

Global Entrepreneurship Monitor Caribbean 2011 Colombian National Report

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Sponsoring Institution International Development Research Centre of Canada

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Global Entrepreneurship | Monitor Caribbean 2011 | Colombian National Report



Content

E	xecutiv	e Summary	5
1.	Introd	luction	7
2.	GEM	Model	9
3.	Resea	arch Design11	1
4.	Main	Results APS	3
	4.1	Social Perception of Entrepreneurship	3
	4.2	Potential Entrepreneurs	3
	4.3	Intentional Entrepreneurs	5
	4.3	Social Perception of Entrepreneurship	5
	4.4	Total Entrepreneurial Activity (TEA)	5
	4.5	Entrepreneurial Motives	3
	4.6	Characteristics of Entrepreneurs)
5	Estab	lished Businesses	5
6	Disco	ontinuous Entrepreneurs)
7	Entre	preneurial Framework Condition	1
	7.1	Financial Support	1
	7.2	Government Policies	2
	7.3	Education & Training	3
	7.4	Women Support to Startup	3
8	Speci	al Topic: - Intrapreneurship	5
9	Conc	lusions)
10	Anne	xs41	1
	Anne	x 1. Technical Data of the Adult Population Survey	1
	Anne	x 2. About the GEM Caribbean Project	2
	Anne	x 3. National Teams GEM Caribbean 2011	3
11	Biblio	ography4	5

Global Entrepreneurship Monitor Caribbean 2011 Colombian National Report



List of figures

Figure 1	- Entrepreneurial Process	9
Figure 2	- GEM Model	10
Figure 3	- Entrepreneurial Perceptions	. 114
Figure 4	- Intentions vs. TEA 2008 - 2011	15
Figure 5	- Entrepreneurial Intentions by Countries	16
Figure 6	- TEA 2008-2011	17
Figure 7	- TEA by Countries	17
Figure 8	- TEA by Cities	18
Figure 9	- Motive Opportunity Type for Opportunity Entrepreneurs	19
Figure 10	- TEA by Age vs. Motive	21
Figure 11	- TEA vs. Education Level	22
Figure 12	- TEA currents vs Expected Job Generation	22
Figure 13	- Distribution of Entrepreneurship by Sectors	23
Figure 14	- TEA and Sectors vs. New Products vs. Competitors	23
Figure 15	- TEA and Sectors vs. Technology	24
Figure 16	- Established Business and TEA by regions	26
Figure 17	- Sectoral Distribution	26
Figure 18	- Established Business: Current and Expected jobs	27
-	- Established Business: Export Intensity	
Figure 20	- Reasons for Exit	29
Figure 21	- NES Scores	31
Figure 22	- Entrepreneurship Process and GEM Operational Definitions, including	
	Entrepreneurial Employee Activity	
Figure 23	- Entrepreneurial Employee Activity (EEA) in 52 Economies, 2011	36
List of	tables	
Table 1	- Entrepreneurial Perception of Entrepreneurship	13
Table 2	- Entrepreneurial Perceptions vs. economic phases	14
Table 3	- Entrepreneurial Perceptions Colombia 2008-2011	15
	- Entrepreneurial Opportunity Neccesity	
Table 5	- TEA vs. Age vs. Gender	20
Table 6	- New and Established Businesses 2008 - 2011	25
Table 7	- Finance Support	32
Table 8	- Government Policies	32
Table 9	- Education & Training	33
Table 10	- Women's support to start up	34
Table 11	- EEA Rate by Demographic Characteristics	37
Table 12	- EEA Rate by Income and Education	37
Table 13	- Distribution of Entrepreneurial Employee Activity by Organization Size	38



Executive summary

Colombia has participated in the Global Entrepreneurship Monitor (GEM) research project since 2006. GEM, the most important and comprehensive study about entrepreneurship, covered 54 economies in the 2011 cycle and interviewed over 140,000 adults aged 18-64 worldwide.

In Colombia the study is conducted by a consortium of four universities: Universidad Icesi, Universidad del Norte, Universidad Javeriana de Cali and Universidad de los Andes. In 2011, a total of 10,374 interviews were conducted to obtain data at both the national and regional levels.

The main indicator GEM measures is the Total Entrepreneurial Activity (TEA), that is, the percentage of the adult population aged 18-64 actively involved in the establishment and/or managing of a business which has been paying salaries for less than 42 months. For 2011, the TEA was 21.4% which means there are about 5 million Colombians in this occupational category. The study determined that there are big differences between the TEAs from city to city and region to region.

The research also analyzes the TEA according to different entrepreneurial characteristics and a

series of questions needing further research arise. For example, the reasons why only 3 out of 10 entrepreneurs are women, why 3 out of 10 enterprises do not generate any new jobs and why 6 out of 10 enterprises do not use new technology.

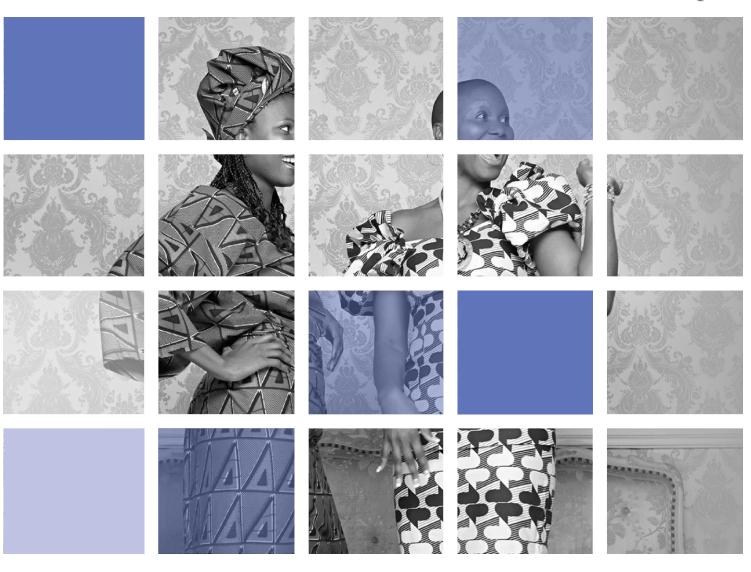
Positive factors derived from the study include the high perceptions Colombians have about the existence of entrepreneurial opportunities, the capacities to manage a new business, the desirability of starting an entrepreneurial career and the low level of fear to failure among other variables. On the other hand, some setback factors found were those dealing with access to financial resources, low levels of businesses internationalization, innovation and use of technology, as well as the low support in the educational system and government programs.

Some policy recommendations are formulated and new research lines identified to advance the support mechanism toward entrepreneurship development.

The reader is invited to go through the report and request information as needed.

Global Entrepreneurship Monitor Caribbean 2011

Colombian National Report







1. Introduction

A broad agreement exists today among the academia and public policy makers about the importance of entrepreneurial activity and entrepreneurs in the dynamics of economic development. New businesses drive innovation, generate jobs and, stimulate productivity and competition thereby developing the economy and welfare of a society.

The Global Entrepreneurship Monitor (GEM) is conducting the biggest on-going research worldwide in order to study and analyze the relationship that exists between entrepreneurship and the national economic development. This project started in 1999 as an initiative of Babson College and the London School of Economics. At the present time, it is the only comparable data source that exists globally

about a wide range of variables associated with the general entrepreneurial activity and specific elements in the different stages that compose the entrepreneurial process.

GEM has been able to take and process harmonized data in an annual basis focusing mainly in three objectives:

- Measuring the differences that exist in the entrepreneurial activity levels between the different countries that participate.
- · Discovering the principal causes and variables that affect the level of entrepreneurial activity in each country.
- Identifying policies that may foster the quality and quantity of the entrepreneurial activity in each country.



2. GEM Model

The GEM model defines the adult population as those aged 18-64. Since they are the object of study, a representative sample is interviewed in order to learn about their attitudes, activities and aspirations towards the intention, creation, growth, and closure aspects of entrepreneurship. Figure 1 shows the entrepreneurial cycle, it defines the main stages in which GEM divides the entrepreneurial process and classifies the entrepreneurs according to the level of their organizational development:

Potential Entrepreneurs: Those developing entrepreneurial knowledge and abilities.

