Religious Sciences (Instituto de Ciências Religiosas);</td>
<td>ICR 6.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching area</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>30.9%</td>
</tr>
<tr>
<td>Economics and management</td>
<td>25.2%</td>
</tr>
<tr>
<td>Sciences (mathematics, statistics, physics and chemistry)</td>
<td>22.0%</td>
</tr>
<tr>
<td>Education</td>
<td>13.8%</td>
</tr>
<tr>
<td>Other</td>
<td>8.1%</td>
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</table>

The questionnaire began by assessing the perceived image of entrepreneur with four statements adapted from Carayannis et al. (2003) (three statements) and Kruckertz and Wagner (2010) (one statement):

1. In business, it is preferable to someone having the initiative to create their own employment (be an entrepreneur) than being an employee in a large company or state company;
2. The initiative to create their own employment (entrepreneurship) is basically an exit and resource for people who have failed;
3. The success of someone who creates their own job (an entrepreneur) is strongly determined by “luck”;
4. The training is more important than personality as a success factor in the initiative to create their own employment (entrepreneurship).

Each respondent was asked to indicate their level of agreement with the statements presented (Likert scale with 5 levels ranging from 1 – “I strongly agree” to 5 – “strongly disagree”. The analysis of responses is summarized in Table 2.

From the analysis of responses and in particular the positive responses (i.e., sum of responses 4-“I agree somehow” and 5 – “I totally agree”), it appears that a large majority of respondents agree that it is preferable someone take the initiative to create self-employment (statement 1, 88.6% of positive responses), but simultaneously also agree that this is an exit or resource for people who failed (statement 2, 78.0%). This result seems a little inconsistent and raises some questions: Are the professors protrude in this statement and believe that in their particular circumstances, have their own job is an exit to people who have failed? Or is it just a misinterpretation? It may be interesting to explore this in the future.

In turn, the analysis of the two statements relating to the success, there is a lower level of agreement with the effect of luck (claim 3, 56.1%) and a significant agreement with the decisive effect of training (claim 4, 78.9%). Thus, it is possible to notice high recognition training as a determinant of success.

In addition to the perceived image of the entrepreneur, the initial research question included two statements regarding perceived image pf entrepreneurship adapted from Carayannis et al. (2003) (Likert scale with five levels).

1. It is more beneficial to society have large companies than many small businesses;
2. Competition is undesirable because it destroys the economy.
The results are summarized in Table 3. On the one hand, the majority of respondents agrees with a perspective of larger companies (statement 1) and on the other side disagrees on the existence of competition (statement 2). It is interesting to note that, from the perspective of entrepreneurship, both statements are negative, which would lead to answers with a more discordant nature. But this does not apply in the particular case of Timorese university professors. Does the agreement with the statement 1 (large companies) signals a desire for stability, job security? It may be interesting in the future to explore this discrepancy.

### Table 2: Perceived image of entrepreneur

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage of Positive Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In business, it is preferable to someone having the initiative to create their own employment (be an entrepreneur) than being an employee in a large company or state company;</td>
<td>88.6%</td>
</tr>
<tr>
<td>2. The initiative to create their own employment (entrepreneurship) is basically an exit and resource for people who have failed;</td>
<td>78.0%</td>
</tr>
<tr>
<td>3. The success of someone who creates their own job (an entrepreneur) is strongly determined by “luck”;</td>
<td>56.1%</td>
</tr>
<tr>
<td>4. Training is more important than personality as a success factor in the initiative to create their own employment (entrepreneurship).</td>
<td>78.9%</td>
</tr>
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### Table 3: Perceived image of entrepreneurship

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage of Positive Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is more beneficial to society have large companies than many small businesses</td>
<td>73.2%</td>
</tr>
<tr>
<td>2. Competition is undesirable because it destroys the economy</td>
<td>36.6%</td>
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In the survey there was also a question to analyze the professors’ risk predisposition. Respondents indicated their level of agreement with two statements from Raijman (2001) using a Likert scale, ranging from 1 (I totally disagree) to 5 (I totally agree):

1. Start a business of your own is risky because it may lose all;
2. It is true that you are the boss himself, but manage your own business involves hard work and responsibility and just brings big headaches.

The responses resulted in percentages of positive responses higher than 50%. Since the statements presented are negative, these results suggest a low predisposition to risk by Timorese university professors. Interestingly, the neutral option (do not agree, nor disagree) presents percentages between 10.6% and 13.0%. The Table 4 summarizes the responses.
Table 4: Risk predisposition

<table>
<thead>
<tr>
<th>Statement</th>
<th>Do not Know/Do not answer</th>
<th>I totally disagree</th>
<th>I disagree somewhat</th>
<th>Do not agree, or disagree</th>
<th>I agree somewhat</th>
<th>I totally agree</th>
<th>% Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Start a business of your own is risky because it may lose all</td>
<td>0.0%</td>
<td>13.8%</td>
<td>22.0%</td>
<td>10.6%</td>
<td>35.0%</td>
<td>18.7%</td>
<td>53.7%</td>
</tr>
<tr>
<td>2. It is true that you are the boss himself, but manage your own business involves hard work and responsibility and just brings big headaches</td>
<td>0.0%</td>
<td>11.4%</td>
<td>18.7%</td>
<td>13.0%</td>
<td>34.1%</td>
<td>22.8%</td>
<td>56.9%</td>
</tr>
</tbody>
</table>

The survey also analyzed the perceptions of professors regarding their student skills and capabilities. Respondents indicated their level of agreement with four statements from Oosterbeek et al. (2010) using a Likert scale, ranging from 1 (I totally agree) to 5 (I totally agree):

1. I am very confident about the technical skills of my students;
2. The technical knowledge of my students is very good;
3. If any of my students decides to participate in creating their own business, I am confident that will succeed;
4. The financial knowledge of my students is very good.

