

ENTREPRENEURIAL ACTIVITY IN LATIN AMERICA AND THE CARIBBEAN REGION

Abstract

This paper analyzes using the APS results the entrepreneurial activity of the Latin American and Caribbean's countries that participated in the GEM research in 2018. The Entrepreneurial Pipeline Model compares the main entrepreneurial stage among the different countries identifying the main leaks that the system has. The NES results compare the Entrepreneurial Framework conditions of the countries. The study derives some general conclusions and recommendations to improve the entrepreneurial ecosystem.

Keywords : GEM, Latin American , Caribbean , Entrepreneurial Pipeline, Entrepreneurship

1. Introduction

Latin America and the Caribbean is a region where too many changes are always happening and where the population is always searching for new forms to improve their living standards. This paper is oriented to review the entrepreneurial activity of the region in 2018 using the Global Entrepreneurship Monitor (GEM), methodology and data. Nine countries participated in the 2018 research which were: Argentina, Brazil, Chile, Colombia, Guatemala, Panama, Peru, Puerto Rico, and Uruguay,

The ranking of the LAC region in most international indexes is not good enough at this time: in the Human Development Index (UNDP, 2018). LAC countries ranked from 44/189 to 127/189; in the Competitiveness Index (World Economic Forum, 2019); ranked from 33/149 to 96/149; in the Global Innovation Index (World Intellectual Property Organization, 2018); ranked from 47/126 to 102/126, in the Doing Business Index (World Bank, 2019); ranked from 56/190 to 119/190 and in the Starting a Business ranked from 65/190 to 140/190,

2. The GEM model and methodology¹

The Global Entrepreneurship Monitor (GEM) project is an annual assessment of the entrepreneurial activity, aspirations and attitudes of adult individuals across a wide range of countries. GEM is unique because, unlike other entrepreneurship data sets that measure newer and smaller firms, GEM studies the behavior of individuals with respect to starting and managing a business.

GEM focuses on four main objectives: Comparisons of entrepreneurial activity; identification of factors that encourage or hinder entrepreneurial activity; Assessing the extent to which entrepreneurial activity influences economic growth, Guiding the formulation of effective and targeted entrepreneurial policies

The GEM conceptual framework derives from the basic assumption that national economic growth is the result of the personal capabilities of individuals to identify and seize opportunities, and that this process is affected by environmental factors, which influence individual's decisions to pursue entrepreneurial initiatives. GEM divides the entrepreneurial process and classifies entrepreneurs according to the level of their organizational development. The conceptual model depicts the multifaceted nature of entrepreneurship, recognizing the proactive, innovative and risk-responsive behavior of individuals, always in interaction with the environment. The National Framework Conditions (NFC) and the Entrepreneurial Framework Conditions (EFC). Include the social, cultural, political and economic context

¹ This chapter is an eclectic work extracting ideas and sentences from several GEM documents, mainly GEM Global Reports, GEM Colombian national reports, GEM Latam 2015 , and Innovación Empresarial: Arte y Ciencia en la creación de Empresas, numerous documents from the Research Innovation Advisory Committee of GEM, and ; personal communications between Rodrigo Varela Villegas and GEM researchers

The GEM model recognizes that entrepreneurship is part of a complex feedback system, and makes explicit the relationships between social values, personal attributes and various forms of entrepreneurial activity. It also recognises that entrepreneurship can mediate the effect of the NFC on new job creation and new economic or social value creation.

The study is done through a representative sample of at least 2000 adults (between 18-64 years old), that are interviewed (APS). Complementing the APS is a National Expert Survey (NES), which gathers in-depth opinions from selected national experts about the factors that have an impact on the nature and level of entrepreneurship in each economy. A minimum of 36 experts per country, a minimum of four experts from each of the entrepreneurial framework condition categories, fulfils the questionnaire.

