



# Caribbean Regional Report 2012



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# GLOBAL ENTREPRENEURSHIP MONITOR CARIBBEAN

CARIBBEAN REGIONAL REPORT 2012

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## LIST OF ABBREVIATIONS

**APS:** Adult Population Survey

**EB:** Established Business

**EU:** European Union

**EFC:** Entrepreneurial Framework Condition

**GEM:** Global Entrepreneurship Monitor

**GNPPC:** Gross National Product Per Capita

**GNP:** Gross National Product

**IDRC:** International Development Research Centre of Canada

**ILO:** International Labor Organization

**MSME:** Micro, Small and Medium Enterprises

**NES:** National Experts Survey

**OCDE:** Organization for Economic Co-operation and Development

**PPP:** Purchase Power Parity

**R&D:** Research and Development

**SV:** Secondary Variables

**SBDC:** Small Business Development Centers

**TEA:** Total Early-Stage Entrepreneurial Activity

**USD:** United State Dollar

**USA:** United States of America

**UNICEF:** United Nations Children's Fund

**UNESCO:** United Nations Educational, Scientific and Cultural Organization

**UN:** United Nations

**WEF:** World Economic Forum





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## EXECUTIVE SUMMARY

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**G**EM Caribbean project, is a research activity executed with the support of the International Development Research Centre of Canada (IDRC), since 2011, in a joint academic venture with the Arthur Lok Jack Graduate School of Business, University of the West Indies in Trinidad & Tobago; Cave Hill School of Business, University of the West Indies in Barbados; University of Technology in Jamaica; and the Center for Entrepreneurship Development at Universidad ICESI in Colombia, with the main objective of studying in detail many characteristics, variables and factor related to the entrepreneurial process in those countries.

This report presents the main measurements, about the entrepreneurial process in the Caribbean region. Also, there are reports for each country that could be reviewed in: [www.gemcaribbean.org](http://www.gemcaribbean.org), and a global report that could be reviewed in: <http://www.gemconsortium.org/>

The entrepreneurial pipeline concept indicates that, in the Caribbean population, 76% of the adults (18-64) have a positive socio-cultural perception about entrepreneurship and entrepreneurs, 67% are potential entrepreneurs, 47% are intentional entrepreneurs, 12% are nascent entrepreneurs, 7% are new entrepreneurs and 8% are established entrepreneurs.

In terms of the total early entrepreneurial activity (nascent+new), the Caribbean countries had high indicators: at the world level Colombia is 11th, Barbados is 14th, Trinidad & Tobago is 19th; at the Latin American level, Colombia is 4th, Barbados is 6th and Trinidad & Tobago is 10th.

As a group, the Caribbean countries present higher TEA (Total Early Entrepreneurial Activity) than the country groups of USA, European Union, Non-European Union, Asia Pacific & South Asia, Middle East & Northern Africa, Latin American but lower than the Sub-Saharan Africa.

The entrepreneurial pipeline of the males presents better indicators than the entrepreneurial pipeline of females. This situation requires a deeper research to identify the reasons behind this behavior and formulate policies and programs to solve the disparity.

As the whole, Caribbean entrepreneurs are creating business with low level in the use of recent technology, oriented mainly to the local markets and with limitations in terms of innovation.

In the report, some new research areas are proposed: disparity male vs. females, entrepreneurial education system for entrepreneurs, evaluation of the support system for entrepreneurs, financing for entrepreneurs, entrepreneurial confidence development, among others.

The main policy recommendations are:

- Development of a policy for entrepreneurs with their own support mechanisms.
- Development of programs oriented to solve limitations that entrepreneurs have.
- Enhancement of the entrepreneurial culture and the financial support programs.
- Improvement of the entrepreneurial education; designing support systems and programs for each one of the entrepreneurial pipeline stages.
- Improvement of the regulatory system to encourage a higher level of formalization.

GEM Caribbean team is open to attend any request for information about many of the variables that are not included in this executive report, and also to receive recommendations about how to improve this research and the dissemination process of the results obtained in GEM.





## INTRODUCTION

A broad agreement exists 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 well-being of a society.

The Global Entrepreneurship Monitor (GEM) conducts 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 Business School. 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 with 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.



## GEM CARIBBEAN

**G**EM 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: Colombia, Jamaica, Trinidad & Tobago and Barbados.

The research done 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 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, to report and disseminate their findings, and to 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.





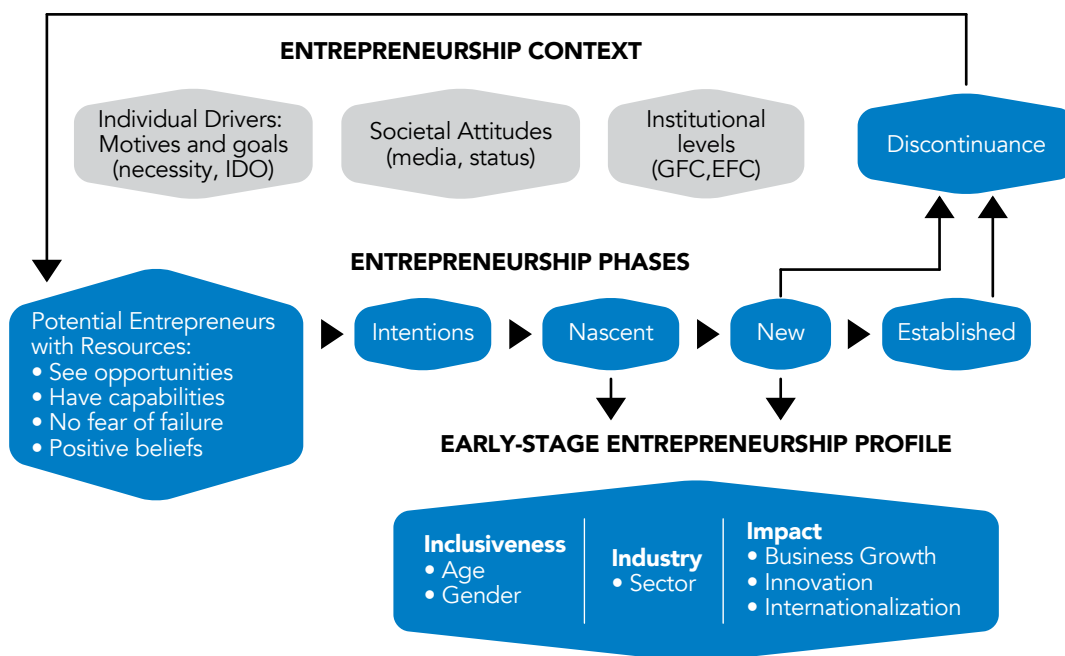


## GEM MODEL

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; the main stages in which GEM divides the entrepreneurial process and how it classifies the entrepreneurs according to the level of their organizational development:

Figure 1. Entrepreneurial process



Source: Global Entrepreneurship Monitor: 2012 Report (2013)



For the analysis of GEM results, the “Entrepreneurial Pipeline” concept (Varela & Soler, 2013) will be used considering the following stages:

**Socio Cultural Acceptance:** The entrepreneurial process is a social process executed by people living in a specific cultural and social condition, for that reason the first stage measures the amount of people that have a positive perception about entrepreneurship. In the GEM research, people are asked if: 1) they consider starting a new business as a good career choice, 2) they associate entrepreneurs with high status and 3) there is a lot of positive media attention for entrepreneurship.

A positive perception of the three concepts mentioned above will foster motivation, professional orientation, commitment and resilience in people, thereby increasing the proportion of adults willing to try to start up new enterprises, and the number of active entrepreneurs willing to keep their business growing.

**Potential Entrepreneurs:** The second stage in the entrepreneurial process determines the amount of people that have the potentiality to become an entrepreneur in the future. Potential Entrepreneurs are those who consider that they: are able to perceive opportunities in their area of living, have the necessary skills and abilities to create and manage a new business and have the capacity to overcome the fear of failure.

**Intentional Entrepreneurs:** The third stage in the entrepreneurial pipeline happens when the potential entrepreneurs express their intention of starting a new business alone or with others within the next three years.

**Nascent Entrepreneurs:** The fourth stage in the entrepreneurial pipeline happens when people have started to do specific activities in setting business and has only paid

salaries, wages or any other remuneration to employees and/or owners for less than three (3) months.

**New Entrepreneurs:** The fifth stage in the entrepreneurial pipeline happens when the people has been owning and managing a business and has paid salaries or any other remuneration to employees and/or owners for less than 42 months but more than 3 months.

**Established Entrepreneurs:** The sixth and final stage in the entrepreneurial pipeline happens when the people has been owning and managing a new business that has survived for more than 42 months paying salaries or any other remuneration to employees and/or owners.

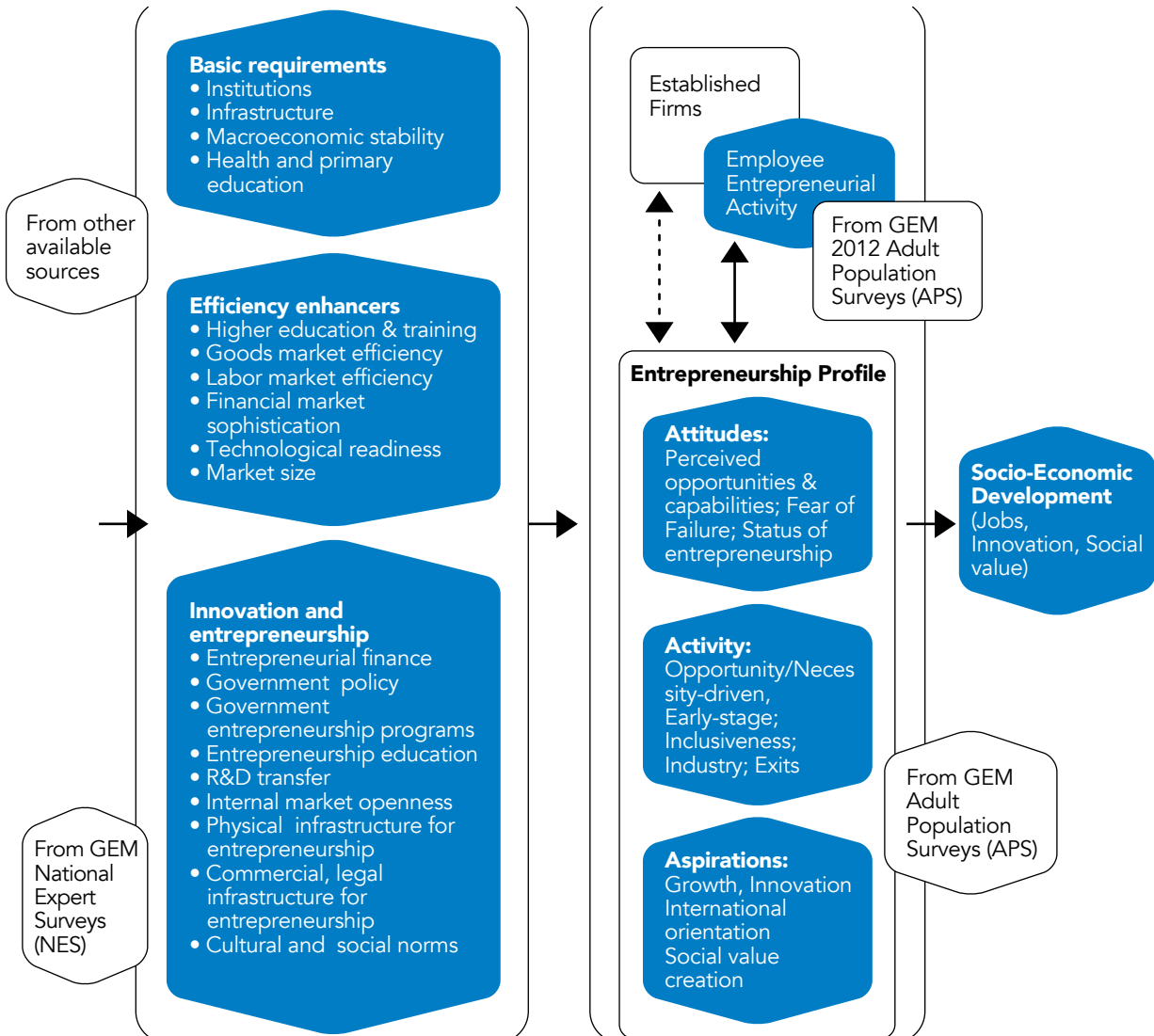
It is important for GEM not only to know the quantity of the adult population in any stages of the entrepreneurial pipeline in a given year, but also to understand the entrepreneurial profiles and/or the characteristics of the individuals who are in each of the stages. For this reason, the research takes into consideration variables associates to industry and impact, in addition, to demographic elements. GEM developed a conceptual model (Figure 2) to explain the relationships that exist between several environmental variables, the entrepreneurial activity and the socioeconomic development indicators; and for that reason it measures those variables and correlate them with the indicators of the different stages of the pipeline

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, 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 socioeconomic 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 model



Source: Global Entrepreneurship Monitor: 2012 Report (2013)



# 4

## 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)**, is a survey administered to the population aged 18-64. In the Caribbean region in 2012, around 10,500 surveys were conducted in Barbados, Colombia and Trinidad & Tobago, representing statistically the population in terms of urban, rural, age, gender and economic strata. The surveys administered per country were: Barbados – 2,055, Colombia – 6,471, and Trinidad & Tobago – 2,029. Even though interviews were conducted, in Jamaica they are not included in this report due to quality problems of the data.

These interviews to the adult population, measured multiple variables of the different

types of entrepreneurs, but the main measurement is the proportion of individuals (18-64) who belong to the following three categories. “Nascent Entrepreneurs”, “New Entrepreneurs” and “Established Entrepreneurs”. The first two groups: nascent entrepreneurs and new entrepreneurs are added to measure the Total Early Entrepreneurial Activity known as TEA. Additionally, the interviews measured the attitudes, aspirations and intentions regarding entrepreneurial activity, entrepreneurial profiles, businesses discontinuance and many other variables concerning entrepreneurs and their enterprises.

**2. The National Expert Survey (NES)**, is a survey administered to national experts who evaluate nine conditions: financial support, government policies, governmental programs, education & training, R&D transfer, commercial & service infrastructure, open-



ness of the market, physical infrastructure, cultural and social norms. In addition to that, the expert added their perception on the following subjects: opportunity perceptions, skills for start-up, motivation towards entrepreneurship, intellectual property legislation, support to woman entrepreneurs, support to business growth, innovation, immigration, intrapreneurship, entrepreneurial networks, young entrepreneurs. In 2012, Barbados conducted 34 surveys, Colombia 50, Trinidad & Tobago 36 and Jamaica 39 surveys.

**3. Secondary sources related to socio-economic variables of the countries (Secondary Variables – SV)**, are 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, UN, USA Census, EU, UNESCO, Doing Business Report, Heritage Foundation as well as from many other secondary sources of information.