Figure 1 summarizes the responses obtained. The analysis of the positive responses, shows values varying between 61.8% (statement 4) and 74.8% (statement 3). The results suggest good levels of confidence in the abilities and skills of their students to be successful in their own business and in their technical or financial preparation.

The survey also analyzed the perceived role of the University and its professors in promoting entrepreneurship. Each respondent was asked to indicate their level of agreement with six statements (Likert scale with five levels). The six statements were developed specifically for this survey:
1. University students should be encouraged to be creative and different;
2. University students must understand that the creation of an own business is a viable alternative;
3. University professors should communicate the advantages and disadvantages of creating a self-employment;
4. The University should create incentive programs to the initiative of self-employment (entrepreneurship) of their students and / or professors;
5. University students should have the opportunity to obtain a basic education at University about how to create their own employment (entrepreneurship);
6. Professors should use their knowledge to teach their students the value of the initiative to create their own employment (entrepreneurship);

The answers are presented in Figure 2.
A significant majority of respondents agree with all statements, with percentages of positive responses to vary between 80.5% (statement 4) and 95.1% (statement 5). Interesting to note that:

- The statement with the highest percentage of responses "I totally agree" is the statement 1, with 69.1%;
- The statement 2 presents a high percentage of positive responses (81.3%) and at the same time the highest percentage of negative responses (8.1% of total answers 1-"I totally disagree" or 2 – "I disagree somewhat";
- The statements with the highest percentage of neutral responses (3-"Do not agree, or disagree") are the statements 2 and 4 (both with 9.8%).

Given the results, one may conclude that the Timorese academics agree with a more active role of universities in promoting entrepreneurship. Professors also have the awareness of the need for professors themselves have a more active role in promoting self-employment among their students.

5. Conclusions

Entrepreneurship is a growing culture in every way. For an entrepreneur to exert its activity, it is necessary to take risks, identify opportunities, seek knowledge, make decisions, show leadership and planning, and above all, entrepreneurial instinct. The entrepreneurial capacity of a country depends on the education and cultural knowledge of entrepreneurship on the part of all citizens. Entrepreneurship develops as a cultural phenomenon linked to the development of education, able to promote the creation of micro and small companies to develop urban and rural areas of a country (Curteis, 1997; Sarkar, 2010).

In East Timor, the promotion of entrepreneurship should be seen as a key opportunity to increase the number of individuals with initiative to create new jobs. The country needs to train entrepreneurs who take responsibility for job creation and contribute to the economic development of the country. Since entrepreneurship has no formal teaching at Timorese universities, it is recognized as pertinent the viewpoint of Timorese professors about entrepreneurship. The research aims to explore the potential for collaboration of professors to foster entrepreneurial behavior of their university students and thereby contribute to further discussion on the topic of entrepreneurship in East Timor.

The survey resulted in 123 valid responses, mainly of male respondents (82.1%), professors at National University of Timor Lorosa’e (45.5%), with an average age of 35.77 years. The paper analyze the perceived image of entrepreneurs and entrepreneurship, risk predisposition of professors, perceived skills of their students, and the perceived role of the University and its professors in promoting entrepreneurship.

In terms of perceived image, the Timorese professors demonstrate a good image of entrepreneurs and entrepreneurship. However, two situations are identified with seemingly contradictory results that arise from a high agreement on two negative statements: “the initiative to create their own employment (entrepreneurship) is basically an exit and resource for people who have failed” (78.0% of positive responses, image of the entrepreneur); “It is more beneficial to society have large companies than many small businesses” (73.2% of positive responses, image of entrepreneurship). Both situations suggest the need for future research to clarify why this finding. The analysis of risk predisposition of Timorese university professors indicates low values. It may result from the fact they already have a stable job. In terms of assessing the skills of their students, professors perceive them as high. Professors demonstrate good levels of agreement with the technical and financial expertise as well as the potential for entrepreneurial success of their students.

Regarding the role of the university and its professors in promoting entrepreneurship, the majority of professors agree with a more active role of the university and themselves in promoting entrepreneurship among its students.

The results indicate the existence of a good receptivity of university professors on the issue of entrepreneurship in East Timor. As entrepreneurship is a new social priority in East Timor and the Government intends to increase the relevance of the private sector, it is believed that the Timorese universities should contribute to its dissemination. For East Timor, it is essential to highlight the role of universities in its role of educating and preparing young people for future working life, providing them with an entrepreneurial attitude that allows them to succeed in creating their own employment. It is recommended in particular that the public university, i.e., the National University of East Timor, assume a leadership role in promoting entrepreneurship.
among its students. The inclusion of disciplines on this subject in the curricula of the courses should be the first step.

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