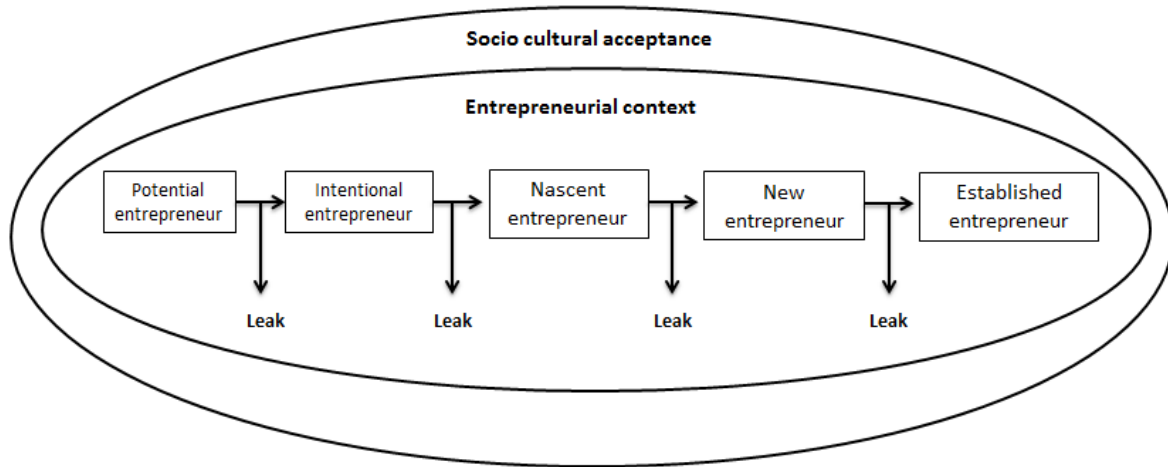
All the data is analyzed and harmonized by the GEM central coordination team to assure the quality of the data. Indicators are developed for each one of the countries and regions and the global report is produced.

Varela & Soler (2013) developed the Entrepreneurial Pipeline Model; by doing an integration of the pipeline concept with the general GEM model. The pipeline is a physical model based on the fact that the inputs to step "j+1" are the outputs of step "j". The subsequent comparison of inputs and outputs of each stage enables one to identify the amount of losses (leaks, discontinuities, deaths, etc.), and from this data, it is possible to propose solutions and improvements that should be implemented at each stage of the process. The final stage is a tank that accumulates all the net flows that get to that stage. The Pipeline Entrepreneurial Model (Figure #1) has six stages.

- The first stage is the Socio cultural acceptance of entrepreneurship, which measures the proportion of people that have a positive perception about entrepreneurship.

- The second stage are Potential Entrepreneurs, which determines the proportion of people within the population that have the potentiality to become an entrepreneur in the future.

Figure # 1
Entrepreneurial Pipeline Model



- The third stage in the entrepreneurial pipeline are the Intentional Entrepreneurs which determines the proportion of people that have the firm intention to start a new business, alone or with others within the next three years.
- The fourth stage is the Nascent Entrepreneur, which measures the percentage of people that have started to do specific activities in setting a business in the last 12 months, and have been paying salaries or any other type of remuneration to employees and/or owners for less than 3 months
- The fifth stage is the New Entrepreneur and measure the percentage of adults that have been owning and managing a business and have been paying salaries or any other type of remuneration to employees and/or owners for less than 42 months but more than 3 months

- The sixth stage is the Established Entrepreneur that measures the amount of people owning and managing a new business that has survived for more than 42 months paying salaries or any other type remuneration to employees and/or owners.