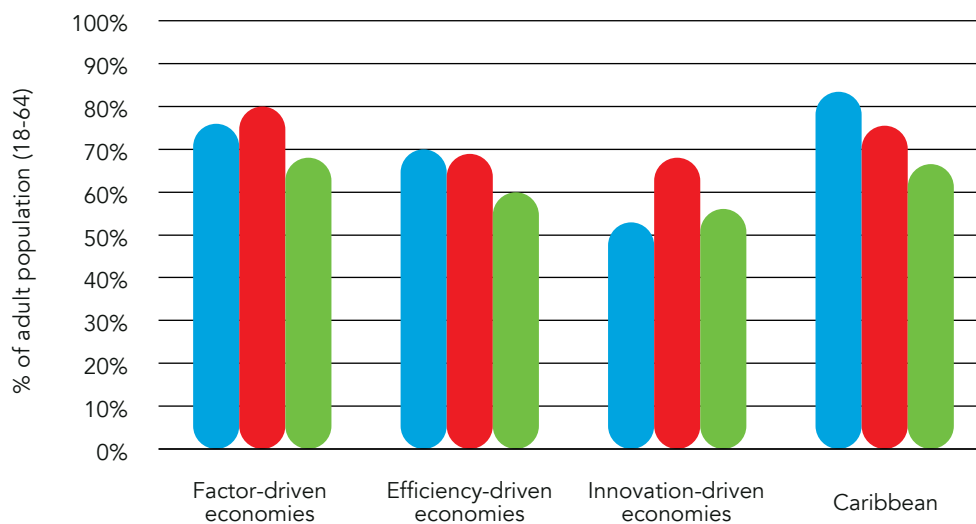




## MAIN RESULTS

This section presents the main results obtained from the adult population survey (APS). The GEM countries are integrated into three economic groups: factor driven, efficiency driven and innovation driven economies, in line with the classification generated by the World Economic Forum's Global Competitiveness Report (2013). Ac-

**Figure 3.** Socio-cultural perceptions about entrepreneurship vs. economic groups (2012)



Good career	76,0%	70,0%	53,0%	83,5%
Status	80,0%	69,0%	68,0%	75,5%
Media coverage	68,0%	60,0%	56,0%	66,5%

Source: Compiled by authors.





According to this, Colombia, Trinidad & Tobago and Barbados were categorized in the efficiency driven group by GEM.

The results were analyzed using the entrepreneurial pipeline to understand better the entrepreneurial process.

### 5.1 SOCIO CULTURAL PERCEPTION OF ENTREPRENEURSHIP

The entrepreneurial process is a social process executed by people living in specific cultural and social conditions, for that reason the positive perception that society has on entrepreneurship is a necessary condition to motivate people toward the entrepreneurial process. GEM asks if: 1) people consider starting a new business as a good career choice, 2) if people associate entrepreneurs with high status and 3) if there is a lot of positive media attention for entrepreneurship.

The social perception of entrepreneurship constructs the base of the entrepreneurial process because, if society has a positive perception towards entrepreneurship, more new entrepreneurs may decide to start a new business.

As indicated on Figure 3, in all three variables, the Caribbean region shows better average results than the ones obtained by the efficiency and the innovation driven economies. Compared to the factor driven economies, the Caribbean region shows a better perception in entrepreneurship as “good career choice” but a lower perception in relation with the “high status” and the “media coverage” factors.

Figure 4 shows the results for this three factors in 2011 and 2012 for Trinidad and Tobago, Colombia and the Latin American–Caribbean group (Argentina, Barbados, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Mexico, Panama, Peru, Trinidad &

Tobago and Uruguay), and some interesting points could be identified.

- Entrepreneurship as a good career choice increased from 2011 to 2012 in all the three groups.
- The high status of entrepreneurship decreased in Trinidad & Tobago, Colombia and the Latin American and Caribbean group.
- The media coverage for entrepreneurship decreased in all three groups.

For the entrepreneurial pipeline concept, an arithmetic average of the percentages of people providing positive perception in the three variables (good career, status, media coverage) is obtained. Table 1 presents the results for the Caribbean countries and the Country groups.

**Table 1.** Socio cultural perception indicators (2011-2012)

	2011	2012
<b>Trinidad &amp; Tobago</b>	75,7%	72,7%
<b>Colombia</b>	79%	77,7%
<b>Caribbean</b>	73,1%	75,2%
<b>Factor driven</b>	71,3%	74,7%
<b>Efficiency driven</b>	66,3%	66,3%
<b>Innovation driven</b>	61,3%	59%
<b>Latin america and Caribbean</b>	69%	71%

The fact that more people are finding entrepreneurship as a good career choice in the Caribbean in particular and in the whole Latin American–Caribbean environment is a very good indicator because it will allow having more entrepreneurs in the short medium and long range in the continent.

However, it is very important to reinforce the educational system and the media actions oriented to increase the status perception of the entrepreneurs; and to get a bigger the

media coverage, by the medias of the successful local entrepreneurs and enterprises, in order to keep a high socio cultural perception about entrepreneurship.

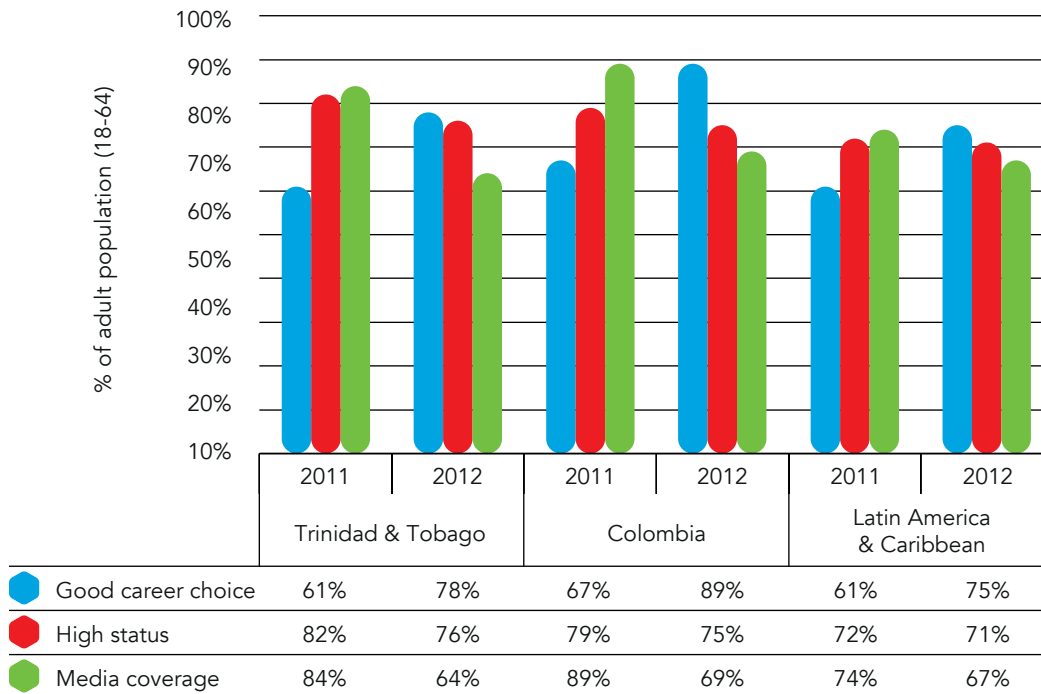
The action of starting a new business depends mainly on the attitudes and values entrepreneurs have towards entrepreneurship, which are shaped and based on their experience and environment. Therefore, education, cultural norms, entrepreneurial attitudes, entrepreneurial attention and entrepreneurship perception will have a great influence in the country's entrepreneurial activity.

GEM research analyzes these aspects to understand the sociocultural framework of entrepreneurship in a country. The national experts evaluated the social and cultural norms, the entrepreneurial education and training, and the motivation for entrepreneurship. They were asked a series of

statements which they had to score using a Likert 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. Statements as the following ones were evaluated by the experts:

- The national culture is highly supportive of individual's success achieved through their own personal efforts.
- The culture emphasizes self-sufficiency, autonomy, and personal initiative.
- The culture encourages entrepreneurial risk-taking.
- The culture encourages creativity and innovativeness.
- The culture emphasizes the responsibility that the individual (rather than the collective) has in managing his or her own life.

**Figure 4.** Socio-cultural perception about entrepreneurship. Caribbean (2011-2012)



Source: Compiled by authors.



- Teaching in primary and secondary education encourages creativity, self-sufficiency, and personal initiative.
- Teaching in primary and secondary education provides adequate instruction in market economic principles.
- Teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation.
- Colleges and universities provide good and adequate preparation for starting up and growing new firms.
- The level of business and management education provide good and adequate preparation for starting up and growing new firms.
- The vocational, professional, and continuing education systems provide good and adequate preparation for starting up and growing new firms.
- The creation of new ventures is considered an appropriate way to become rich.
- Most people consider becoming an entrepreneur as a desirable career choice.
- Successful entrepreneurs have a high level of status and respect.
- Often the mass media publish stories about successful entrepreneurs.
- Most people think of entrepreneurs as competent and resourceful individuals.

As shown by Table 2, the national experts in every country do not have a very positive perception about: the cultural and social norms, the education and training, and the motivation for entrepreneurship. In many case the scores are below average (3.0), which indicates that their opinion about the conditions is not too favorable for entrepreneurship, position quite different of the one proposed by the adult population. The lowest score (on EFCs) in all the countries is education and training indicates that many new educational improvements should be implemented to produce an entrepreneurial culture in these countries.

## 5.2 POTENTIAL ENTREPRENEURS

The second stage in the entrepreneurial pipeline happens when people consider that they are able to perceive opportunities in their country, when they are confident in their ability to create and manage a new business and when they consider they have the capacity to overcome the fear of failure. In this stage, they have not embarked, in any actions, to start an enterprise, even though they believe they have the capacity to do it;

**Table 2.** Socio-cultural acceptance. NES Caribbean (2012)<sup>1</sup>

	Colombia	Trinidad & Tobago	Barbados	Jamaica	Caribbean
<b>Cultural and social norms</b>	3,0	2,6	2,8	3.8	3,1
<b>Education and training</b>	2,8	2,6	2,5	2.6	2,6
<b>Motivation for entrepreneurship</b>	3,1	3,5	3,5	3.9	3,5

Source: Compiled by authors.

<sup>1</sup> Each component is evaluated using a Likert scale from 1 to 5, where 5 means very favourable to entrepreneurship and 1 means little favorable to entrepreneurship.

for this reason they are called potential entrepreneurs.

Table 3, compares Caribbean measures in the three facts that define the potential entrepreneur with the three economic groups and the Latin American and Caribbean group in 2011 and 2012 and several points can be made:

- In perceived opportunities, the Caribbean countries show a decrease from 2011 to 2012, but still show better results than the efficiency, the innovation driven economies and the Latin American and Caribbean group, but the significant improvement of the factor driven economies from 2011 to 2012 and the decrease of the Caribbean generates in 2012 better results for the factor driven economies.
- In perceived capacities, the factor driven economies and the Caribbean countries improved their perception for 2011 to 2012. Again the Caribbean countries present better results that efficiency, innovation and Latin American and Caribbean both years, but in 2012, Caribbean trails the factor driven economies.

- In terms of fear of failure, the Caribbean countries show in 2011 and 2012 a smaller perception of fear of failure that all the other country groups.

Figure 5 shows differences among the entrepreneurial perceptions in the Caribbean countries. Colombia presents the highest value (72%) in the capacity to perceive opportunities and Barbados the lowest (47%); Trinidad & Tobago (76%) and Barbados (70%) are the leaders in terms of the perception about the capacities to create and to manage a new business, and Colombia with (57%) has the lowest score. Trinidad & Tobago (17%) and Barbados (17%) show a more risk oriented approach than Colombia (32%).

For the entrepreneurial pipeline concept, an arithmetic average is established with the scores obtained in each country or group of countries of percentage perceived opportunities; percentage perceived capacities, percentage no fear of failure (complement of fear of failure).

Table 4 presents for 2012 this indicator for the Caribbean countries and the country groups.

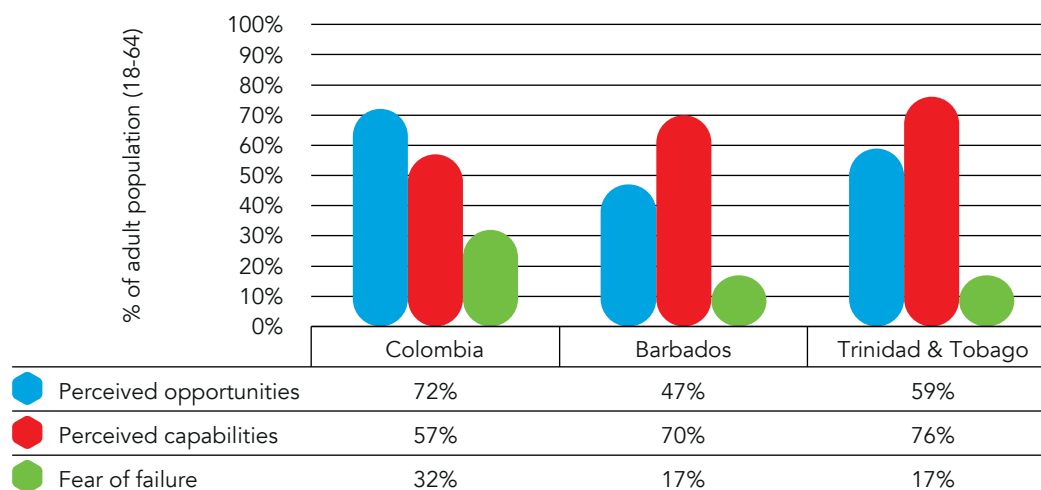
**Table 3.** Potential entrepreneurs vs. economic phases. (2011-2012)

		Perceived opportunities	Perceived capabilities	Fear of failure
<b>Factor-driven economies</b>	2011	49%	56%	37%
	2012	63%	71%	28%
<b>Efficiency-driven Economies</b>	2011	40%	52%	32%
	2012	41%	52%	32%
<b>Innovation-driven Economies</b>	2011	35%	41%	38%
	2012	31%	36%	39%
<b>Latin America</b>	2011	56%	64%	31%
	2012	53%	62%	28%
<b>Caribbean</b>	2011	65%	66%	30%
	2012	59%	68%	22%

Source: Compiled by authors.



**Figure 5.** Potential entrepreneurs. Caribbean (2012)



Source: Compiled by authors.

**Table 4.** Potential entrepreneur indicator (2011-2012)

	2011	2012
<b>Barbados</b>	63.7	66.7
<b>Jamaica</b>	65	-
<b>Trinidad &amp; Tobago</b>	74.7	72.7
<b>Colombia</b>	67	65.7
<b>Caribbean</b>	67.3	68.3
<b>Factor driven</b>	55.7	68.7
<b>Efficiency driven</b>	53.4	53.7
<b>Innovation driven</b>	45.8	42.7
<b>Latin America</b>	62.9	62.3

Trinidad & Tobago presents the highest indicator for all the Caribbean countries. The integrated Caribbean result (68.3) is greater than the indicator for all the country groups, except the factor driven economies (68.7).