Intentional Entrepreneurs: Those having the intention of starting a new business or develop a business idea in the near future.

Nascent entrepreneurs: Those who have recently initiated a business and have paid salaries to employees and/or themselves for a period of 0 to 3 months which marks the stage of the birth of the company

New Entrepreneurs: Those who have been in an entrepreneurial activity paying salaries for more than 3 months but less than 42 months.

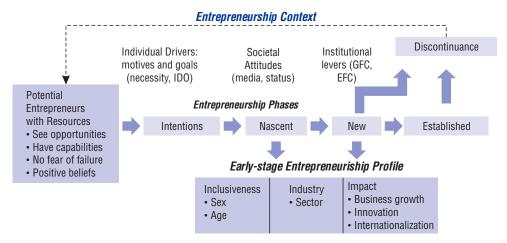
Established Entrepreneurs: Those having an entrepreneurial activity which has paid salaries for more than 42 months

Discontinued Entrepreneurs: Those who for any reason have exited an entrepreneurial activity

The GEM research, measures the proportion of individuals aged 18-64 who are: nascent entrepreneurs, new entrepreneurs and established entrepreneurs. The sum of the "Nascent" and "New" categories generates the Total Entrepreneurial Activity rate (TEA) which indicates the percentage of individuals in the population 18-64 age groups involved in the process of creating and/or managing a new business which has been paying salaries for less than 3½ years.

It is important for GEM not only to know the proportion of new activities started in a given year, but also to understand their entrepreneurial profile, that is the characteristics of the individuals who participate in these activities. For this reason, the research takes into consideration inclusiveness, industry and impact. As a result, GEM has developed a conceptual model

Figure 1 Entrepreneurial Process 1



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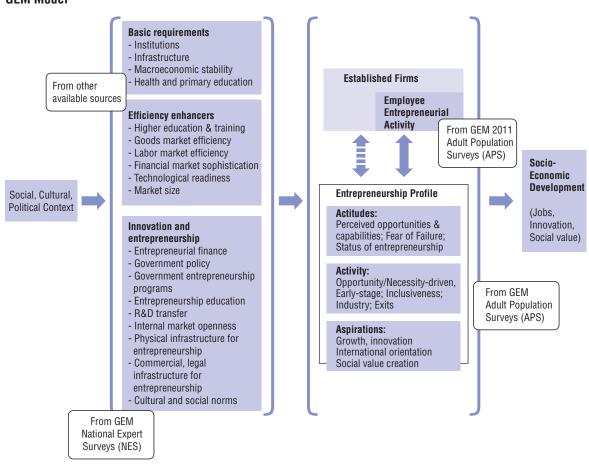
(Figure 2) to explain the relationships that exist between several environmental variables, the entrepreneurial activity and the socioeconomic development indicators.

The model explains how the social, cultural and political contexts of each country has an influence on three sets of conditions - basic requirements, efficiency enhancer and innovation / entrepreneurship - which are the critical factors for the value creation of the socioeconomic dynamism generated by the established

firms and the new enterprises. The magnitude of the socio economic value creation is the defining variable of the socioeconomic development.

In order to increase the socioeconomic development of a country, appropriate policies must be formulated to foster the three sets of conditions so as to create more and better enterprises. The main role of GEM is to obtain measurements of different entrepreneurial variables in order to evaluate the effectiveness of these policies.

Figure 2 GEM Model²



² Global Entrepreneurship Monitor 2011 Global Report



3. Research Design

In order to compare results among participating countries, the methodology used in the GEM study is standardized worldwide, and it is composed of three basic processes:

- 1. The Adult Population Survey (APS) it's a survey of the population aged 18 -64. In Colombia in 2011, around 10.500 surveys were done in the country covering 61 municipalities representing the population in terms of urban, rural, age, gender and economic strata. These surveys measured the proportion of individuals 18 - 64 who belong to the following three categories: "Nascent Entrepreneurs", "New Entrepreneurs" and "Established Entrepreneurs". As mentioned before, the first two groups: nascent entrepreneurs and new entrepreneurs are added to measure the Total Entrepreneurial Activity known as TEA. Additionally, the attitudes, aspirations and intentions regarding entrepreneurial activity, entrepreneurial profiles, businesses discontinuance and many other variables concerning entrepreneurs and their enterprises among the general population are measured.
- 2. The National Expert Survey (NES) it's a survey done to national experts who evaluate nine conditions in: innovation and entrepre-

- neurship, entrepreneurial finance, government policies, governmental programs, education & training, R&D transfer, commercial & service infrastructure. openness of the market, physical infrastructure, cultural and social norms among others. In 2011, Colombia conducted 36 surveys of this type.
- 3. Secondary sources related to socioeconomic variables of the countries (Secondary Variables – SV) it is composed of a series of data about each participant country which is fundamental for the basic requirements as well as for the efficiency enhancers, such as: population, level of income, employment and unemployment rates, investment in research & development, commercial and physical infrastructure, competitiveness, risk indicators, corruption levels, national gross product per capita and ease in doing business within the country. This data is gathered by the central coordination team of the GEM project in London from sources such as: The World Bank, International Monetary Fund, World Economic Forum, OCDE, ONU, USA Census, UE, UNESCO, Doing Business Report, Heritage Foundation as well as from many other secondary sources of information.

Global Entrepreneurship Monitor Caribbean 2011 Colombian National Report







4. Main Results APS

This section presents the main results obtained from the adult population survey. The GEM countries are grouped into three economic levels: factor driven, efficiency driven and innovation driven in line with the classification generated by the World Economic Forum's Global Competitiveness Report³. According to this, Colombia is categorized in the efficiency driven group.

The results were analyzed using the entrepreneurial process model (Figure 1) to understand the entrepreneurial pipeline.

4.1 Social perception of entrepreneurship

When starting a new business, the motivations entrepreneurs have are influenced by the perceptions society has on entrepreneurship such as: the view of entrepreneurship as a career of choice, the high status of successful entrepreneurs and the media attention focused on them.

As indicated on Table 1, in all three variables, Colombia shows better than average results in the efficiency and innovation driven economies. Compared to the factor driven economies, the country has a higher percentage in two variables while maintaining the same score on the third

4.2 Potential Entrepreneurs

The first step in the entrepreneurial process is becoming a potential entrepreneur. In this stage are the individuals who may or may not venture in the process of starting a new business in the near future. These individuals perceive opportunities in their country, are confident in their ability to manage a new business and believe they can overcome the fear of failure; however, they had not embarked into any specific actions to start one by the time they were interviewed.

As presented in Table 1, compared to the average of countries in the different economic phases, Colombia presents a higher percentage of individuals aged 18-64 who identify good opportunities in their area and consider having the knowledge, ability and skills needed to own and manage a new business.

Figure 3 shows the entrepreneurial perceptions results for the North, Central, South America and Caribbean countries participating in GEM 2011. The countries with population having the

Table 1: Social Perception of Entrepreneurship

	Good Career	Status	Media coverage
Factor-Driven Economies	77%	79%	58%
Efficiency-Driven Economies	70%	69%	60%
Innovation-Driven Economies	57%	69%	58%
Colombia	89%	79%	67%

³ Schwab, Klaus, ed., The Global Competitiveness Report 2011-2012 (Geneva: World Economic Forum, 2011).



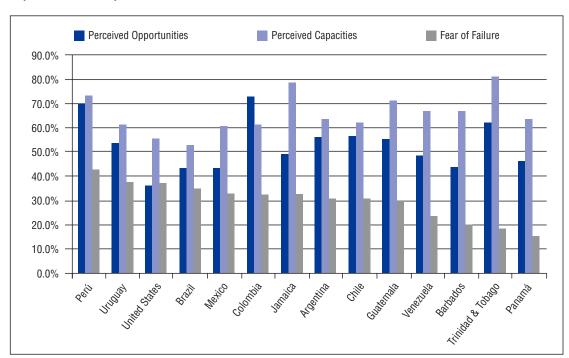
Table 2: **Entrepreneurial Perception vs. Economic Phases**

	Perceived Opportunities	Perceived Capabilities	Fear of Failure
Factor-Driven Economies	49.0%	55.5%	37.3%
Efficiency-Driven Economies	40.3%	52.0%	32.1%
Innovation-Driven Economies	34.9%	40.6%	38.1%
Colombia	73.1%	61.3%	32.6%

highest levels of positive perception about the existence of entrepreneurial opportunities in their country are Colombia (73.1%) and Peru (70.3%). When the results are analyzed by the perception of ability to manage and own a new business, the countries with the highest values are Trinidad & Tobago (81.2%) and Jamaica (78.6%). Countries that presented the lowest percentage of individuals not starting a business due to fear of failure are Panama and Trinidad & Tobago (18.2%).