3. APS Results

Table #1 present the Entrepreneurial Pipelines for all nine countries. The main results are:

Table # 1
Entrepreneurial pipeline model for LAC region (mean scores), by country GEM 2018

Country	1	2	3	4	5	6
Peru	51.4%	51.0%	14.8%	4.9%	4.3%	9.1%
Brazil		51.0%	26.1%	1.7%	16.4%	20.3%
Colombia	71.8%	66.9%	48.8%	15.7%	5.8%	6.5%
Guatemala	73.4%	63.2%	49.7%	13.7%	15.0%	11.2%
Argentina	51.4%	51.0%	14.8%	4.9%	4.3%	9.1%
Chile	66.5%	65.2%	48.7%	16.0%	10.1%	8.5%
Panama	45.4%	53.9%	18.9%	7.4%	6.6%	6.4%
Uruguay	52.4%	53.5%	24.2%	1.1%	4.9%	5.6%
Puerto Rico	51.4%	54.0%	22.9%	9.1%	2.6%	1.9%

- Guatemala presented the highest socio-cultural acceptance of entrepreneurship (73.4%) while Panama presented the lowest with (45.4%). It is important to highlight that: 84.2% of Colombians consider that entrepreneurship is synonym of high status followed by Guatemala (71.7%) and Peru (62.4%) but only 46.3% of the Panama population think is synonym of high status. 94.4% of Guatemala people consider that entrepreneurship is a good career option, followed by Chile (76.1%). Curiously, 80.9% of Puerto Rico people considers that entrepreneurship has attention in media but only 20.7% thinks is a good career option.
- The country with the biggest amount of potential entrepreneurs is Peru with 71.8% of its population, while Panama is the country with the least amount of potential entrepreneurs with 42.1% of its population. In the LAC region less, than one-third of its population consider that fear of failure would prevent them from starting a business.

- For the LAC region, the highest entrepreneurial intention rates were in Chile (48.7%), Colombia (48.8%) and Guatemala (49.7%), while Panama (18.9%) and Argentina (14.83%) presented the lowest intention level.
- In the LAC region, Peru (17.5%), Chile (16%) and Colombia (15.7%) presents the highest levels of nascent entrepreneurs, while Brazil (1.7%) and Uruguay (1.1%) present the lowest.
- In the LAC region Brazil (16.4%) and Guatemala (15%) presents the highest levels of new entrepreneurs, while Puerto Rico (2.6%), Argentina (4.3%), Uruguay (4.9%), Colombia and Peru (5.8%) presents the lowest scores. It is interesting how Brazil has low levels of nascent entrepreneurs and high levels of new entrepreneurs,
- In the LAC region Brazil presents the highest amount of established businesses (20.3%) followed by Guatemala (11.2%), while Puerto Rico (1.9%) had the lowest amount of established businesses. Although countries like Brazil and Uruguay present low percentages of nascent entrepreneurs they have high percentages of new and established entrepreneurs, Differently, Colombia, Puerto Rico, Chile and Panama, don't have a steady flow through the pipeline and have considerable leaks through their stages having the least percentage in the established business stage.

4. Regional performance in terms of the Entrepreneurial Framework Conditions

The National Framework Conditions, which include: entrepreneurial finance (1), entrepreneurship as a relevant economic issue (2a), Taxes and regulations (2b), government entrepreneurship programs (3), entrepreneurship education at basic school (4a), entrepreneurship education at post-secondary levels (4b), R&D transfer (5), commercial and legal infrastructure (6), internal market dynamics and entry regulation (7a), market openness (7b), physical infrastructure (8), and cultural and social norms (9). Table #1 shows the mean scores for the experts' ratings for each component

of the entrepreneurial framework. Given that, “9” denotes a highly positive rating while “1” denotes a strongly negative view of the EFC concerned.

It is clear that Latin America has great challenges to have an optimal framework for entrepreneurship. For 2018, national experts perceive that almost all conditions have a low performance in fostering entrepreneurship activity.