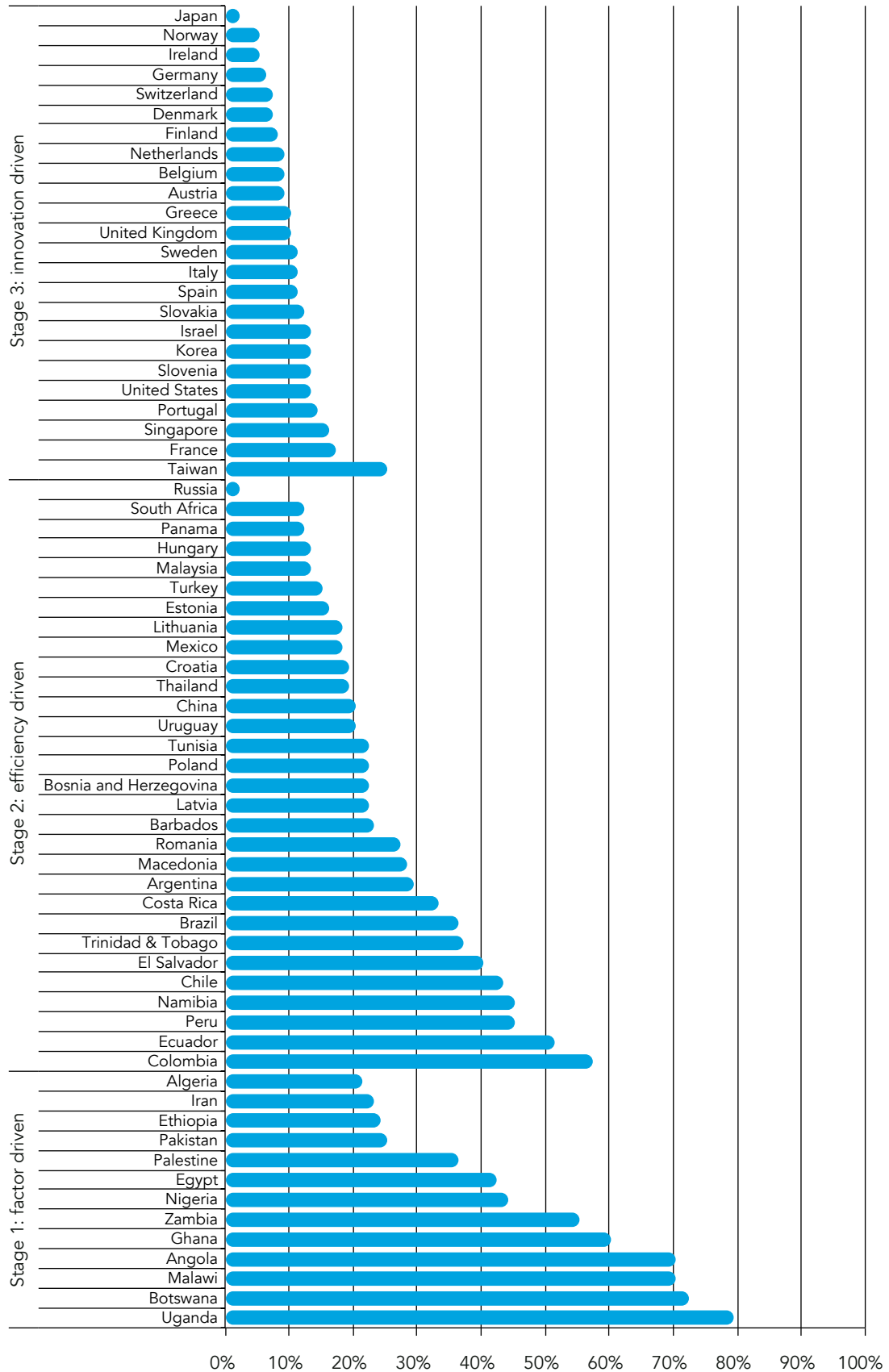
Colombia even though show a high level of capacities to perceived opportunities (72%) are not so confident in the capacities to manage the business (57%) and show a very high level of fear of failure. Whereas Barbados and Trinidad & Tobago with low levels

of fear of failure (17%) and good confidence in the capacities to manage the business, show low level in the capacities to perceived opportunities (47.6%).

The fact that more than 50% of the Caribbean people consider they are able to identify opportunities and have the capabilities to create and manage a new business, and the low level of people that will not start an entrepreneurial process due to the fear of failure that was previously analyzed show that people feel competent and willing to go ahead with the entrepreneurial process, and feel better prepared than people in most of the other country groups, and establishes a good environment for the development of entrepreneurs and is aligned with the positive social culture perceptions about entrepreneurship.

These basic conditions of the potential entrepreneurs start to indicate how the policies and the program orientations had to be country oriented and not general region policies. A very important strategy to improve the potential entrepreneurs population will be to expose the population to the development of entrepreneurial competences in the educational and training system.

Figure 6. Intentional entrepreneurs by countries (2012)



Source: Compiled by authors.



### 5.3 INTENTIONAL ENTREPRENEURS

The next stage in the entrepreneurial pipeline 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.

Figure 6, presents the results for all the countries that participated in the 2012 GEM cycle, classified in each one of the three economic groups.

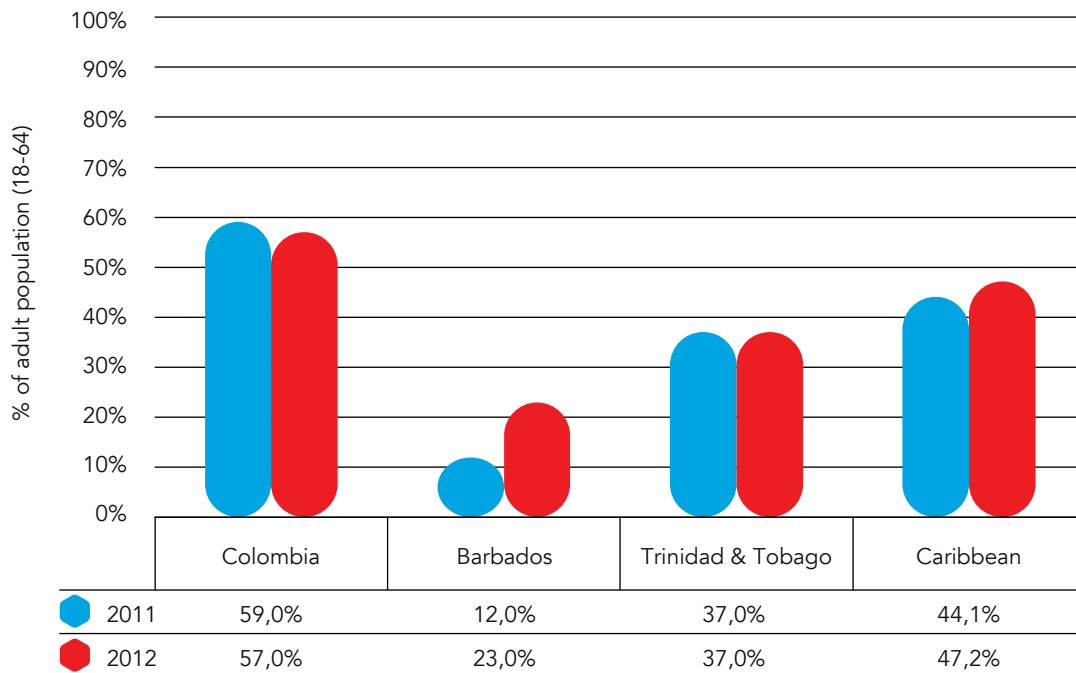
In 2012, the countries with the highest rates of entrepreneurial intentions were: Uganda (79%), Botswana (72%), Malawi (70%) and Angola (70%) while Russia (2%), Japan (2%) and Norway (5%) presented the lowest scores (Figure 6). In the Caribbean region, 57% of the Colombians will expect to start a new business in the next 3 years, a high percentage compared with 37% from Trinidad & Tobago and 23% of Barbados (Figure 7).

According to the GEM 2012 Global Report, the entrepreneurial intention rate in the efficiency driven economies is 26%, in the innovation driven is 10% and in the factor driven is 48%. When Barbados, is compared with factor or efficiency driven economies it still show a low level. On the other hand, Colombia and Trinidad & Tobago have a higher rate than the efficiency driven economies.

Taking into account the differences among the three Caribbean Countries, a series of research questions could be proposed:

- What actions are Colombia conducting to keep high entrepreneurial intentions?
- What are the issues in the entrepreneurial pipeline, in Barbados which cause the loss of so many potential entrepreneurs?
- What makes Barbados intentions increase from 2011 to 2012 in an 11%?

**Figure 7.** Entrepreneurial intentions. Caribbean (2011-212)



Source: Compiled by authors.

- What should be done in terms of training and support programs to motivate the potential entrepreneurs to actually pursue their intent to start a business within the next three years?

Many policy perspectives could be derived from the significant proportion of adults that were potential entrepreneurs but do not classify as intentional entrepreneurs in each country: developing a stronger entrepreneurial vision, developing entrepreneurial career plan, strengthen the quality of the idea development process, creating personal support systems with coaching, mentoring, and other interactive procedure to build in the potential entrepreneur the self-confidence and the determination required to become an intentional entrepreneur.

#### 5.4 NASCENT ENTREPRENEURS

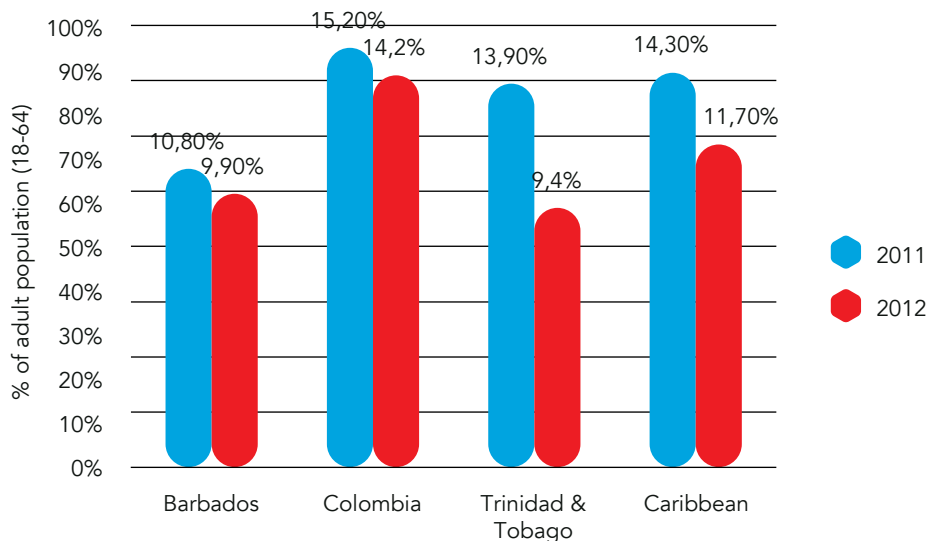
In this stage are the adults that have started to do specific activities in setting business and have only paid salaries, wages or any other remuneration to employees and/or owners for less than three (3) months.

Between 2011 and 2012, all the Caribbean countries show a decrease in the “nascent entrepreneurs” indicator. The Caribbean results showed a decreased in this stage from 2011 (14.3%) to 2012 (11.7%). The Caribbean region in 2012, with 11.7% of nascent entrepreneurs, indicates that about 4.479.930 adults are in the process of starting a business.

For the nascent Caribbean entrepreneurs some important elements were identified:

- 95.3% have clearly defined the product or service that they will offer.
- 59.7% have a business plan.
- 36.6% have established contact with other people to finance their business.
- 43.2% have a support human group for the development of their
- 37.5% already have purchased machinery, equipment, implements for their business.
- 34.4% already have bought raw materials, inputs, products or services to suppliers

Figure 8. Nascent entrepreneurs. Caribbean (2011 – 2012)



Source: Compiled by authors.





- 27.7% consider that their enterprise is in operations.
- 84.0% already made their first sale.

In all the Caribbean countries a big leakage in the pipeline occurs when moving from intentional to nascent. Policies and programs to reduce the significant leakage has to be analyzed, designed and implemented in every country.

### 5.5 NEW ENTREPRENEURS

In this stage of the entrepreneurial pipeline are the adults that have started to do specific activities in setting a business and have paid salaries, wages or any other remuneration to employees and/or owners for more than 3 months but for less than 42 months.

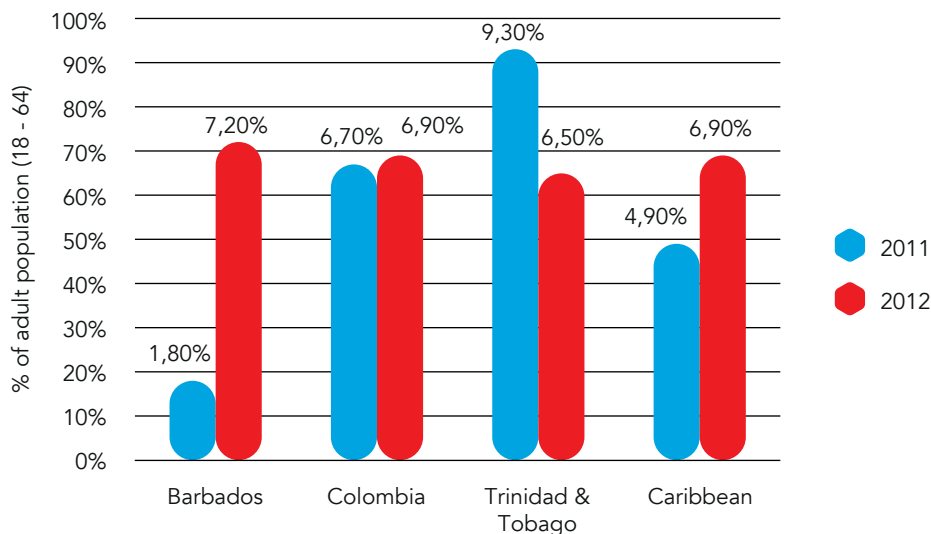
The “new entrepreneurs” indicator shows very significant fluctuation in Barbados (1.8% in 2011 and 7.2% in 2012) and Trinidad & Tobago (9.3% in 2011 and 6.5% in 2012). The Caribbean results showed an increased in this stage from 2011 (4.9%) to 2012 (6.9%). The Caribbean region in 2012,

with 6.9% of new entrepreneurs, indicates that about 2.198.846 adults are in the process of starting a business.

There are several elements that the Caribbean new entrepreneurs show:

- 98.1% consider that they have completely defined the product and/or the services they have for their customers.
- 64.4% have a business plan.
- 41.2% have had meeting with banks and other financial sources to search for financial resources.
- 46.8% have a support entrepreneurial group.
- 70.2% have purchased machinery, equipment, implements from suppliers
- 74.0% have bought raw material/products or services from suppliers.
- 87.8% consider that their enterprise is in operations.

**Figure 9.** New entrepreneurs. Caribbean (2011 – 2012)



Source: Compiled by authors.

- 97.5% already made their first sale.

Some research questions should be formulated at this time:

- Why the “new entrepreneurs” indicators have such a significant increase in Barbados from 2011 to 2012?
- Why the “nascent and new entrepreneurs” indicators in Trinidad & Tobago decreased from 2011 to 2012?
- What is happening in Colombia that the “nascent entrepreneurs” decrease but the “new entrepreneurs” indicator increases?

A deeper research on economic conditions, policies implemented in each stage, changes in the entrepreneurial perspective of the citizens, changes in the support systems, and other local variables should be implemented.