These perceptions have changed significantly the last four years in Colombia. While in 2009 around 51.2% of the population perceived good entrepreneurial opportunities, in 2011 the percentage increased to 73.1%. The perception of individuals, who believe to have the ability to manage a new business, fluctuates between 61.3% and 67.7%, while the fear of failure oscillated between 31.5% and 32.6%.

Figure 3: **Entrepreneurial Perceptions**





4.3 Intentional Entrepreneurs

The next step in the entrepreneurial process is when the potential entrepreneur expresses the intention of starting a new business in the near future. To evaluate this, GEM asks these individuals if they are planning to start a new business alone or with others within the next three years.

Colombians have shown through the years very high intentions of starting new businesses as observed in Figure 4. The entrepreneurial intentions of Colombians have fluctuated between 67% and 46% in the last four years. In 2011, 58.46% of the population was willing to start a new business placing the country with the highest entrepreneurial intentions worldwide.

During the last four years, the average entrepreneurial intentions of Colombians have rated above average when compared to entrepreneurial intentions in factor, efficiency and innovation driven economies. For instance, the efficiency driven countries have an average range between 24.5% and 26.3%, the factor driven economies between 26.4% and 31.6% and the innovation driven economies between 9.8% and 11.9%.

Figure 5 shows the results of the entrepreneurial intentions in all participating countries in GEM 2011. The variation in the countries is quite significant and surprisingly some developed countries had less than 10% of their population planning to start a new business.

Table 3: Entrepreneurial Perception Colombia 2008-2011

	2008	2009	2010	2011
Perceived Opportunities	60.3%	51.2%	68.4%	73.1%
Perceived Capacities	67.7%	67.6%	65.2%	61.3%
Fear of Failure	32.1%	31.5%	31.8%	32.6%

Figure 4: Intentions vs. TEA 2008 - 2011

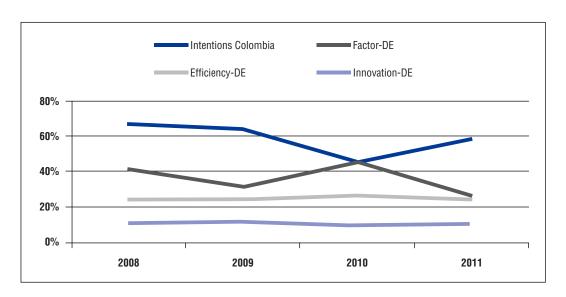
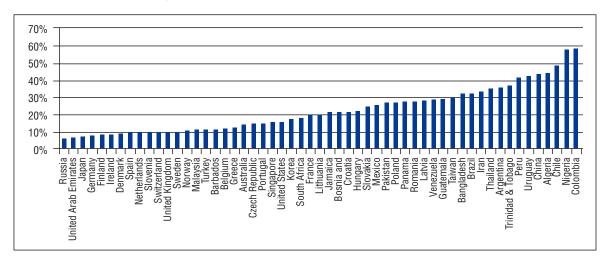




Figure 5: Entrepreneurial Intentions by Countries



To keep this perception high it is necessary to design and execute educational and promotional programs which allow the population to: acquire the knowledge and skills necessary to engage in entrepreneurial activity, learn about the required entrepreneurial competences to start a business, and develop an entrepreneurial career plan which allows them to move effectively into the following stages of the entrepreneurial process.

4.4 Total Entrepreneurial Activity (TEA)

The central measurement of GEM is the Total Entrepreneurial Activity (TEA), which as indicated earlier, is made up of individuals aged 18 - 64 who have already started their business and are in one of the two initial periods:

- 0 − 3 months of paying salaries (Nascent entrepreneurs).
- 3 42 months of paying salaries (New entrepreneurs).

Figure 6 presents the TEA for Colombia which in the last four years shows a measurement between 24.52% and 20.61%. However, except for 2012, the new entrepreneur proportion has shown a declining trend. These results indicate that many nascent entrepreneurs are unable to reach the new entrepreneur stage. To have better

conversion rates, it is important to identify what is lacking in terms of support mechanisms in order to design new policies and new programs. Economic growth depends on the entrepreneurial strength of a country and a dynamic approach applied at all stages is needed in order to keep the entrepreneurial activity of the country alive and growing.

Figure 7 presents the data for all participant countries in the 2011 cycle. Colombia with 21.4% shows the sixth highest rate surpassed by Trinidad & Tobago 22.67%, Peru 22.89%, Chile 23.69%, China 24.01% and Nigeria 34.99%.

A TEA of 21.4% implies that about 5'112.038⁴ individuals in Colombia are involved in the 0–42 months span of business creation. At this time is important to compare some data for Colombia in 2011.

- The Potential entrepreneurs were around 65%.
- The Intentional entrepreneurs were 58%.
- The Nascent entrepreneurs (0 3 months) were 15.2%.
- The New entrepreneurs (3 42 months) were 6.2%.

⁴ Censo Nacional 2005, Departamento Administrativo Nacional de Estadística



Figure 6: TEA 2008-2011

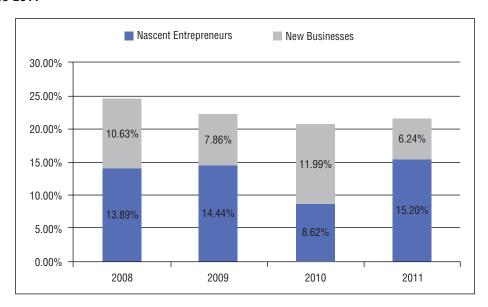
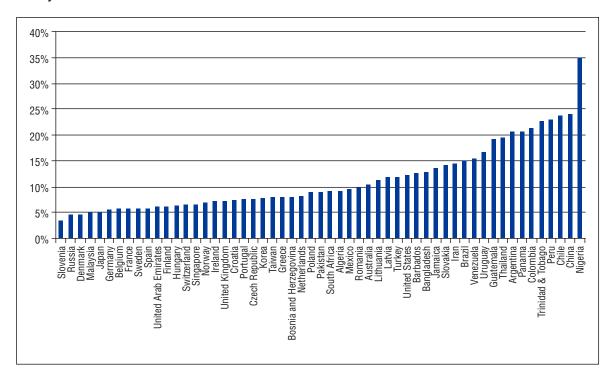


Figure 7: **TEA by Countries**





The numbers indicate the significant difference between those who are willing to be entrepreneurs (potential) from those who may start developing specific activities towards starting a business (intention) and those who really became entrepreneurs (nascent & new). It also indicates the need of support programs to develop entrepreneurial competences in order to encourage more individuals to move from the intention phase to the creation phase.

As shown in Figure 8, there are significant differences among the Total Entrepreneurial Activity rates in Colombian cities where TEA rates range from 51.7% in Quibdo to 0% in Tunja. When the cities are grouped into regions, it is observed that the Central region (Antioquía, Caldas, Risaralda, Quindío, Huila, Tolima, Caquetá) has the highest TEA (23.7%), followed by Bogotá and the Eastern region (Santander, Norte de Santander, Cundinamarca, Meta, Boyacá, Casanare) TEA (23.4%), the Atlantic region (Magdalena, Sucre, Atlántico, Bolivar, La Guajira) TEA (18.4%) and the Pacific region (Valle del Cauca, Chocó, Cauca, Nariño) TEA (17.3%). It is imperative that all policy makers in each city and region understand the entrepreneurial activity of their area in order to design specific programs and support activities which improve the quantity and quality of TEA in their regions while being attentive to the social, cultural and economic context of each area.

4.5 Entrepreneurial Motives

An important aspect in the entrepreneurial process is the motive that drives entrepreneurs to start a business. GEM considers that there are two basic situations which may motivate the start-up: one where the potential entrepreneur is driven by the identification of an opportunity in the market, and the other where he is driven by the necessity.