Table # 2:
Experts’ assessment of GEM Entrepreneurial Framework Conditions for LAC region (mean scores), by country and phase of economic development, GEM 2018

Country Income Group	Country	1	2a	2b	3	4a	4b	5	6	7a	7b	8	9
Upper-Middle Income	Peru	3.6	3.4	3.2	4.2	3.0	5.0	3.4	4.1	4.3	4.1	5.6	5.6
	Brazil	4.8	2.8	2.0	3.3	2.2	4.1	3.4	4.5	5.8	3.6	5.4	3.4
	Colombia	3.2	3.9	3.6	4.6	3.4	5.7	3.3	4.3	4.1	4.1	6.3	5.3
	Guatemala	2.7	2.1	3.5	3.0	2.3	5.6	3.3	4.7	4.0	3.7	6.2	5.1
Upper-Middle countries mean		3.5	3.4	3.3	4.2	2.7	5.2	3.4	4.4	4.7	3.8	6.1	5.1
High Income	Argentina	3.2	6.2	3.6	5.3	3.0	5.0	4.5	5.1	5.6	4.2	5.6	5.4
	Chile	3.8	5.2	4.7	5.6	2.4	5.0	3.7	4.2	4.4	3.8	7.3	5.4
	Panama	3.1	2.9	3.2	4.2	1.9	4.0	3.2	3.5	4.0	3.0	6.0	4.6
	Uruguay	3.5	4.2	3.4	5.4	2.5	5.7	4.4	4.6	3.7	4.1	6.1	3.5
	Puerto Rico	3.1	2.9	2.2	3.5	2.4	5.0	3.1	4.4	4.6	3.6	4.8	4.6
High Income countries mean		3.3	4.3	3.4	4.8	2.4	4.9	3.8	4.3	4.5	3.7	5.9	4.7
Latin American countries mean 2018		3.4	3.8	3.4	4.5	2.6	5.1	3.6	4.4	4.6	3.8	6.0	4.9
Latin American countries mean 2015		3.4	3.7	3.3	4.1	2.5	4.8	3.4	4.5	4.2	3.8	6.2	4.7

The weakest condition is school-level entrepreneurship education, followed by taxes or regulations. On the other hand, the highest condition is physical infrastructure where experts gave a mid-high grade. Comparing 2018 and 2015 there has not been a significant change in the framework conditions, there has only been a positive increase in government entrepreneurship programs and internal market dynamics.

In addition to grading each condition by a series of questions, the experts identify and comment on the main conditions that foster or constraint entrepreneurial activity in their countries. For the experts the principal constraints are Government Policies, Financial support, and Education & Training. Other listed constraints were political, Institutional and Social Context; Cultural & Social Norms; Government programs; Economic climate.

As to the conditions that encourages entrepreneurial activity, the experts had diverse opinions depending on the country. The most common factor is governments programs that focuses on entrepreneurs and/or entrepreneurship, but some experts consider that the positive economic climate, the population capacity for entrepreneurship, the Research & Development transfer and finally were relevant factors

5. Conclusions and recommendations

- LAC countries need to improve the entrepreneurial ecosystems, because all of them present low scores in the different components of the Entrepreneurial framework conditions. Following the expert recommendations it is necessary to develop better government policies, have more financial mechanisms ,foster education and training for entrepreneurship, and develop centers for entrepreneurial support and development
- The entrepreneurial pipelines allows each country to identify the stage in which the leaks are stronger and allow them to develop specific programs to avoid those leaks.
- The pipeline results indicates that the situation of every country is different, even though the trend is very similar, and for that reason every country has to develop their own policies and programs to solve the leaks. The idea of universal solutions do not apply here, and less the copy and paste of programs and methodologies developed in other socio cultural regions
- The data for gender shows in the LAC countries that there is a significant difference between males and females in terms of the entrepreneurial process. Specific actions should be taken to provide services to women so that they can have a more significant participation in the entrepreneurial arena

- To have an increase in established entrepreneurs, which are the ones, who effectively contributes to the generation of economic and social value, and job creation, it is necessary to have a steady flow of people through the EP and decrease the “leaks”, that it shows in the LAC countries. Countries must understand the source of the leaks in each entrepreneurial stage so that they can make effective policies that allows a steady flow through the pipeline.
- High entrepreneurial dynamics is not characteristic of the LAC region, even though the TEA may be high when compared with other countries. Most of the new business had very small added value. Thus programs to develop better businesses has to be implemented and support mechanism required for those high impact entrepreneurial activities should be provided

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