## 5.6 TOTAL ENTREPRENEURIAL ACTIVITY (TEA)

The central measurement of GEM is the Total Early 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 stages: nascent entrepreneurs or new entrepreneurs.

Figure 10 shows the total early entrepreneurial activity data for all participant countries in the 2012 cycle. As shown, there is a great variability in the TEA worldwide ranging from 4.0% to 41.0%. The innovation and efficiency driven economies present the lowest TEA rates, meanwhile the factor driven economies has the widest TEA range and the highest TEA rate.

In the innovation driven economies TEA goes from 13% in the U.S. to 4%, in Italy and Japan. In the efficiency driven economies TEA goes from 27% in Ecuador to 4% in Russia, and in the factor driven economies from 41% in Zambia to 8% in Egypt.

Colombia is the 4th, Barbados is 8th, and Trinidad and Tobago is 10th among the efficiency driven countries.

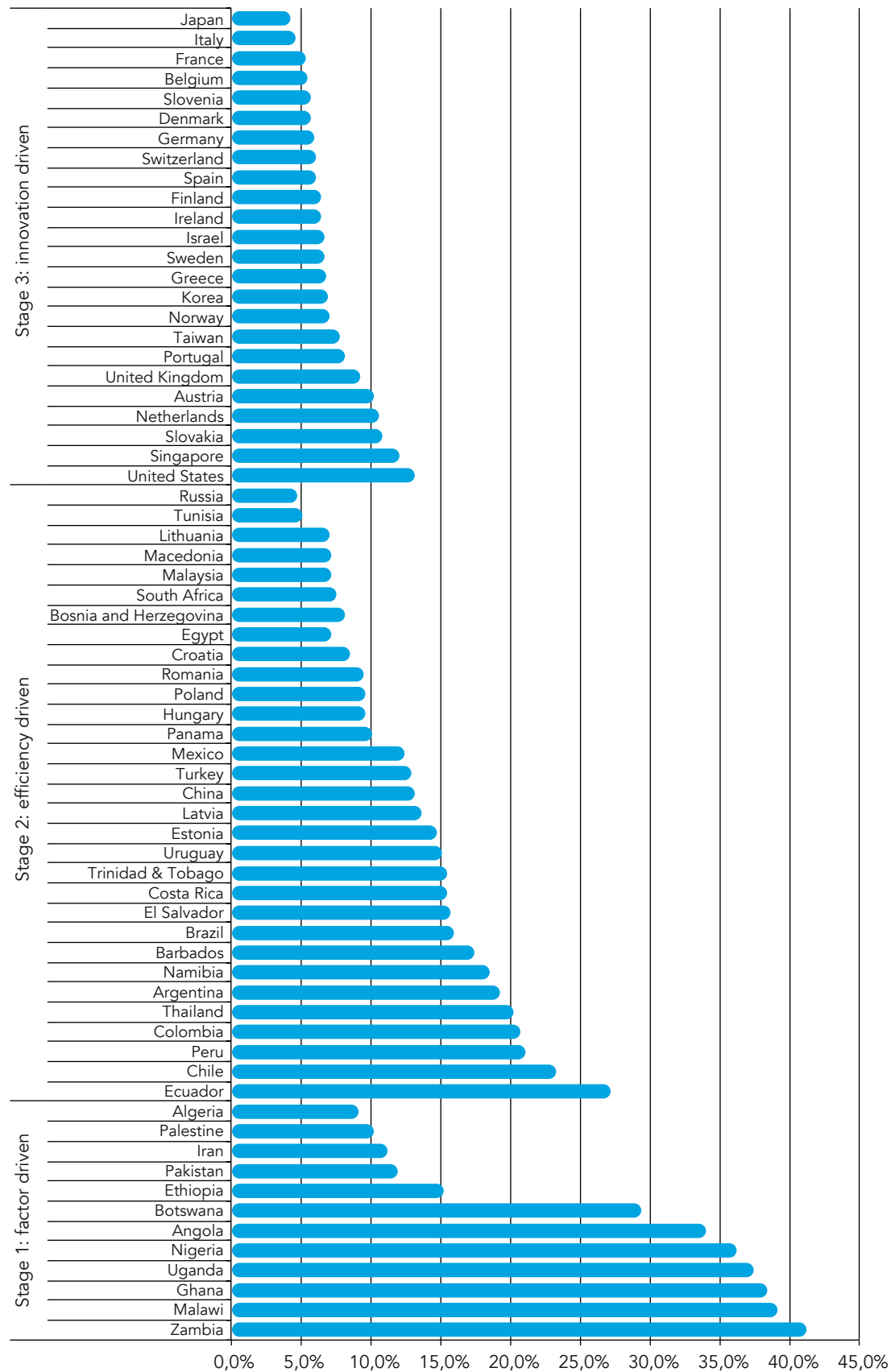
Table 5, presents the variations in TEA, among several Latin America and Caribbean countries, from 2011 to 2012. The significant

**Table 5.** TEA in Latin America and Caribbean. (2011-2012)

	2011	2012
<b>Argentina</b>	21%	19%
<b>Barbados</b>	13%	17%
<b>Brazil</b>	15%	15%
<b>Chile</b>	24%	23%
<b>Colombia</b>	21%	20%
<b>Costa Rica</b>	-	15%
<b>Ecuador</b>	-	27%
<b>Mexico</b>	10%	12%
<b>Panama</b>	21%	9%
<b>Perú</b>	23%	20%
<b>Trinidad &amp; Tobago</b>	23%	15%
<b>Uruguay</b>	17%	15%

Source: Compiled by authors.

Figure 10. TEA by countries (2012)



Source: Compiled by authors.

variations were Barbados from 13% to 17%, Panama from 21% to 9% and Trinidad and Tobago from 23% to 15%.

Figure 11, shows the composition of TEA in terms of nascent and new entrepreneurs. A very interesting point is that for all the countries in the Caribbean basin, the new entrepreneurs figures is practically the same (7%), thus all the TEA difference among those countries comes from the nascent entrepreneurs.

When the ratio (nascent/new) is established some important points can be established.

- Colombia present a ratio of 2, which means that only 50% of the nascent entrepreneurs become new entrepreneurs or in other terms that there is a very significant proportion of nascent entrepreneurs that are not able to get into the next stage: new entrepreneurs.
- Barbados with a ratio of 1.4 and Trinidad and Tobago with a ratio of 1.3 present a higher conversion rate.

Figure 12, shows the ratio (nascent/new) for the Caribbean, and the three economic groups in 2011 and 2012. The efficiency

and the innovation driven economies kept this ratio close to 1.3 in both years. The factor driven and the Caribbean present very significant changes in the two years period.

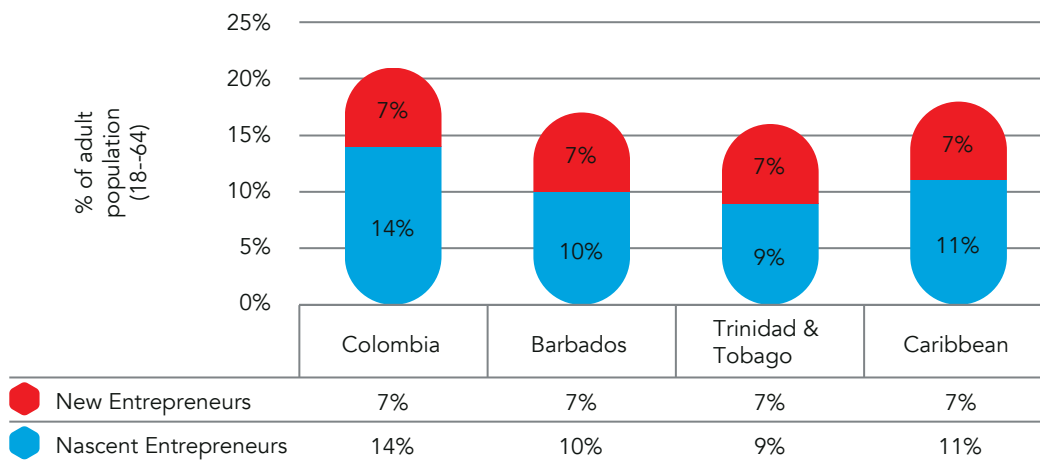
Considering the TEA results for every country and the population of the three Caribbean countries, 6.632.334 adults were involved in early entrepreneurial activities (0–42 months).

### 5.7 ESTABLISHED BUSINESSES

The sixth stage in the entrepreneurial pipeline happens when new businesses have survived for more than 42 months paying salaries. GEM categorizes these enterprises as established business.

Table 6, present the proportion of established entrepreneurs in each one of the countries and the economic groups used for comparison. Trinidad & Tobago and Colombia present the same proportion that the innovation driven economies and lower that the efficiency and the factor driven economy. Barbados presents the highest proportion which indicates the existence of a big proportion of entrepreneurs who have had a business for

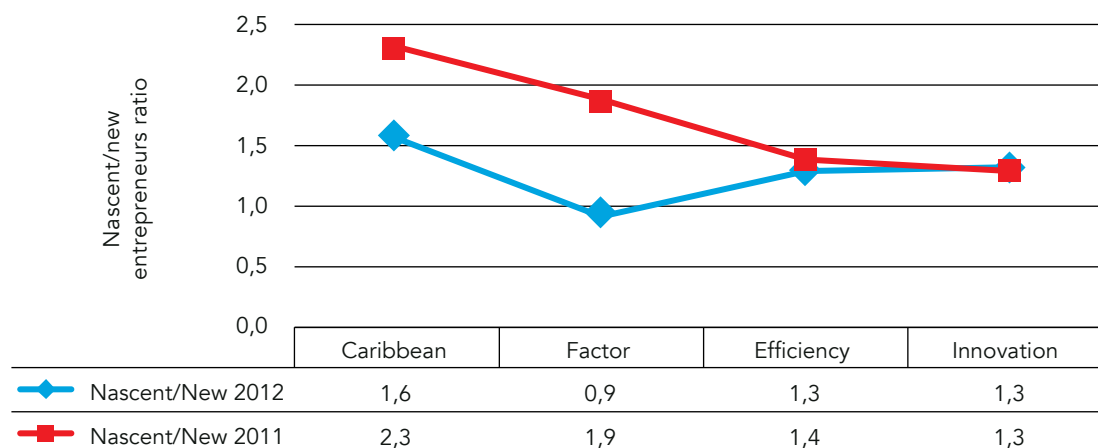
Figure 11. TEA composition (2012)



Source: Compiled by authors.



**Figure 12.** Nascent / new entrepreneurs ratio



Source: Compiled by authors.

more than 42 months of paying salaries or any other remuneration form.

**Table 6.** Established business (2012)

<b>Innovation-Driven</b>	7%
<b>Factor driven</b>	11%
<b>Efficiency driven</b>	8%
<b>Latin America &amp; Caribbean</b>	8%
<b>Trinidad &amp; Tobago</b>	7%
<b>Barbados</b>	12%
<b>Colombia</b>	7%

Source: Compiled by authors.

## 5.8 DISCONTINUOUS ENTREPRENEURS

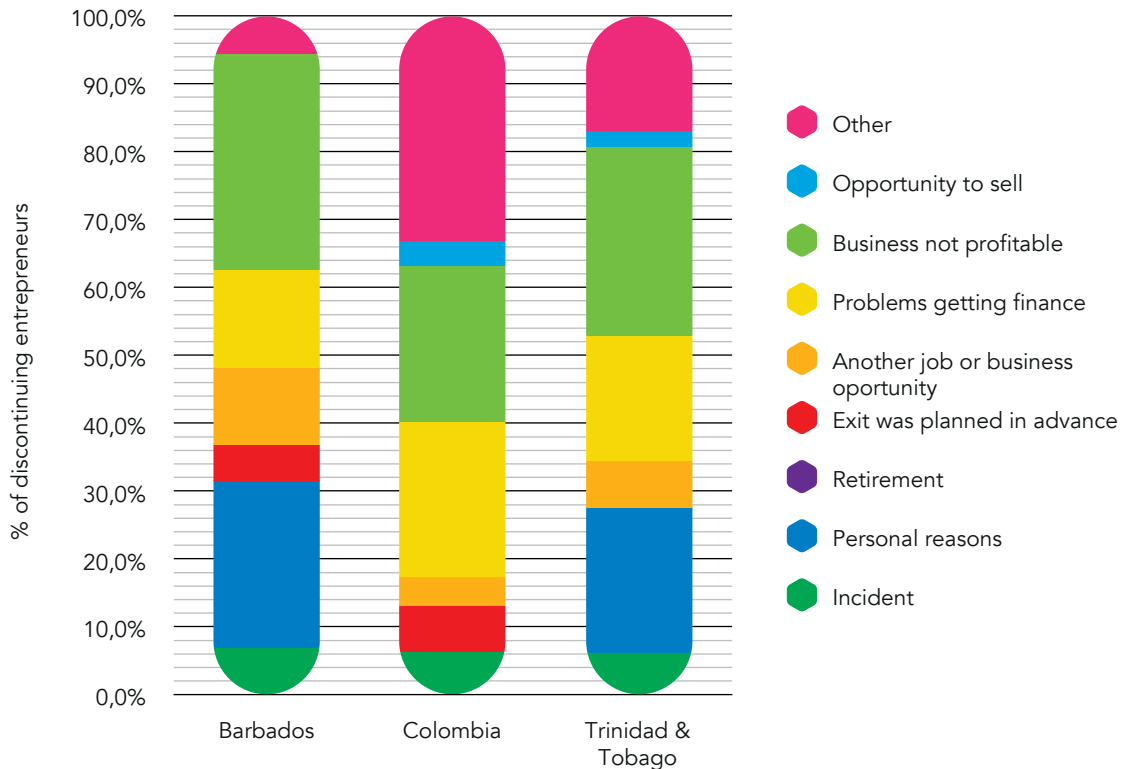
Along the entrepreneurial process, entrepreneurs face different situations that may force them to discontinue their initiative either temporarily or definitively. The discontinuance rate is due to several factors including the market and financial failure of the business, the personal dissatisfaction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

family needs and retirement. For 2012, in Colombia, 7% of the population had discontinued a business in the last 12 months being the highest among the Caribbean region, followed by 3% in Barbados, and 5% in Trinidad & Tobago. Figure 13, shows the main reasons for business discontinuance in the last 12 months in Barbados, Colombia and Trinidad & Tobago. Most discontinuances are due to a non-profitable business (31.8%, 22.9% and 27.8%), and difficulties obtaining finance (14.4%, 22.9% and 18.4%), in Barbados, Colombia and Trinidad & Tobago respectively.

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.

A policy implication may be to improve all the entrepreneurial support system to decrease the number of entrepreneurs that discontinue their entrepreneurial endeavor due to non-profitability and financing difficulties.

**Figure 13.** Reasons for exit



Source: Compiled by authors.

### 5.9 ENTREPRENEURIAL PIPELINE

With all the previous results, it is possible to develop the entrepreneurial pipeline not only for each one of the countries, but also for the Caribbean group of countries.

Figures 14, 15, 16 and 17 present the entrepreneurial pipelines for 2012 for Barbados, Colombia, Trinidad and Tobago and the Caribbean group of countries.

Analyzing the pipelines for each country is possible to identify the stages in which there are significant "leaks" and identify for each country actions that should be taken to avoid the "leaks".

- For Barbados, the principal leaks, in percentage points, occur in the following transitions.