In Colombia, 30.1% of the entrepreneurs are motivated entirely by seeking a market opportunity, 25.1% are motivated entirely by necessity and 44.8% have a mixed motivation between opportunity and necessity. When compared to other economies, Colombia shows a very low level of new businesses based in opportunity, even when compared with the factor driven economies.

Figure 8: TEA by Cities

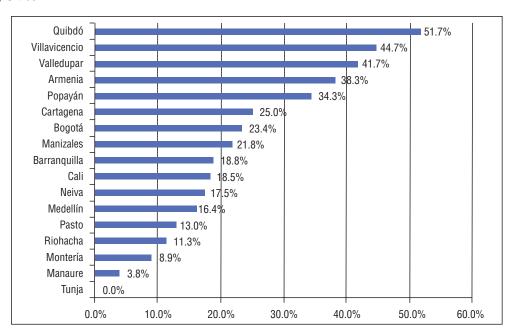




Table 4: **Opportunity Necessity Entrepreneurs**

	Opportunity	Necessity	Opportunity/ Necessity
Colombia	30.1%	25.1%	1.20
Factor	38.5%	37.0%	1.04
Efficiency	41.7%	28.2%	1.47
Innovation	57%	17.6%	3.24

The fact that the necessity motivation is very significant in Colombia, either by itself or in a combination necessity-opportunity, raises the need to develop policies and programs to change this behavior. It is known that the failure rate in necessity based business is high due to the lack of: entrepreneurial competences, commitment with the business, resources, innovation and differentiation.

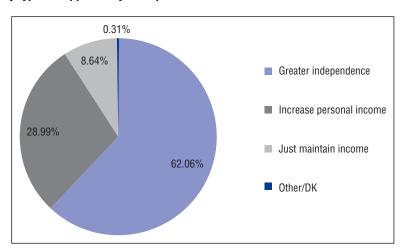
In general, the opportunity based new businesses are considered to have a greater potential to survive and therefore grow. This is why it is important first, to direct attention of Colombians toward the development of entrepreneurial activities based on the identification and evaluation of an opportunity in the market, through new programs that can develop

entrepreneurial competences and abilities to manage new businesses. These programs will provide entrepreneurial orientation to new entrepreneurs especially those, who because of the lack of employment, are forced to begin new businesses based in necessity without undergoing a rigorous evaluation resulting in their loss of resources and self-confidence.

An additional study is needed to identify and more efficiently profile the entrepreneurs driven simultaneously by opportunity and necessity, because more than 45% of the new entrepreneurs present this kind of motivation.

Another important aspect about the entrepreneur's profile is their reason for starting a new business. Figure 9 shows that 62.06% of the opportunity driven entrepreneurs are looking

Figure 9: Motive Opportunity type for opportunity entrepreneurs





for greater independence, 28.99% to increase their personal income and 8.64% to maintain their income. In the case of the necessity driven entrepreneurs they are mainly looking for any source of income.

4.6 Characteristics of Entrepreneurs

Societies should be inclusive in access and participation in entrepreneurship development, by providing anyone independent of their: gender, age, social status or educational level, the opportunity to develop their entrepreneurial competences and to participate in the socioeconomic development through their entrepreneurial initiatives.

There is a significant difference in the new entrepreneurial activity when data is analyzed by gender and age. As shown on Table 5, in Colombia the TEA for males is 26.85% and for females is 16.27% resulting in one of the highest disparity in the region (TEA Male / TEA Female =1.65).

These results reveal the urgency in identifying the reasons for this disparity in Colombia; it also urges the creation of policies and programs to foster entrepreneurship among women.

Although it is widely accepted that entrepreneurship can begin at any given time in a person's life, a constant tendency in the GEM study demonstrates that individuals more likely to start new businesses are those aged 25-34. In this group, individuals may have: developed the competences and abilities required to manage a new business through: work experience, gained expertise in a specific working area; generated the conviction of working independently after having been an employee; saved enough resources to start a new business; been affected by the combination of many other positive and negative forces which affect the personal decision of becoming an entrepreneur.

For the GEM 2011 study the trend mentioned before continues; Figure 10 presents the TEA not only by age groups, but also by the distribution for each age group in terms of the motive to start the business (opportunity, necessity, or a mix of both). The age groups of 25-34 and 35-44 present the highest tendency toward business creation having a TEA rate of 26.9% and 23.2% respectively. While the 55-64 group with 12.1% presents the lowest TEA rate.

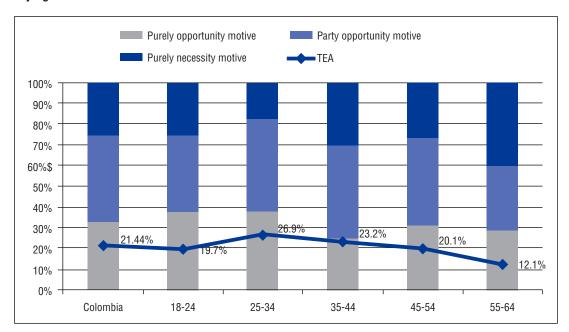
It is important to observe that the group aged 25-34 have the lowest proportion of necessity

Table 5: TEA vs. Age vs. Gender

	TEA Male	TEA Female	TEA Male/ TEA Female
18-24 years	23,12%	16,21%	1,43
25-34 years	32,72%	21,20%	1,54
35-44 years	29,70%	17,17%	1,73
45-54 years	27,11%	13,62%	1,99
55-64 years	15,65%	8,79%	1,78
National	26,85%	16,27%	1,65



Figure 10: TEA by Age vs. Motive



driven businesses (17.6%) while the 55-64 group has the highest (40.1%). The high necessity motivated value of the latter group may be due to problems with not receiving an adequate pension, difficulties finding a new job to maintain their standard of living, and the lack of training in entrepreneurship development.

It is important to have policies and programs in place to support people in the different age groups in order for the country to have a continuous process for the development of entrepreneurs to stimulate the economy. The policies and programs designed have to be specific for each age group since young people may have the energy, tolerate more risk, better handle new technologies and have fresh perceptions and yet, not have the resources, experience, training and networks of older people.

• When the educational level is crossed with TEA, as indicated in Figure 11, a very clear trend is shown: the higher the educational level the higher the TEA rate. The policy implication of this finding is the importance of improving the coverage and the quality of education for Colombians. There is also an urgency of including effective programs in their pedagogical content and curriculum design to develop a better entrepreneurial spirit. Entrepreneurial competences should be included at every educational level around the country in order to fulfill the entrepreneurial needs at all levels.

• New businesses generate new jobs, hence one of the variables analyzed by GEM is the amount of jobs generated up to the time of the interview and the expectation of being able continue the same trend during the following 5 year period. Figure 12 shows that 30% of the new businesses have not created any jobs and 2% believe that they will not be generating any jobs for the next 5 years; 54% of the new businesses have already created between 1-5 jobs; 18% between 6-19 jobs, and 10% more than 20 jobs. This demonstrates that most of the new businesses are still micro or small in terms of jobs generated.

When the 5 year perspective is considered 46% believe that they will generate between



Figure 11: **TEA vs Education Level**

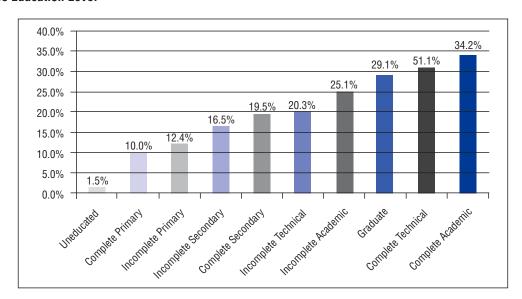
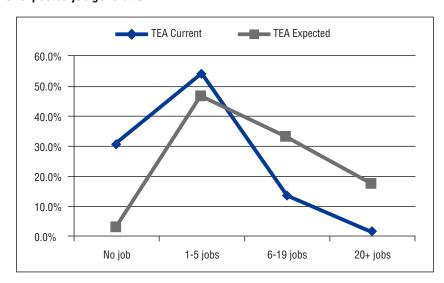


Figure 12: TEA current vs. expected job generation



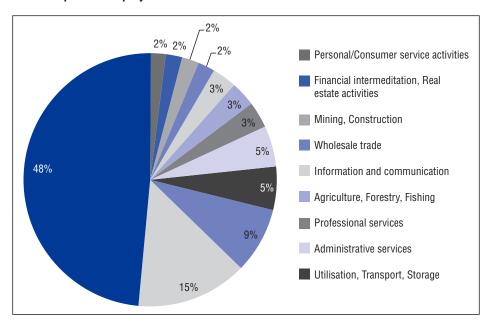
1-5 jobs, 34% between 6-19 jobs and 18% more than 20 jobs. Although these results reflect the level of confidence new entrepreneurs have on their initiatives, they also reflect the need to provide support to ensure their growth and survival. The ongoing support has to be different from the one they may or may not have received during their entrepreneurial birth process.