<b>From Potential to Intentional</b>	-44
<b>From Intentional to Nascent</b>	-13

- For Colombia, the principal leaks, in percentage points, occur in the following transitions.

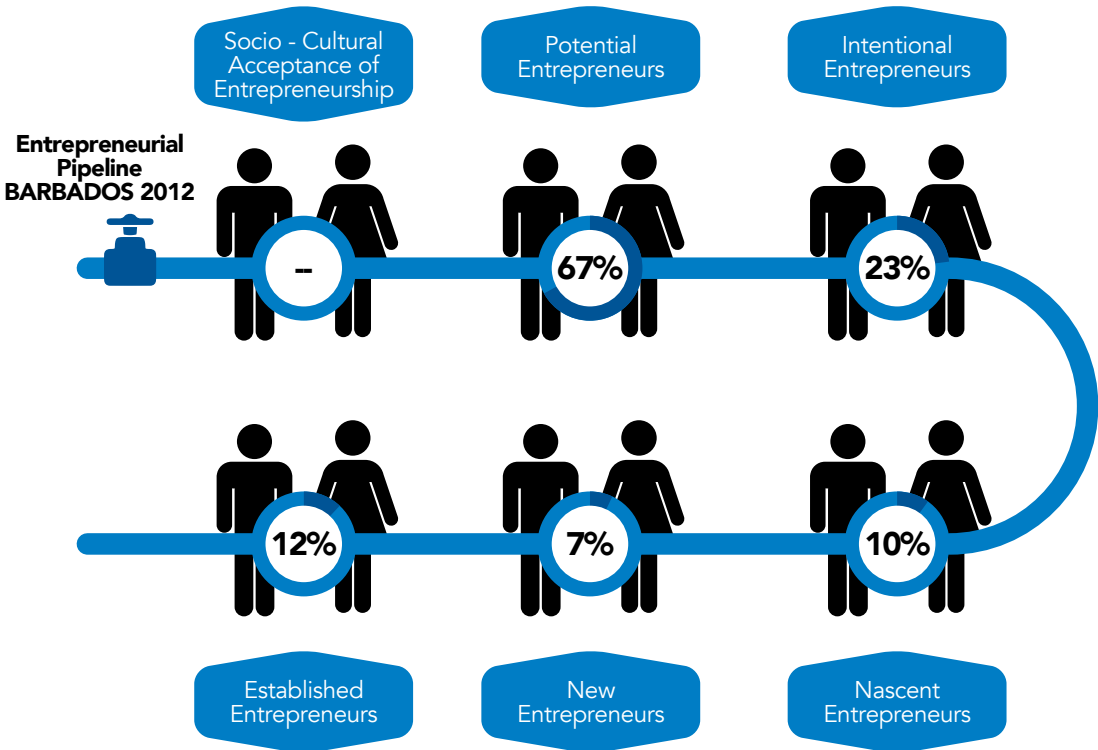
<b>From Socio Cultural Acceptance to Potential</b>	-14
<b>From Intentional to Nascent</b>	-43

- For Trinidad & Tobago, the principal leaks, in percentage points, occur in the following transitions.

<b>From Potential to Intentional</b>	-36
<b>From Intentional to Nascent</b>	-28

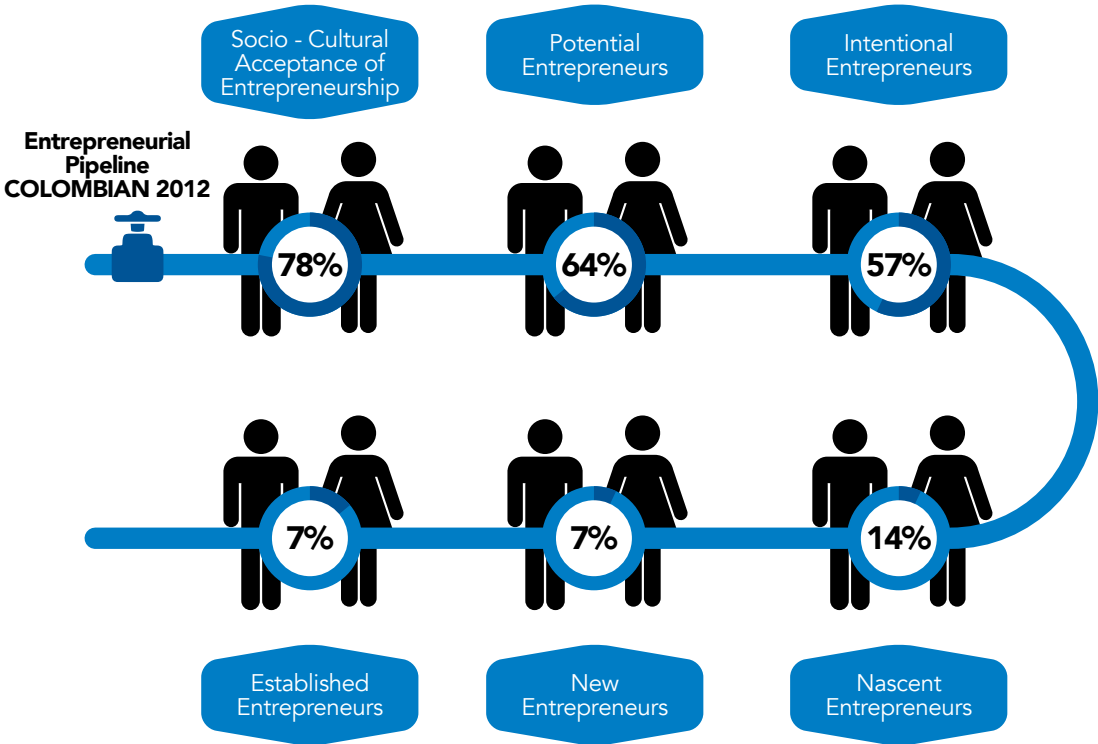


Figure 14. Entrepreneurial pipeline for Barbadian entrepreneurs.



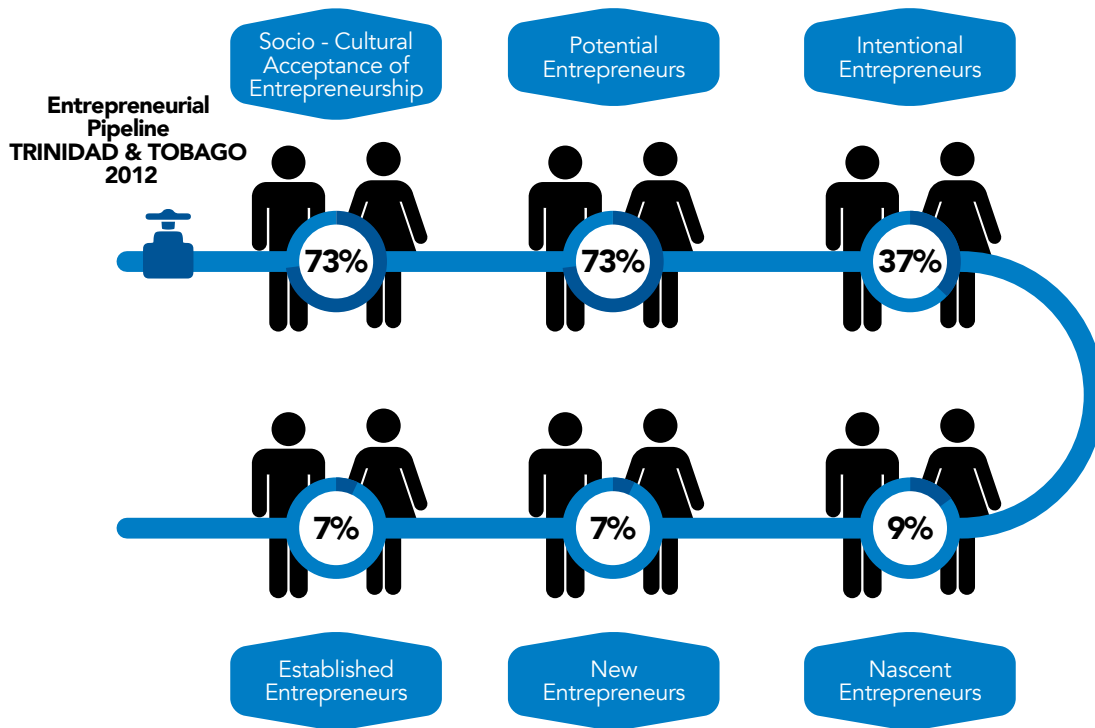
Source: Compiled by authors.

Figure 15. Entrepreneurial pipeline for Colombian entrepreneurs.



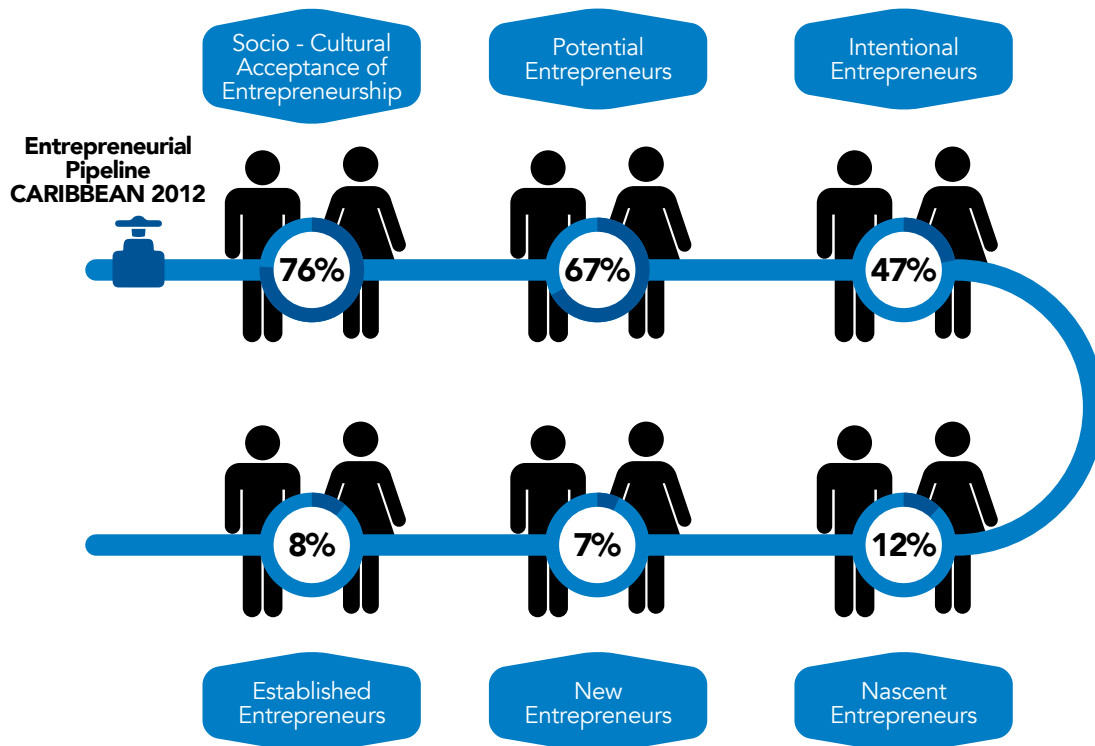
Source: Compiled by authors.

**Figure 16.** Entrepreneurial pipeline for Trinidad & Tobago entrepreneurs.



Source: Compiled by authors.

**Figure 17.** Entrepreneurial pipeline for Caribbean entrepreneurs.



Source: Compiled by authors.





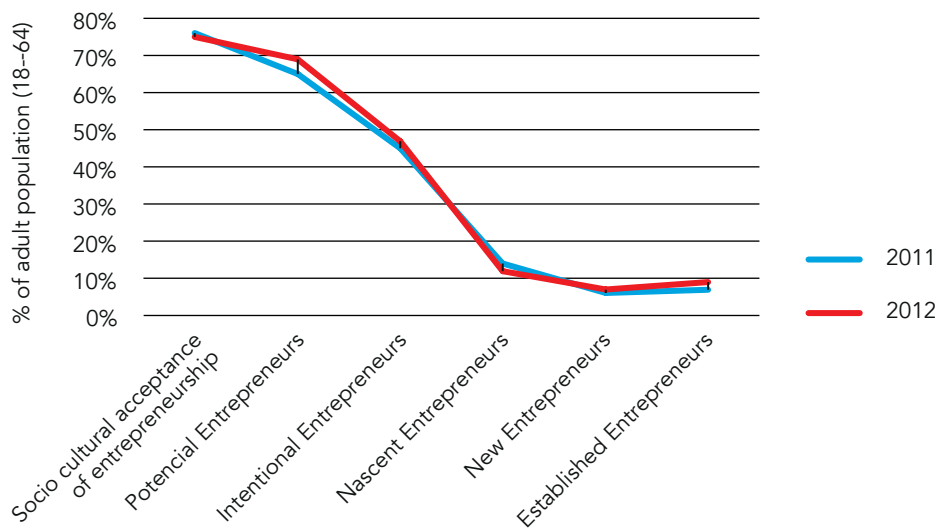
Figure 18 shows the variations in each stage of the pipeline for every country from 2011 to 2012.

Integrating the data presented in the previous sections some integration of them is needed.

- In Colombia, there are very strong positive perceptions towards entrepreneurship and a much higher level of intent to start a business (intentional entrepreneurs) relative to other GEM countries (surpassed by only 4 of the 69 GEM countries in 2012). Yet Colombians have a lower perception of their capacities to be able to create and run a new business and a higher fear of failure (than in Latin America and Caribbean countries and in Barbados and Trinidad & Tobago). So interest is there, but more has to be done to improve the level of confidence of adults in their ability to start a business (entrepreneurship education, skills workshops, exposure to more entrepreneur role-models, etc.). On the other hand, a significantly higher percentage of adults see good opportuni-

ties for starting a business in Colombia in the next six months, than in other GEM countries, including in Latin America and Caribbean. This could be because the Colombian economy is growing at a fast rate (average of 4.8% GDP growth over 2010-2012 period, compared to 0.25% GDP growth in Barbados and negative GDP growth in Trinidad & Tobago). From 2011 to 2012, Colombia did not see any significant variations in intentional, nascent and new business owner rates, in other words, these rates stayed rather consistent in the population. One of the barriers to overcome is the lower perception of entrepreneurial ability of the adult population and the high fear of failure, which may be improved by more exposure to entrepreneurship in the educational and training system as well as to successful role-models. Another difference between Colombia and Barbados and Trinidad & Tobago is the much higher rate of entrepreneurial discontinuance in Colombia (7% of the adult population discontinued their involvement in a business they owned in the past 12 months, compared to 5%

**Figure 18.** Entrepreneurial pipeline. Caribbean (2011-2012)



Source: Compiled by authors.

in Trinidad & Tobago and 3% in Barbados). Discontinuance rates are primarily due to lack of profitability or lack of financing. So for Colombia, a focus on stronger start-ups with more potential for survivability and greater access to financing are implicated.