• The GEM study consolidates the entrepre-

neurial activities using the International Standard Industry Classification (ISIC). As shown in Figure 12, 48% of the new entrepreneurial activities are created in the sectors of retail trade, hotels & restaurants, followed by 15% in manufacturing activities. The areas with the fewest new entrepreneurial activities with only 2% per sector are: the personal/consumer service, the financial intermediation and real estate and the mining and construction sectors.



Figure 13: Distribution of Entrepreneurship by Sectors



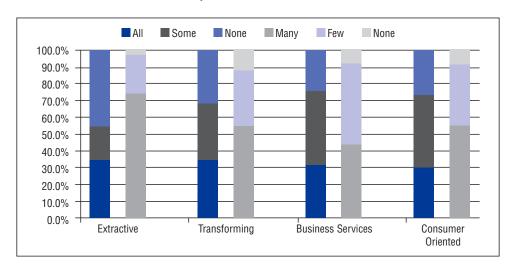
One interesting aspect is that in the most common sectors that is retail trade, hotels and restaurants, around 28% of the participants are driven by necessity; in the less common sector of personal/consumer service activities, financial intermediation, real state, mining and construction around 50% of the participants are driven by opportunity.

• Figure 14 shows the level of innovation of new

enterprises. Between 53% and 73% of these business offer products or services that are very similar to the existing products in the market. It also indicates that only 10% of the new enterprises consider that they do not have a significant competition and 31.5% consider that their products / services are completely new to the market.

When the businesses are categorized by

Figure 14: TEA and Sectors vs. New Products vs. Competitors





sectors, the transforming sector has the highest levels of innovation since 34.6% of the businesses offer the market totally new products and 12.15% have no other competitors offering the same.

The business services sector on the other hand. shows the least level of innovation having 24.8% percent of potential customers who do not think the product is new while 44% of the competition offers the same products and services. The low level of new start-ups, motivated purely by opportunity, may be responsible for the low level in innovation.

The creation of significant value is associated with new products and new markets, thus all the entrepreneurial development programs must explain and teach the concepts of innovation, flexibility, market orientation and widening market perspective as basic elements for the success and growth of a new business.

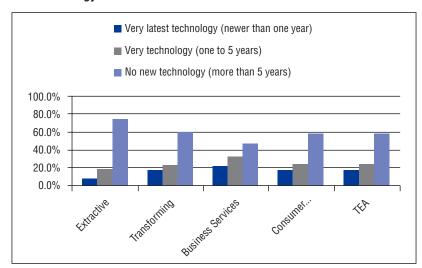
Government and universities must foster innovation and create a culture driven by it, so that regardless of whether individuals are entrepreneurs or employees, they recognize the importance that innovation has for competitiveness.

"Innpulsa" is the program the national government has initiated to foster innovation. It is an instrument aimed to improve the development and competitiveness of the country which intends to motivate more entrepreneurs to venture in high impact businesses driven by innovation. It is also important for Universities and Colciencias to begin creating programs which support technology based business in order to promote creation of this type of enterprises.

• Figure 15 shows that less than 20% of the new created enterprises use the latest technology (less than 1 year old); than 25% use new technology (1 to 5 years old); and from 58% of new enterprises use old technology (more than 5 years old).

It is very important that all entrepreneurial actors - government, education system and entrepreneurs – understand the need to update technologies in order to be able to compete in a globalized economy. The need for updated technology is even more evident as the Colombian government enthusiastically signs free trade agreements with other countries.

Figure 15: TEA and Sectors vs. Technology





5. Established Businesses

The 4th stage in the entrepreneurial process happens when new businesses paying salaries have survived for more than 42 months. GEM categorizes these businesses as established companies.

Table 6 shows a very negative situation in business demography since the percentage of Colombians aged 18-64 who are owners of a business with more than 42 months, decreases year after year with a similar trend to the one presented by the percentage of Colombians in the new business category. This situation requires immediate action because not only is the country decreasing the proportion of established business but also their source, which is the new business, thus directly impacting the future of the socioeconomic development of the country.

When this data is contrasted with the proportion of Colombians that are potential entrepreneurs, with the ones that have the intention of starting a business and with the nascent entrepreneurs, it is clear that along the entrepreneurial pipeline there are many obstacles which prevents entrepreneurs from reaching the mature stage. It is urgent to take action through policies and/or programs to identify the reasons why entrepreneurs exit the process, and also develop mechanisms to change this trend by providing adequate support services.

When the established businesses are analyzed by geographical regions (Figure 16) it is evident how the Eastern region has not only the highest percentage of established businesses but also a high percentage of new entrepreneurial activities. On the other hand, the Pacific region has both, the lowest percentage in established business and the lowest percentage in new entrepreneurial activities. Given the different social, cultural and economic environment of each region, entrepreneurial enhancers should be designed specifically for each area instead of using standardized national policies. Each region must research and understand its own entrepreneurial activity so it can create specific programs and policies for the entrepreneurs and businesses in its area.

When the established businesses are analyzed by sectors, some significant differences are found with respect to the early entrepreneurial initiatives. 40.25% of the established businesses are in the transforming sector and 44.27% in the consumer oriented product sector, whereas in the early entrepreneurial initiatives 24.51% are in transforming and 58.55% are in the consumer oriented sector. In both cases, a very low percentage of enterprises focusing on the business service sectors are evident when compared to countries that are driven by innovation and labeled as developed countries.

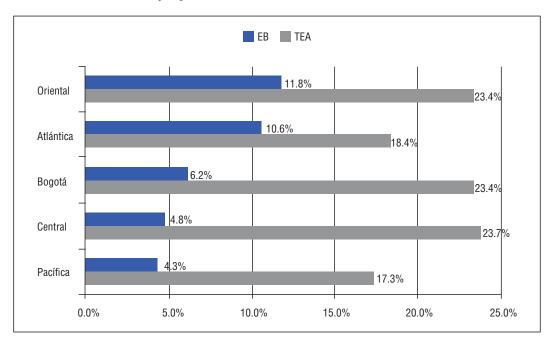
It is expected that businesses will generate new jobs and contribute to the economic development of the country and for this reason GEM studies this variable. Figure 17 shows the actual job generation and the expected job generation of established businesses which is not as high as anticipated: 50% of the established businesses,

Table 6: New and Established businesses 2008 - 2011

	2008	2009	2010	2011
New Businesses	10,63%	7,86%	11,99%	6,24%
Established Business Rate	14,07%	12,92%	12,22%	7,46%



Figure 16: Established business and TEA by regions



still have not generated jobs, 42% have generated between 1 to 5 jobs, 7% between 6-19 jobs and only 1% has generated more than 20 jobs. In terms of expected job generation in the following 5 years 18% expect to generate between 6-19 jobs and 10% more than 20 jobs.