- Whereas in Trinidad & Tobago, adults have a high level of confidence in their ability to start a business, a low fear of failure, and a relatively high perception of good opportunities (higher than average for innovation-driven economies, and for Latin America and Caribbean countries, although much lower than in Colombia), but saw a big drop in both nascent entrepreneur and new business owner rates in 2012 over 2011. So some external factors are affecting the lower levels of entrepreneurial activity in Trinidad & Tobago, perhaps slow economic growth generally? Plus there is a relatively low unemployment rate in Trinidad & Tobago (5.6% in 2012, compared to 11.6% in Barbados, and 10.4% in Colombia), so may be easier for Trinidadians to find paid employment.
- In Barbados, many fewer adults perceive good opportunities for starting a business in the next six months (47%) than Colombians (72%) or Trinidadians (59%). However, they have a low fear of failure and the percentage of adults with confidence in their abilities to start and run a business falls between that in Colombia and Trinidad & Tobago. It appears that the lower perception of good opportunities is a factor in the much lower intent to start a business in the next three years (only 23% of adults see good opportunities, compared to 37% of Trinidadians and 57% of Colombians). A low perception of opportunities could be related to the relatively dormant economic growth in Barbados (0% in 2012). On the other hand, a higher percentage of early-stage

entrepreneurs in Barbados are motivated by opportunity rather than necessity, even though unemployment rates are highest in Barbados (11.6% versus 10.4% in Colombia and only 5.6% in Trinidad & Tobago). In addition, the entrepreneurial discontinuance rate is the lowest in Barbados (in 2012, only 3% of adults in the year preceding the GEM survey discontinued their involvement in a business they previously owned). However, the rate of intentional entrepreneurs in Barbados could be improved if they were more positive about the opportunities to start a business. This might be done by making it easier to start a business and easier to access financing. For example, according to the 2014 Doing Business Report (World Bank, 2013), Barbados ranks worse than Colombia and Trinidad on the overall ease of starting a business and on getting credit. Barbados also performs more poorly than Colombia and Trinidad & Tobago on a number of the Entrepreneurial Framework Conditions (according to national experts' scores), for example, on Financial Support indicators, R&D Transfer indicators, and Education and Training Indicators.

- In Barbados, biggest leakage is from potential to intentional, meaning more has to be done to motivate adults to become interested in starting a business (e.g. more awareness, promotion of entrepreneurship, celebration of successful entrepreneur role-models, entrepreneurship events, entrepreneurship education initiatives, etc.). In Colombia, biggest leakage is from intentional to nascent, so biggest problem is finding ways to improve the transition from intent to action, e.g. by ensuring there are easily accessible entry points and support systems for providing information, advice and counselling, entrepreneurship promotion events, business plan competitions, opportunity-identification



workshops, etc. so intentional entrepreneurs see the possibilities, viability of moving forward on their intent by taking the steps to start a business.

- In Trinidad & Tobago, there are significant leakages in both moving adults from potential to intentional and from intentional to nascent, implying more policy and program actions are needed to inspire and motivate more adults to become interested in starting businesses, as well as ensuring that necessary supports are in place to help nascent entrepreneurs get started.





## CARIBBEAN ENTREPRENEURS PROFILE

An important aspect of GEM data is the possibility it brings in terms of identifying different elements to characterize entrepreneurs. The analysis will be done with the persons that classified as nascent or new entrepreneurs in the entrepreneurial pipeline and with the persons that classified as established entrepreneurs.

### 6.1 GENDER

Figure 19, 20, 21, and 22 present the entrepreneurial pipeline for men and women

for each country and the Caribbean region for 2012.

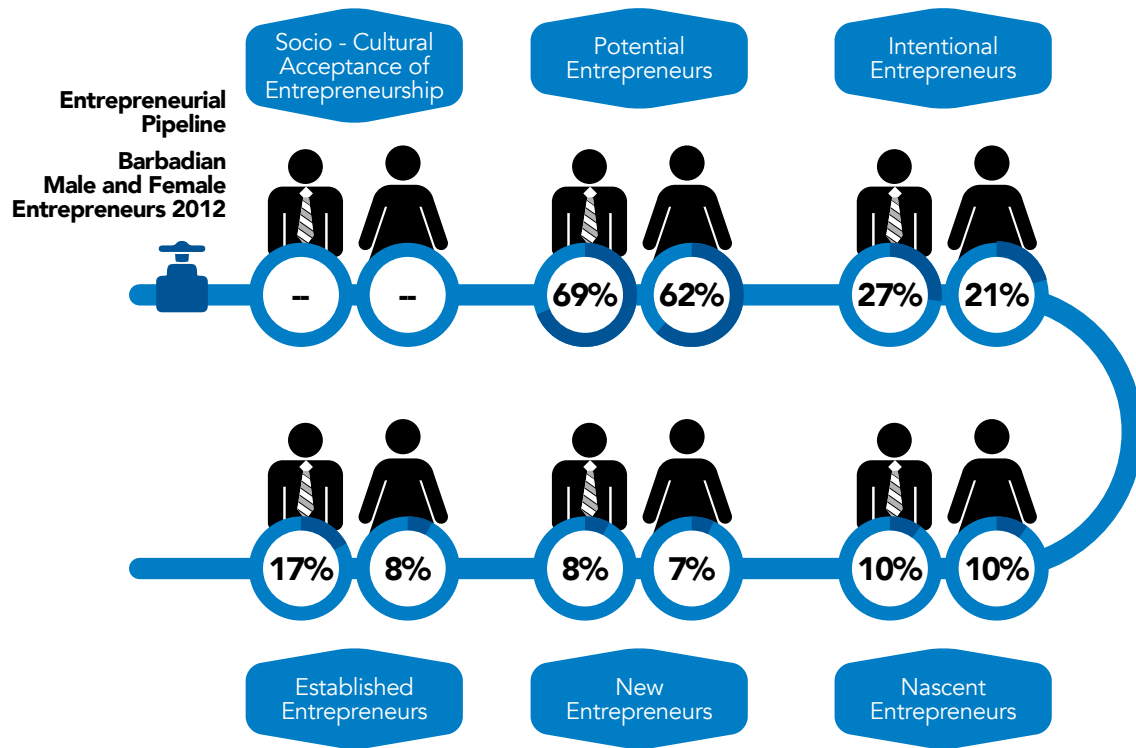
There is a significant difference in the different stages of the entrepreneurial pipeline for men and women. Table 7 presents the TEA by gender for the Caribbean countries and the economic groups. The disparity rate defined as the ratio TEA males/TEA females indicates that in the factor driven economies and in the innovation driven economies the disparity is the highest. Barbados with 1.1 presents the best indicator.

**Table 7.** Gender gaps in nascent and new entrepreneurial activity rates (2012).

	TEA male	TEA female	Male/female ratio
<b>Colombia</b>	22.8%	17.6%	1.3:1
<b>Barbados</b>	18.2%	16.1%	1.1:1
<b>Trinidad &amp; Tobago</b>	16.7%	13.2%	1.3:1
<b>Caribbean</b>	20.8%	16.5%	1.2:1
<b>Factor driven</b>	12,0%	5,0%	2.4:1
<b>Efficiency driven</b>	15,4%	10,9%	1.4:1
<b>Innovation driven</b>	9,2%	5,0%	1.8:1

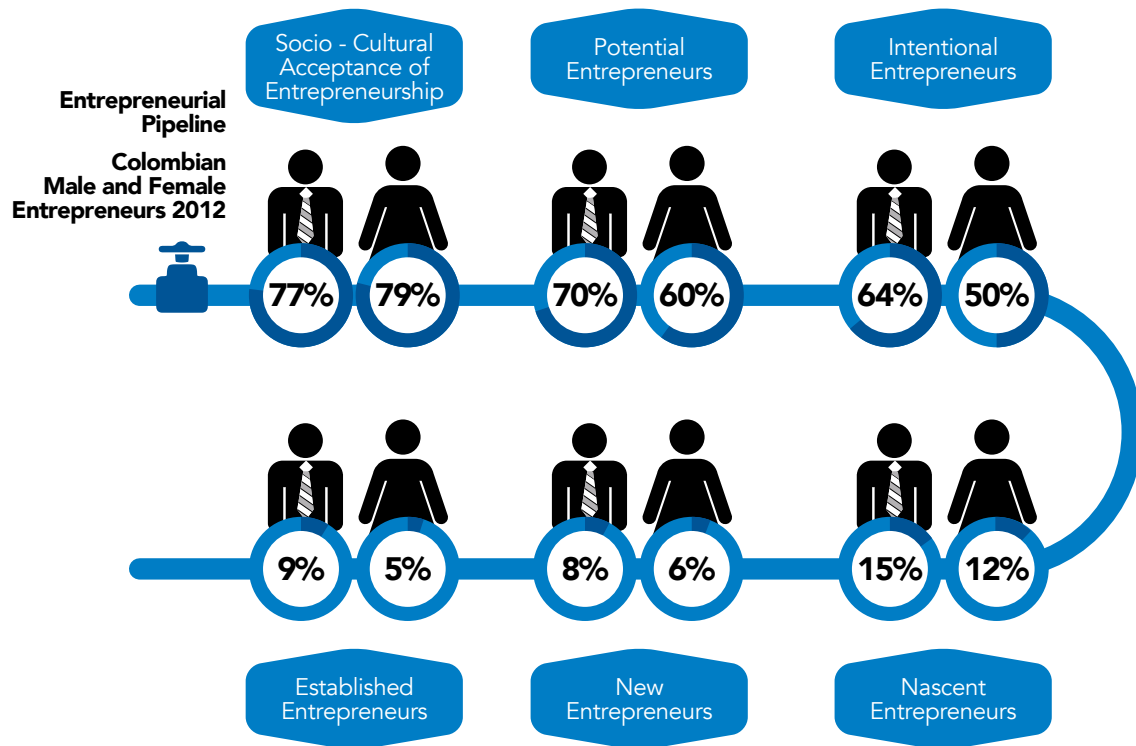
Source: Compiled by authors.

**Figure 19.** Entrepreneurial pipeline of Barbadian male and female entrepreneurs. 2012.



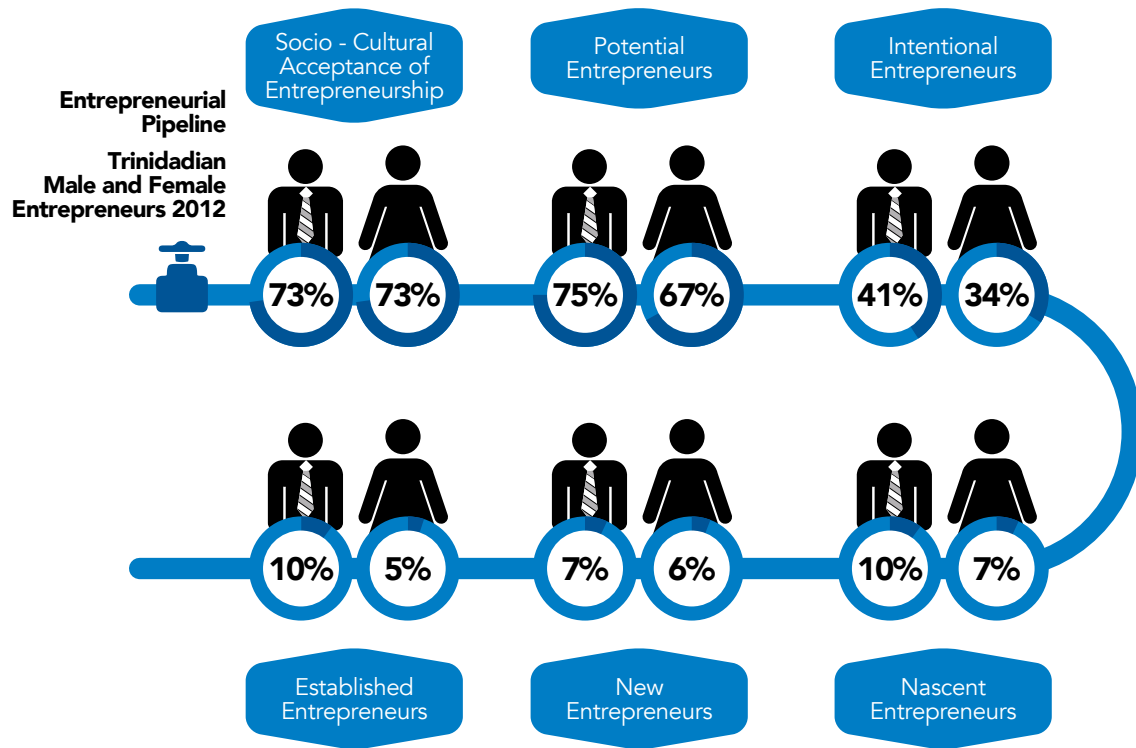
Source: Compiled by authors.

**Figure 20.** Entrepreneurial pipeline of Colombian male and female entrepreneurs. 2012.



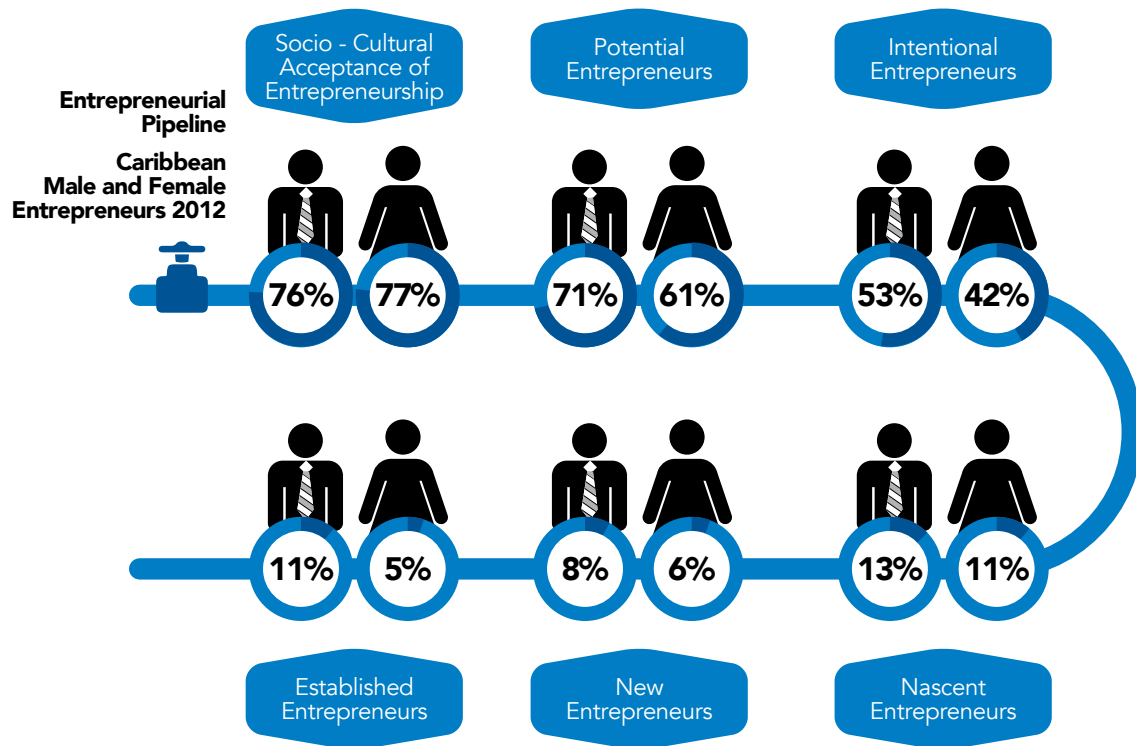
Source: Compiled by authors.