The inability to generate new jobs and move along the stages of the entrepreneurial process towards an established, mature enterprise needs immediate solutions since it is imperative for a country to have continuous development, to have constant economic growth and more and

Figure 17: Sectorial Distribution

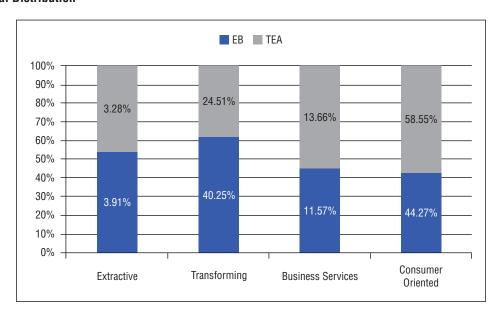
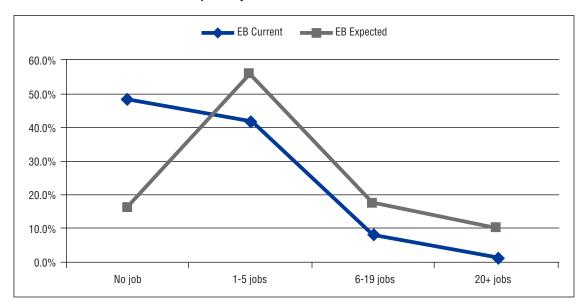




Figure 18: **Established Business Current and Expected jobs**

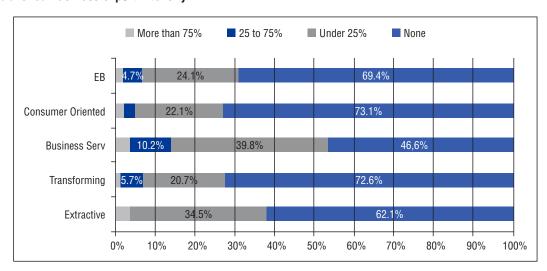


better established businesses that focus on innovation and expand and open new markets.

GEM measures the extent in which entrepreneurs sell to customers outside their economies, as an indicator of international orientation and of international competitiveness. In the established business 69.4% do not have foreign customers. Only 6.5% have an international portfolio covering more than 25% of their total clients. This result is low compared to the average of efficiency driven economies (11.48%) and of innovation driven economies (14.5%).

When these indicators are analyzed by sectors, as indicated in Figure 19, the business service sector and the extractive industry sector are the ones that have the highest international orientation. Although in 1992 the government created Proexport, (the entity responsible for the commercial promotion of exports), Colombian

Figure 19: **Established Business export intensity**



Global Entrepreneurship Monitor Caribbean 2011 | Colombian National Report



businesses still have low participation in international markets.

Surprisingly new enterprises have more international presence than established business, where 44% of the new businesses export versus 30.6% of the established businesses. The low export intensity of most of Colombian businesses indicates the need to study the causes and develop support mechanisms for new business so that they can adequately have the means to increase their exports.



6. Discontinuous Entrepreneurs

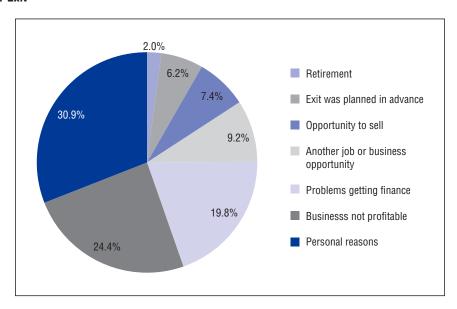
The last stage in the entrepreneurial process is the moment when the entrepreneur decides to exit his/her business.

Along the entrepreneurial process, entrepreneurs face different situations that may compel them to discontinue their initiative either temporarily or definitively. The discontinuance rate is due to several factors including the market and financial failure of the business, the entrepreneur's personal dissatisfaction with the activities required to keep the business in operation, as well as other factors dealing with health problems, living conditions, family requirements and retirement.

Figure 20 shows the main reasons for business discontinuance in the last 12 months in Colombia. 30.9% of the cases are due to personal reasons, 24.4% to lack of profitability and 19.8% to difficulties in financing the operation.

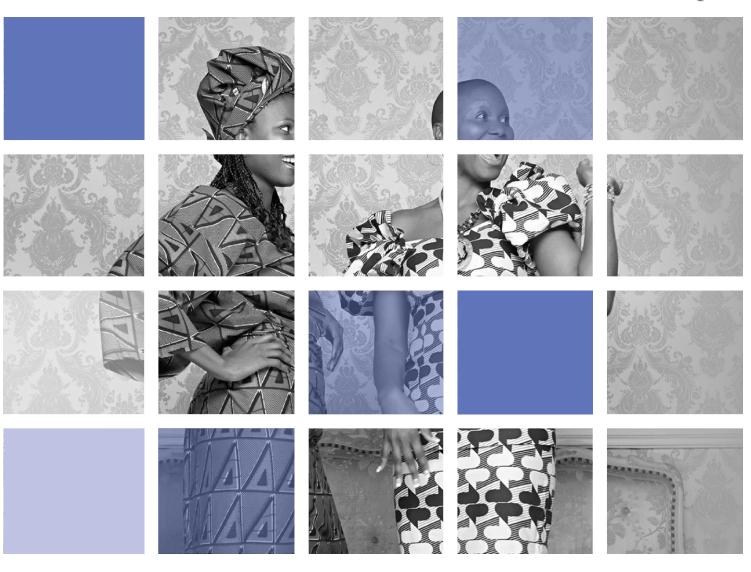
Again, there is a need to orient and better train the new entrepreneurs to allow them to obtain the skills required to manage the new business, have a better entrepreneurial vision and be able to identify and study the opportunity. By including these in the entrepreneur's development program much of the discontinuance cases can be avoided.

Figure 20: **Reasons for Exit**



Global Entrepreneurship Monitor Caribbean 2011

Colombian National Report







7. Entrepreneurial Framework Condition

Although there is not a complete understanding of all the variables that have a direct effect in entrepreneurship development, GEM evaluates, through the National Expert Survey, several framework conditions (EFCs) to measure the status of these in every country.

In 2011, Colombia surveyed 36 experts in the different areas indicated in the GEM model (Figure 2): entrepreneurial finance, government policy, government entrepreneurship programs, entrepreneurship education, R&D transfer, internal market openness, physical infrastructure for entrepreneurship, commercial, legal infrastructure for entrepreneurship and, cultural and social norms as well as in three additional topics: Intrapreneurship Environment, High Growth Enterprises and Women Support.

Each expert, evaluates a different set of statements using a Likaert scale from 1 to 5, where 5 indicates that the statement fosters entrepreneurship in a very positive way and 1 in a very negative way.

As indicated by Figure 21, the results for Colombia are discouraging; only two of the overall conditions have scores above 3.0 and four are below 2.5 To be able to produce new policy requirements, it is very important to analyze in detail some of these conditions.

7.1 Financial Support

An important element for the development of new enterprises is the existence of financial support which allows entrepreneurs access to the financial resources they need to start a new enterprise. As indicated by Table 7, in all the statements regarding the Colombian financial support, the scores given were very low (From 1.5 to 2.1).

According to these results, the lack of financial resources may be one of the reason new businesses start small, use low-end technology and are not oriented to competitive markets.

Figure 21: **NES Scores**

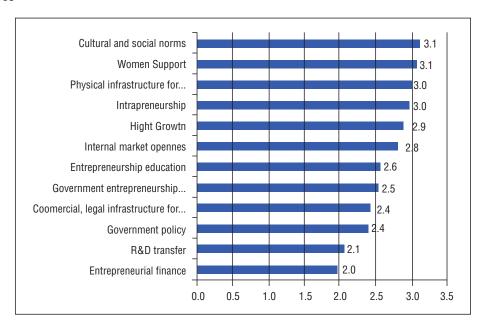




Table 7: **Finance Support**

Finance Support - In my country, there is sufficient	
Equity funding available for new and growing firms	1.8
Debt funding available for new and growing firms	2.1
Government subsidies available for new and growing firms	2.1
Funding available from private individuals (other than founders) for new and growing firms	1.8
Venture capitalist funding available for new and growing firms)	1.5
Funding available through initial public offerings (IPOs) for new and growing firms	1.7

The creation of new mechanisms such as: the development of seed capital funds, the conformation of angel investor's networks, the development of venture capital firms, the establishment of new credit options with accessible warranties, may improve this basic framework condition for the different type of businesses that are created in Colombia. Another option is to provide fiscal stimulus for potential investors in new enterprises in order to encourage the financing of new businesses.

7.2 Government Policies

The importance of the government in the formulation and application of policies oriented toward promoting and supporting entrepreneurship, facilitating the creation of new enterprises and providing legal stability to both investors and entrepreneurs is widely recognized.