**Figure 21.** Entrepreneurial pipeline of Trinidadian male and female entrepreneurs. 2012.



Source: Compiled by authors.

**Figure 22.** Entrepreneurial pipeline of Caribbean male and female entrepreneurs. 2012.



Source: Compiled by authors.



For the established entrepreneurs, the propensity by gender is presented in Table 8. In all the Caribbean countries, the disparity in the established entrepreneurs stage between female and male is higher than in the nascent and new entrepreneurs stage.

**Table 8.** Gender gaps in established business owner rates (2012).

	EB male	EB female	Male/female ratio
<b>Colombia</b>	9.0	4.6	2.0:1
<b>Barbados</b>	16.8	8.0	2.1:1
<b>Trinidad &amp; Tobago</b>	9.5	4.9	1.9:1
<b>Caribbean</b>	10.6	5.3	2.0:1

## 6.2 AGE

Although it is widely accepted that entrepreneurship can begin at any given time in a personal life, a constant tendency in the GEM study demonstrates that individuals more likely to start new businesses are those aged 25-34. The reasons for this may be:

- That the individuals in this age group may have developed the competences and

abilities required to manage a new business through work experience.

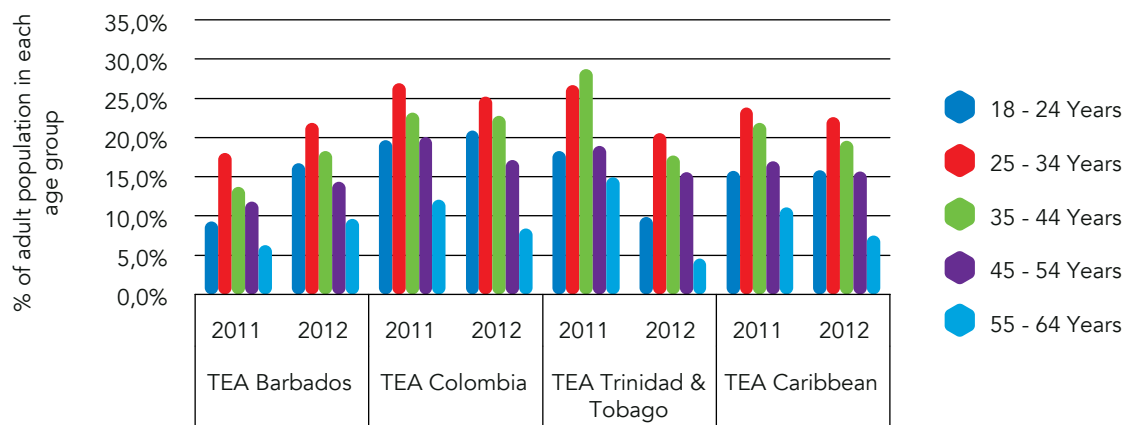
- They may have gained expertise in a specific working area, or they may also have decided to work independently after having been employed or saved enough resources to start a new business or been affected by the combination of many other positive and negative forces which affect the personal decision of becoming an entrepreneur.

For the GEM 2012 study, the trend mentioned before continues as it is seen in Figure 23. The age groups of 25-34 and 35-44 present the highest tendency toward business creation having an average TEA rate in the Caribbean of 22.6% and 19.6% respectively. The 55-64 age groups with 7.5% presented the lowest average TEA rate.

## 6.3 HOUSEHOLD INCOME

When the TEA is analyzed in relation to the home income (Table 9), it was found that as the income grows the TEA rate trend to increase except in Trinidad & Tobago. The country that presented the highest trend is Colombia in which the lowest third household income percentile had a TEA rate of 10.4% while the high-

**Figure 23.** TEA by age. Caribbean (2011-2012).



Source: Compiled by authors.

**Table 9.** TEA rates by household income level (2012)

	Lowest third percentile	middle third percentile	highest third percentile
<b>Barbados</b>	19,8%	17,3%	21,5%
<b>Colombia</b>	10,4%	18,3%	25,8%
<b>Trinidad &amp; Tobago</b>	14,9%	13,0%	14,2%
<b>Caribbean</b>	15,0%	16,2%	20,5%

Source: Compiled by authors.

est third household income percentile had a TEA rate of 25.8%. Trinidad & Tobago not only presents a different trend, but in the middle and upper third percentile present lower TEA than the other two countries.

### 6.4 EDUCATION

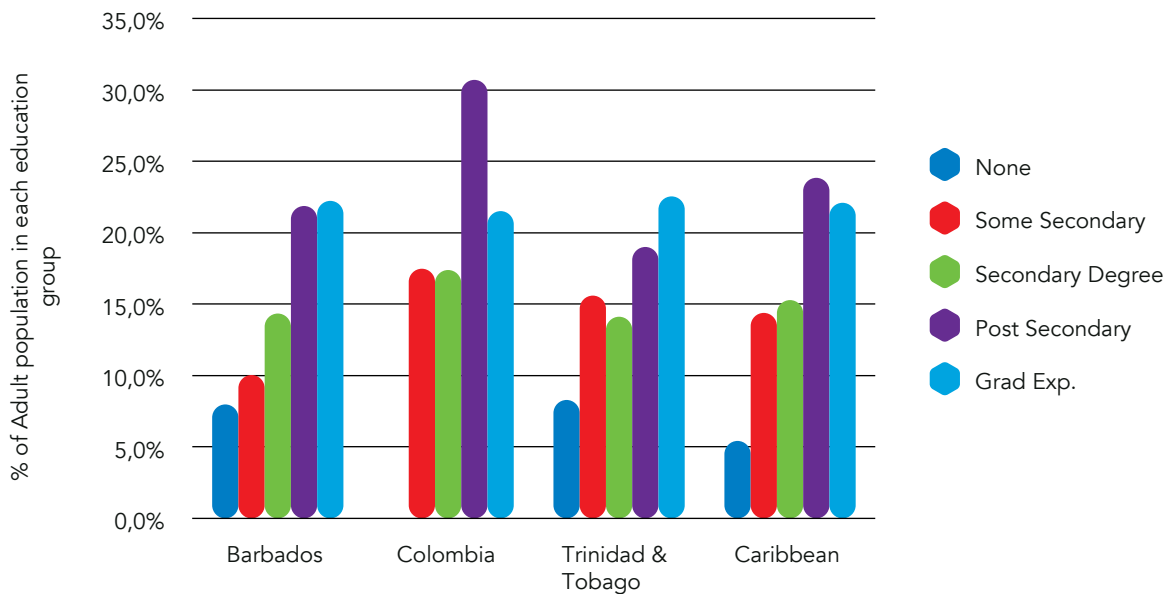
When the educational level is crossed with TEA as indicated in Figure 24, the trend is that the higher the educational level, the higher the TEA.

In Colombia, the educational group with the highest TEA is Post-Secondary (University

Level). In Barbados and Trinidad & Tobago the educational group with the highest TEA level is Graduate studies.

These results debunk the myth that there is no relation between the level of education and the level of entrepreneurial activity, and really call the education system of all the countries not only to increase their efforts toward improving their education system, but also to include an entrepreneurial education component to better develop the entrepreneurial competences and culture among their citizens.

**Figure 24.** TEA rates by education level (2012)



Source: Compiled by authors.





### 6.5 ENTREPRENEURIAL MOTIVATION

An important issue in the entrepreneurial pipeline process is to identify the circumstances which drive entrepreneurs to start a business. GEM considers that there are two basic motivations which may drive the start-up.

GEM defines opportunity driven when the entrepreneurs decides to start because they identifies a market opportunity and necessity driven when the entrepreneurs decides to start because they do not have other work options.

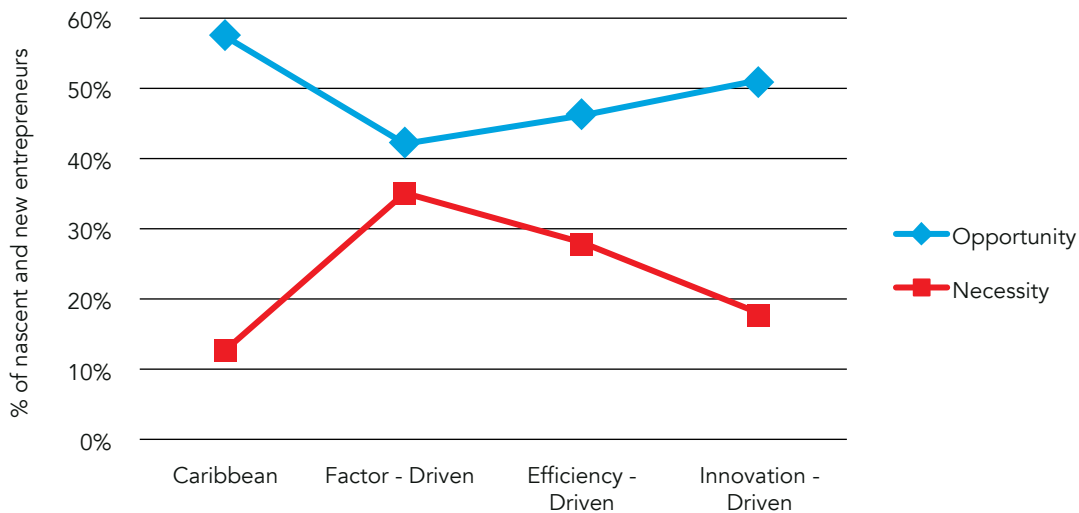
It is important to understand that the previous definitions really convey other elements that are allocated to each one of them. One will expect that the opportunity driven entrepreneur identifies a market opportunity as a result of a thorough analysis of it, has done the planning required, and adapts his entrepreneurial competences to the business opportunity, and that the necessity driven entrepreneurs is an individual facing personal and professional difficulties decides to embark on an entrepreneurial activity as the last work option, having done little analysis and/ or preparation to start this new initiative.

As shown in Figure 25, the Caribbean countries had a bigger entrepreneurial orientation by opportunity driven factors than the other three economic groups. These results require more research because it was expected that at least the innovation driven economies should have a better indicator due to the socio-economic conditions of their peoples: less unemployment, better income, greater opportunities.

In order to improve the proportion of new entrepreneurs driven by opportunity in an economy, they should be trained in areas such as:

- Analyze market opportunities.
- Plan the way to deliver product/service in the market.
- Design strategies to get resources needed.
- Consider different options to develop their career.
- Develop to some level entrepreneurial competences.

**Figure 25.** Opportunity vs. necessity in Caribbean and economic groups (2012)



Source: Compiled by authors.

- Improve the chances of making the new business initiative survive and grow.

The results also point to the need for orienting all educational and vocational, training and the entrepreneurial programs toward the development of entrepreneurial activities driven as much as possible by opportunity.

Ideally, no entrepreneur anywhere should begin a new business driven only by necessity and without undergoing a rigorous evaluation of the business model, in order to decrease the risk of failure, loss of resources, and specially the loss of self-confidence.

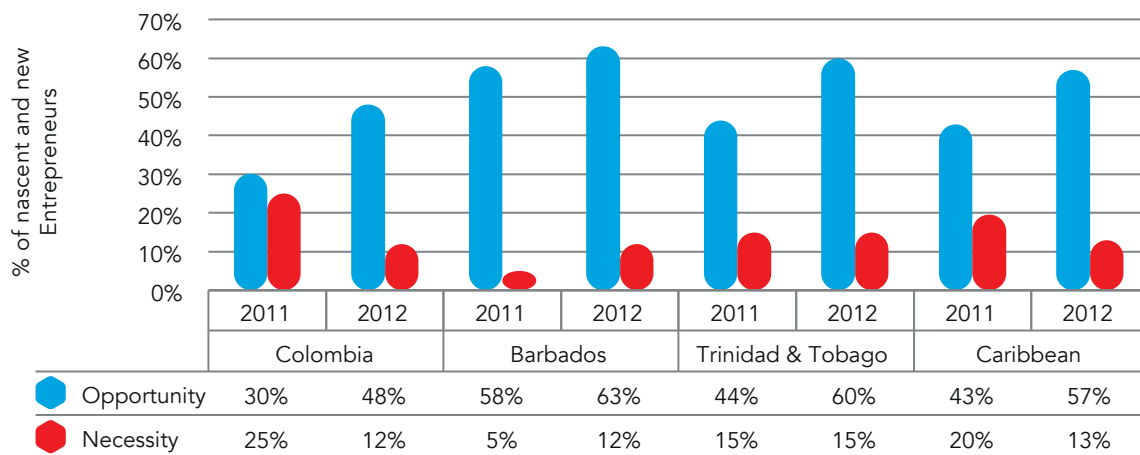
In the Caribbean region, 57% of the entrepreneurs are entirely opportunity driven, 13% are entirely necessity driven and 12% are driven by a mix of opportunity and necessity. When the motivation is analyzed by countries, Colombia and Barbados show a low level of new entrepreneurs driven only by necessity, while Trinidad & Tobago shows the highest level of necessity driven motivation (Figure 26). On the other hand, Barbados reported the highest level of opportunity driven motivation with 63% followed by Trinidad & Tobago with 60% in 2012. There is an important increase in the motivation driven by opportunity in all the

countries of the Caribbean region from 2011 to 2012, maybe due to changes of perception in the entrepreneurs about what motivates them to create a business.

When each age group of the nascent and new entrepreneurs is analyzed by motivation (Figure 27), it is important to observe that the group aged 18-24 have the lowest proportion of necessity driven businesses (8.3%) while the group aged 35-44 has the highest (18.3%). Individuals driven by high necessity, in the group aged 55-64, may have problems with not receiving an adequate pension, or have difficulties finding a new job to maintain their standard of living, compounded with a lack of training in entrepreneurship development.

Consequently, it is important to have policies and programs in place to support people in the different age groups in order for the countries 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, handle better new technologies and have fresh perceptions and yet, not have the resources, experience, training and networks of older people.

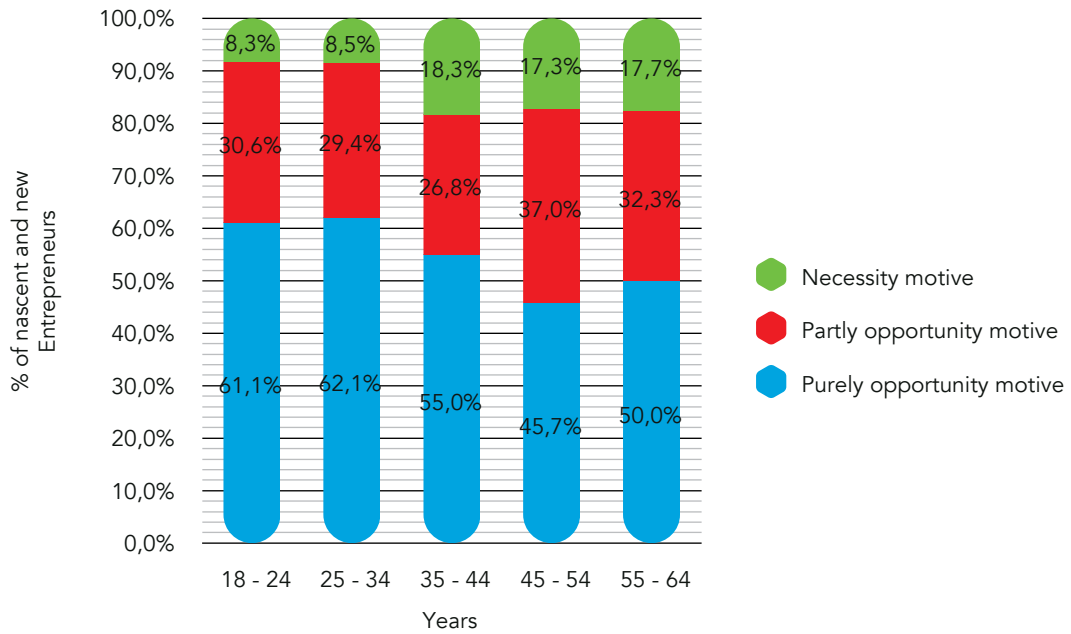
**Figure 26.** Opportunity/necessity motivation (2011-2012)



Source: Compiled by authors.