The results in Table 8 show that the national experts consider that the Colombian govern-

Table 8: **Government Policies**

Government Policies - In my country,	
Government policies (e g , public procurement) consistently favor new firms	2,3
The support for new and growing firms is a high priority for policy at the national government level	2,9
The support for new and growing firms is a high priority for policy at the local government level	2,5
New firms can get most of the required permits and licenses in about a week	2,0
The amount of taxes is NOT a burden for new and growing firms	1,9
Taxes and other government regulations are applied to new and growing firms in a predictable and consistent way	2,5
Coping with government bureaucracy, regulations, and licensing requirements it is not unduly difficult for new and growing firms	2,1



ment has not implemented adequate policies to foster entrepreneurship. The statements received scores between 1.9 and 2.9, showing that entrepreneurship and entrepreneurial development is not a high priority policy at the national (2.9) and local level (2.5). There are also deficiencies in public procurement (2.3), ease for obtaining permits and licenses (2.0), taxes (1.9) regulations (2.5), and bureaucracy (2.1). Complex paperwork, processes and varying regulations are an obstacle for new enterprises and may explain the many problems the entrepreneurial pipeline has. It may also explain why, with so many potential and intentional entrepreneurs, only a small fraction achieve a startup business (0-3 months) and even less maintains the business to a 3-42 months or longer than 42 months.

7.3 Education & Training

The capacity of the entrepreneur to go from an idea to the realization of a successful business is related to the entrepreneurial competences (knowledge, ability and skills) the individual may have, the type and quality of education obtained, and the training and skill developments received.

As shown on Table 9, the experts provided very low scores for the education and training components (1.6 to 3.1) specifically in primary and secondary entrepreneurial education (1.6 to 2.1). This means new measures need to be taken at all educational levels to develop entrepreneurial spirit components, (creativity, self sufficiency, personal initiative, opportunity development, achievement motivation etc.), and acquire knowledge in market, economic concepts and starting an entrepreneurial process. It is also important to train primary and secondary teachers, board members, and parents, in entrepreneurial education to improve the level of the entrepreneurial competences in the population.

Colleges, universities and other organizations oriented to business and management education obtained only median results (2.9 to 3.1) indicating that improvements are also required in these levels.

7.4 Women Support to Startup

In the APS results, a significant difference in TEA was found between men and women. According to the experts, as shown on Table 10,

Table 9: **Education & Training**

Education & Training - In my country	
Teaching in primary and secondary education encourages creativity, self-sufficiency, and personal initiative	2.1
Teaching in primary and secondary education provides adequate instruction in market economic principles	1.8
Teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation	1.6
Colleges and universities provide good and adequate preparation for starting up and growing new firms	2.9
The level of business and management education provide good and adequate preparation for starting up and growing new firms	3.1
The vocational, professional, and continuing education systems provide good and adequate preparation for starting up and growing new firms	3.1



Table 10: Women's Support to Startup

Women's support to start up - In my country	
There are sufficient social services available so that women can continue to work even after they start a family	2.3
Starting a new business is a socially acceptable career option for women	3.2
Women are encouraged to become self-employed or start a new business	2.8
Men and women get equally exposed to good opportunities to start a new business	2.8
Men and women have the same level of knowledge and skills to start a new business	3.9

men and women have the same level of knowledge and skills to start a new business (3.9), and yet, women do not have a support system which will enable them to work and care for their family (2.3), receive encouragement to be self employed or start a new business (2.8), receive exposure to good opportunities (2.8) and gain social acceptability of entrepreneurship as a career option for women (3.2).

If Colombia is determined to raise the entrepreneurial development rates for women, new support and educational programs are going to be needed dealing with topics such as career plan development, new ideas about entrepreneurship, risk taking behavior, opportunity identification and business development.



8. Special Topic – Intrapreneurship

Traditionally GEM has oriented its efforts to study entrepreneurship and all its aspects. However, in the 2011 cycle, a decision was taken to study as a special topic, intrapreneurship, understood as the study of people who play a leading role in creating and developing new business activities within an organization. It includes all the employees that developed or launched new goods or services, or setup new business units that constitute a new establishment or subsidiary for the main employer.

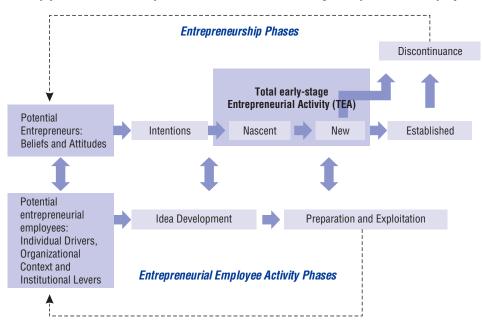
Figure 22 shows the model GEM used to measure the Entrepreneurial Employee Activity (EEA). The research distinguished three phases of EEA:

• Potential entrepreneurial employees: are the employees who have individual drivers, aspirations and attitudes towards entrepreneurship, a proper organizational context and institutional leves that foster entrepreneurial employee activity.

- Idea development: are the employees who are starting to develop a new entrepreneurial activity for their employer realizing activities such as searching information, brainstorming and submitting ideas.
- Preparation and exploitation: are the employees who have started to develop a new entrepreneurial activity for their employer and are realizing activities such as preparing a business plan, marketing the new activity, finding financial resources and acquiring a team of workers for the new activity.

The report for 2011, measured the entrepreneurial employee activity rate according to a broad and a narrow definition. The broad definition included all the employees who in the past three years were actively involved in a leading role developing an idea or in the preparation and exploitation of an activity within his organization, while the narrow definition refers only to the employees who in the past twelve months are currently developing an entrepreneurial

Figure 22 Entrepreneurship process and GEM operational definitions, including entrepreneurial employee activity





activity within his organization. The following data refers only to the narrow definition.

Figure 22 shows the results of the entrepreneurial employee activity (EEA) in 52 countries in 2011. It is clear that EEA is more common in the innovation-driven economies (4.6%) than in efficiency or factor driven economies, 1.8% and 0.3% respectively.

Colombia had an EEA rate of 1.5%, which is below the average of the efficiency-driven, and average within the Latin and South American countries. The countries with the highest EEA rates were Finland (8.0%), Belgium (8.6%), Denmark (9.2%) and Sweden (13.5%). While the countries with the least EEA rates were: Bangladesh (0%), Pakistan (0%), Jamaica (0%) and Panama (0%).

The EEA has a distribution quite different than the TEA, because the innovation driven economies that did not have very high TEA present the highest EEA and the factor driven economies that have a very high TEA present the lowest EEA. A possible explanation could be that in the innovation driven economies, the percentage of the adult population employed in organizations is higher having more employees on a relative base. Another element to consider is the educational level of the employees, the level of their enterprises in terms of technology, market, sizes, international capacity, management, infrastructure, innovation policies and stimuli/rewards that may promote better intrapreneurship.

These results also indicate that the entrepreneurial competences of a nation are split between two groups: entrepreneurs and intrapreneurs and that it is necessary to study both groups and develop policies for both. It is important then for the educational programs to focus more on intrapreneurship.

The age distribution of entrepreneurial employees, as indicated by Table 11, follows the inverted U shape, very similar in form but not in values, to the TEA shape. The highest prevalence in Colombia is in the 35-44 year old group. The lowest value is registered in the 55-64 year old group perhaps because those who are still

Figure 23: Entrepreneurial Employee Activity (EEA) in 52 economies, 2011

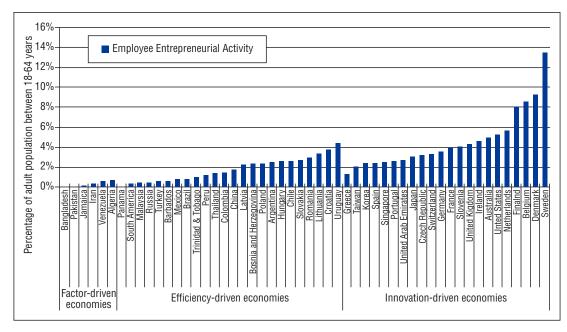




Table 11: EEA rate by demographic characteristics

	Adult
Age	
18-24	1,5%
25-34	1,7%
35-44	1,9%
45-54	1,2%
55-64	,4%
Gender	
Male	2,4%
Female	,5%
Region	
Atlantic	1,0%
Central	1,3%
Bogotá	2,7%
Oriental	,9%
Pacific	1,3%

employed at this age may find themselves in low level positions or close to retirement and thus motivated by other factors. The propensity between men and women is again quite different and the proportion is practically 5 times higher that the proportion in TEA.

When looking at the regions, it is interesting that Bogotá has a propensity twice as big as the Pacific and Central regions which can be accounted by the presence of bigger companies in Bogota. In Colombia, a study that allows the identification of the main variables that promote intrapreneurship within an organization (size, management style, entrepreneurial culture, rewards, level of education of personnel) needs to be designed.

The results show that the people with the highest income have a bigger prevalence of intrapreneurial activity. It is not clear if the determinant variable that allows more entrepreneurial activity is the income or the position, nor if it is the entrepreneurial orientation which provides better positions and better income.

Educational level is clearly a factor in entrepreneurial activity as was shown in TEA, and it is

Table 12: EEA rate by income and education

	Adult	Employment
Income		
Lowest 33%tile	,5%	2,6%
Middle 33%tile	,9%	2,8%
Upper 33%tile	2,9%	6,4%
Education		
None	,4%	2,0%
Some Secondary	1,0%	4,0%
Secondary Degree	,7%	2,1%
Post Secondary	2,4%	4,9%
Grad Exp.	10,6%	16,7%



also observed from Table 11. The difference between professionals with graduate experience and people with a lower educational level is extremely significant. Again, entrepreneurial education should be expanded to provide more people with the knowledge and skills needed to develop new enterprises either through entrepreneurship or intrapreneurship. Table 13, shows how EEA grows according with size of the company but there is an odd point in the 500+ employee, that may arise from the sampling.

At the global level some other differences were identified between the individuals and enterprises in TEA and the individuals and enterprises in EEA. For example:

- The job growth expectation is higher in the individuals in EEA.
- Innovation rate, measure by products/services new to their customers, is also higher in the individuals in EEA.

Table 13: Distribution of Entrepreneurial employee activity by organization size

Employees	EEA
<10	2,71%
10-49	3,79%
50-249	3,90%
250-499	12,18%
500+	4,34%

The Intrapreneurial employees when compared with the new entrepreneurs did show:

- More capacity to perceive opportunities
- More ability to start a business
- More apt to be involved in a new independent business.

Global Entrepreneurship Monitor Caribbean 2011 Colombian National Report







9. Conclusions

The main points that can be derived from the sixth GEM research in Colombia are:

- The population of Colombia shows a very high level in all the variables related to potentiality and willingness to become entrepreneurs. The results show a very positive entrepreneurial environment, which generates lots of potential entrepreneurs and lots of intentions of becoming entrepreneurs. People in the country have the aspiration, perception of competences, perception of opportunities and willingness to overcome the fear of failure needed. They also have positive views on the social perceptions of entrepreneurship (entrepreneurship as a good career choice, high status to successful entrepreneurs and media attention to entrepreneurs.
- The TEA for Colombia keeps showing a high value (21.4%), sixth in the world and fourth in the Americas. This positive result shows that many Colombians are in the process of starting their ventures, but the TEA for new business is just 6.23%, which indicates that approximately for every 5 individuals who are in the 0-3 months span, only 2 are in the 3-42 months span. These results clearly indicate a problem in the entrepreneurial pipeline that can be solved by implementing new programs to improve the survival rate of the nascent business.
- A major concern is that only 7.5% of the population had an established business in 2011. This is alarming not only because the figure has been decreasing through the years, but also because it points to another problem along the entrepreneurial pipeline due to the high TEA rate. Again new support systems should be developed to allow more enterprises to move and grow beyond the 42 month period.
- When the entrepreneurial activity was analyzed by regions and cities, the data

- showed big differences regarding TEA and Established Business. These results suggest that entrepreneurial development policies cannot be standardized for the whole country, especially in entrepreneurial support and development programs, which should be designed and implemented for every region considering, their potentiality, and sociocultural context.
- Some measurements from this investigation are negative for the Colombian entrepreneurial development. Very few enterprises have a real international orientation, use modern technology, or develop innovative products. These conditions compromise and are counterproductive to national competitiveness. New strategies must be developed to orient new and established businesses toward innovation, international markets, growth and new product development. These policies should be included in the Colombian entrepreneurial policy.
- · Many of the new business created in Colombia still have a very strong "necessity motivation" which generates very small businesses with very low investments, very few jobs generated, and very low survival and growth perspectives. This may be the main cause of the exiting in the different stages of the entrepreneurial process. New policies should be designed to attend this critical situation.
- Gender is a variable that affects business creation. The study shows how men create more businesses than women. Research must be conducted to identify the causes of this disparity and find ways of encouraging women to be more actively involved in business creation.
- It was possible to debunk the common myth that education is not correlated with entrepre-

Global Entrepreneurship Monitor Caribbean 2011

Colombian National Report



neurship. The results showed the higher the level of education the higher the TEA rate. To improve the quantity and the quality of the future Colombian entrepreneurs, the quality of the education and particularly entrepreneurial education must be enhanced.

- GEM study measured intrapreneurship for the first time and Colombia had very low rates, which indicates that Colombian enterprises do not have a well established entrepreneurial culture when compared to other countries. To improve enterprise innovation and organiza-
- tional dynamics, intrapreneurship orientation for employees must be developed.
- The experts considered that the entrepreneurial framework condition in Colombia is weak. Elements requiring immediate attention are: entrepreneurial finance, R & D transfers, government policies (bureaucracy and taxes), entrepreneurial education (elementary and high school), internal market development, entrepreneurial skills, intellectual property legislation, commercial and professional infrastructure.



10. Annexs

Annex 1. Technical Data of the Adult Population Survey

Study	Global Entrepreneurship Monitor (GEM) 2011 - APS Methodology
Methodology	Quantitative
Interview techniques	Telephone interviews using the CATI (Computer Aided Telephone Interview) in the cities and face to face in rural areas and small cities.
Dates	June -August 2011
Interview profile	Adults 18-64 year old residents in Colombia
Selection of the interview	Random selection among the home member
Universe	Home with telephone in the main cities. Census data in small and rural cities.
# of interviews by strata	Strata 1: 2085; Strata 2: 3152; Strata 3: 3023; Strata 4: 1155; Strata 5: 572; Strata 6: 384
Total number of interviews	10.374
Response rate	60% of the contact people accepted the interview.
# of contacts	Five (5) + Calls was the maximum number of tries.
Colombian Team	Universidad de los Andes, Universidad del Norte, Universidad Icesi, Universidad Javeriana - Cali
Vendor	Centro Nacional de Consultoría



Annex 2. About the GEM Caribbean Project

GEM Caribbean is a three-year project, supported by Canada's International Development Research Centre (IDRC) that will establish, train and strengthen entrepreneurship research teams in five Caribbean countries: Colombia, Jamaica, Trinidad & Tobago, Haiti, and Barbados.

The research by these teams will measure the levels, underlying factors, and environmental constraints of entrepreneurship within each national environment and comparatively within the region by using the Global Entrepreneurship Monitor (GEM) methodology. The findings can assist policymakers, educators, and researchers (both applied and theory building) in creating supportive environments that encourage job creation and inclusive economic development through growth in entrepreneurship.

The overall objective of this project is to build research capacities on entrepreneurship research and to provide policymakers with a stronger empirical foundation on which to build and monitor progress in the promotion

of entrepreneurship and job creation in the Caribbean.

The specific objectives include:

- To build the capacity of national research teams to conduct entrepreneurship research, report and disseminate their findings, and sustain their work in the long-term.
- · To generate research findings on entrepreneurship on a national and regional level, with a focus on high-growth entrepreneurship, particularly among youth and women as well as on creative industries in the Caribbean.
- To facilitate discussion of these research findings and policy recommendations among the private sector, policy makers, educators, and researchers, particularly regarding promotion of high-growth entrepreneurship and gender and entrepreneurship.
- To generate a harmonized, publicly available database on entrepreneurship in the Caribbean through the application of the Global Entrepreneurship Monitor (GEM) methodology.



Annex 3. National Teams GEM Caribbean 2011

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