**Figure 27.** Situation composition at every age group (2012)



Source: Compiled by authors.





## ENTERPRISES CHARACTERISTICS

Other important aspect of GEM data is the possibility it brings in terms of identifying different elements to characterize enterprises. The analysis will be done with the enterprises that classified in the nascent and new business and with the enterprises that classified as established business in the entrepreneurial pipeline concept.

### 7.1 JOBS

New businesses should generate new jobs, hence one of the variables analyzed by GEM is the amount of jobs generated up to the time of the survey and the expectation of job generation during the following 5 year period. Table 9 shows that, in the Caribbean region, on average 45% of the new businesses have

**Table 10.** Current vs. expected job generation in the nascent and new business (2012)

	Barbados	Colombia	Trinidad & Tobago	Caribbean	
<b>No Job</b>	Current	62,5%	37,1%	48,9%	45%
	Expected	19,7%	4,1%	12,9%	7%
<b>1-5 Jobs</b>	Current	34,1%	53,2%	40,8%	47%
	Expected	55,9%	41,9%	53,6%	45%
<b>6-19 Jobs</b>	Current	2,2%	6,5%	8,6%	6%
	Expected	16,2%	30,6%	19,8%	27%
<b>20+ Jobs</b>	Current	1,2%	3,2%	1,7%	3%
	Expected	8,3%	23,3%	13,8%	20%

Source: Compiled by authors.



not created any new jobs and 7% believe that they will not be generating any jobs for the next 5 years. 47% of the new businesses have already created between 1-5 jobs, 6% 6-19 jobs, and 3% more than 20 jobs.

For the Caribbean region Table 10, demonstrates that most of the new businesses are still small in terms of jobs generated. When the 5 year perspective is considered 45% believe that they will generate 1-5 jobs, 27% 6-19 jobs and 20% more than 20 jobs. Although these results reflect the level of confidence that new entrepreneurs have in their initiatives, they also reflect the need to provide support to ensure their growth and survival.

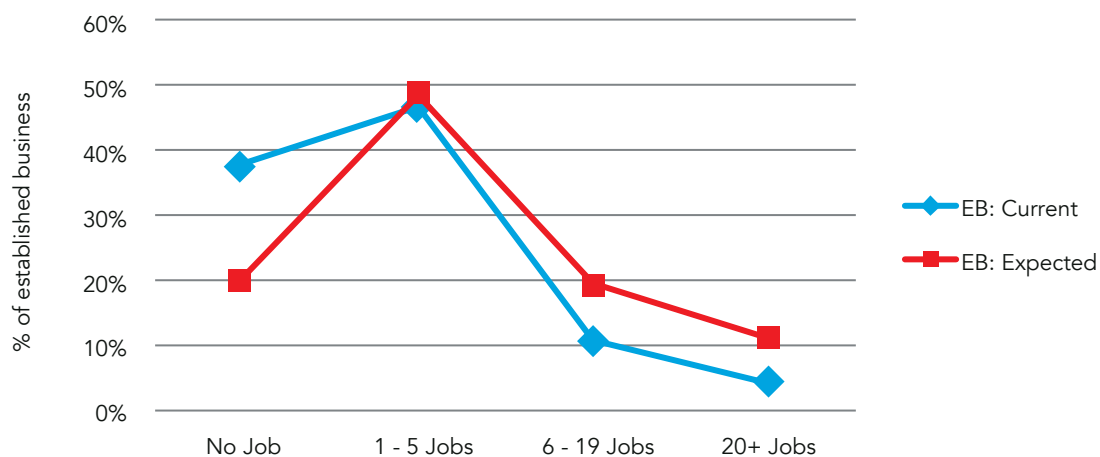
When countries are analyzed, Barbados has the highest percentage (62.5%) of new businesses that up to the time of the interview have not generated any jobs which indicates that many of their new/nascent enterprises are very small. Colombia has the highest percentage of new businesses expecting to create more than 20 new jobs in the next 5 year, which indicates that there is a significant proportion of new enterprises with potential to grow.

Established businesses are expected to have a bigger generation of jobs than nascent and

new businesses. Figure 28, shows the current job generation and the expected job generation of established businesses, which is not as high as anticipated; 38% of the established businesses, still have not generated jobs, 47% have generated between 1 to 5 jobs, 11% between 6-19 jobs and only 4% has generated more than 20 jobs. In terms of expected job generation in the following 5 years 20% expect to generate between 6-19 jobs and 11% more than 20 jobs.

The profile of the Caribbean established businesses in terms of job generation indicates that many of them do not have the capacity and/or aspiration to grow and generate significant value to the economy. Being entrepreneurship an strategy oriented to the creation of jobs among other goals, these results indicates that in the Caribbean countries it is very important to produce a new generation of entrepreneurs better trained and better oriented to allow them to create more, bigger, and better enterprises. Again educational programs and specific support systems to the entrepreneurs and enterprises are required to have enterprises that add significant value to the economy and help to solve the unemployment problems of the region.

**Figure 28.** Current vs. expected job generation in the established business (2012)



Source: Compiled by authors.

## 7.2 SECTOR

The GEM study consolidates the entrepreneurial activities using the International Standard Industry Classification (ISIC) and the four economic sectors classification (Extractive, Transforming, Business Services, and Consumer Oriented). Table 11, shows that 40.4% of the new entrepreneurial activities in the Caribbean are created in the sectors of “retail trade, hotels & restaurants”, followed by 17.4% in manufacturing activities. The lower quantity of new entrepreneurial activities is found in “personal/consumer service”, “financial intermediation, real estate” and “information and communication sectors”.

For instance, “government, health and social services” are important in Barbados (18.4%) but have a little impact in Colombia and Trinidad & Tobago (7.7% and 7.7% respectively). As an efficiency driven economy, Colombia has a manufacturing sec-

tor that represents 21.6% of the new businesses almost three times the figures that of Barbados and Trinidad & Tobago (8.4% and 8.8% respectively).

When the established businesses are analyzed by sectors, some significant differences are found with respect to the early entrepreneurial initiatives. 28.3% of the established businesses are in the transforming sector, and 51.8% in the consumer oriented product sector, whereas, in the early entrepreneurial initiatives, 36.1% are in transforming and 46.8% 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.

Each country in the Caribbean region has different profiles regarding the composition of established business. For example, Barbados has the biggest percentage of

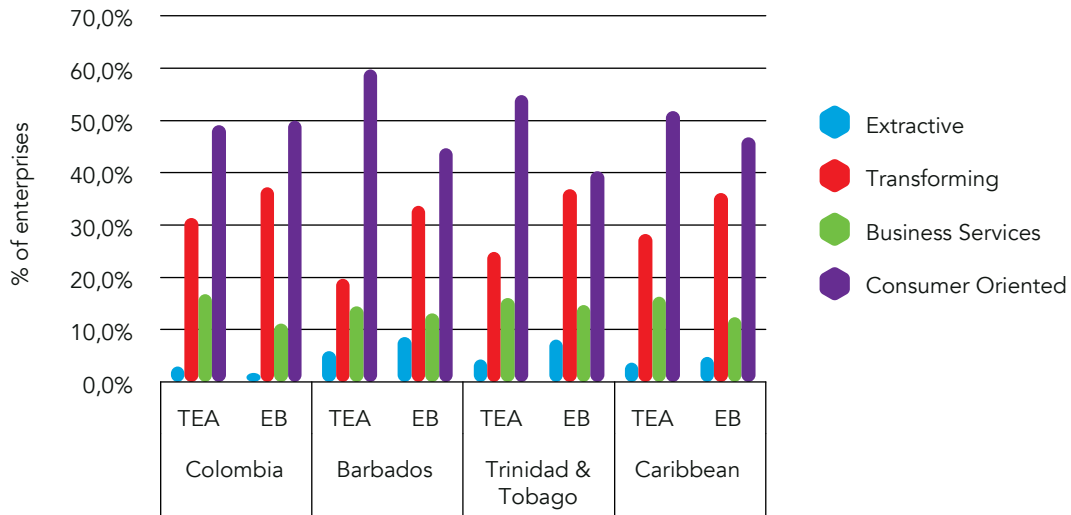
**Table 11.** Distribution of nascent and new enterprises by sector (2012)

	Barbados	Colombia	Trinidad & Tobago	Caribbean
<b>Agriculture, Forestry, Fishing</b>	5,9%	2,6%	4,3%	3,4%
<b>Mining, Construction</b>	5,5%	2,3%	7,3%	3,6%
<b>Manufacturing</b>	8,4%	21,6%	8,8%	17,4%
<b>Utilisation, Transport, Storage</b>	2,9%	4,4%	4,3%	4,1%
<b>Wholesale Trade</b>	2,9%	3,3%	4,4%	3,4%
<b>Retail Trade, Hotels &amp; Restaurants</b>	38,8%	39,7%	45,4%	40,4%
<b>Information And Communication</b>	1,1%	4,1%	1,6%	3,2%
<b>Financial Intermediation, Real Estate Activities</b>	1,7%	1,3%	4,3%	1,8%
<b>Professional Services</b>	5,5%	7,1%	4,0%	6,4%
<b>Administrative Services</b>	6,3%	4,3%	6,1%	4,9%
<b>Government, Health, Education, Social Services</b>	18,4%	7,7%	7,7%	9,6%
<b>Personal/Consumer Service Activities</b>	2,6%	1,6%	1,8%	1,8%

Source: Compiled by authors.



**Figure 29.** Sectorial distribution (2012)



Source: Compiled by authors.

established business focused in the business services sector while Colombia and Trinidad & Tobago focus mainly on transforming and consumer oriented businesses (Figure 29).

### 7.3 INNOVATION

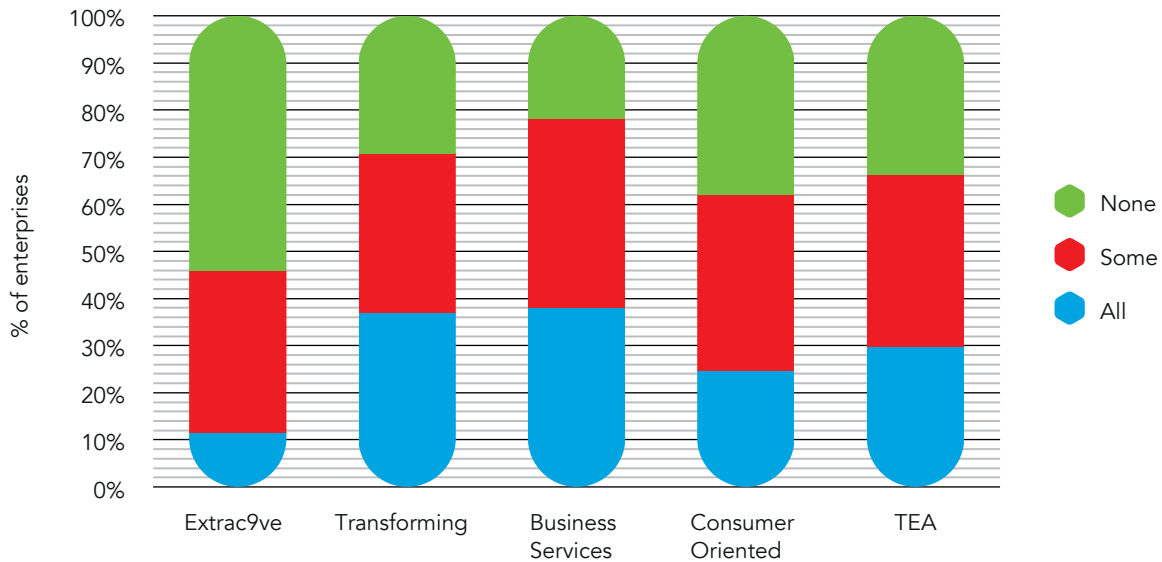
It is well known that innovation goes further than product innovation, and maybe it is necessary, research about the other innovations such as new ways to offer products/services, new ways to deliver them, a new way to promote them, new market niches, new materials, new processes, new technologies; but, such a low propensity toward new product/services is a weakness of the new enterprises because it does not provide differentiation.

Innovative products or services must add value and have a positive impact on the lives of people. New enterprises must provide differentiation. To do this, they must identify new market niches, focusing in creative ways to offer, deliver and promote products and services as well as find new materials, processes and technologies.

To understand the level of innovation of new enterprises, GEM analyzes three main variables: the perception of innovation in product/services by the consumers, the level of competitors making the same products and the application of new technology.

Figure 30 shows, the level of innovation by economic sectors in terms of the perception the entrepreneurs may have about the innovativeness of their product, and for that uses three levels: All means that the entrepreneur consider that all the consumers considered the product/service is innovative, some means that some of their products are innovative for the consumers, and none means that the entrepreneurs consider that none of their products is innovative for their consumers. One of the problems of the Caribbean enterprises is that in all sectors of the economy a high percentage of entrepreneurs (21.9% to 54.1%), consider that their product/service will not be considered by the consumers as new/innovative. On average, 29.6% of the nascent/new entrepreneurs consider that their product/service is new to consumers.

**Figure 30.** Innovativeness of products/ services by sector groupings (2012)



Source: Compiled by authors.

When the perception of the consumers about the product/services are analyzed by country and compared with the three economic groups, the results are not very good for the Caribbean enterprises. Colombia shows a good figure in the category products/services as new/innovative higher than the three economic group, but Barbados and Trinidad & Tobago show very low level, even compared the factor driven economies.

**Table 12.** Caribbean Countries and economic phases vs. new products (2012)

	All	Some	None
<b>Barbados</b>	6,1%	15,0%	78,9%
<b>Colombia</b>	37,7%	44,1%	18,3%
<b>Trinidad &amp; Tobago</b>	7,2%	17,0%	75,8%
<b>Caribbean</b>	29,6%	36,8%	33,6%
<b>Factor</b>	15,2%	18,9%	65,8%
<b>Efficency</b>	18,5%	27,8%	53,7%
<b>Innovation</b>	17,7%	29,4%	52,9%

Source: Compiled by authors.

Another problem arises when the variable, “number of competitors”, is analyzed among the Caribbean countries (Figure 31). The results show weaknesses of the new entrepreneurial system since above 45% of enterprises in all countries are entering markets with many direct competitors. In very few cases, Barbados (16.4%), Colombia (13.9%) and Trinidad & Tobago (16.4%) new enterprises are entering markets with no significant direct competitors.

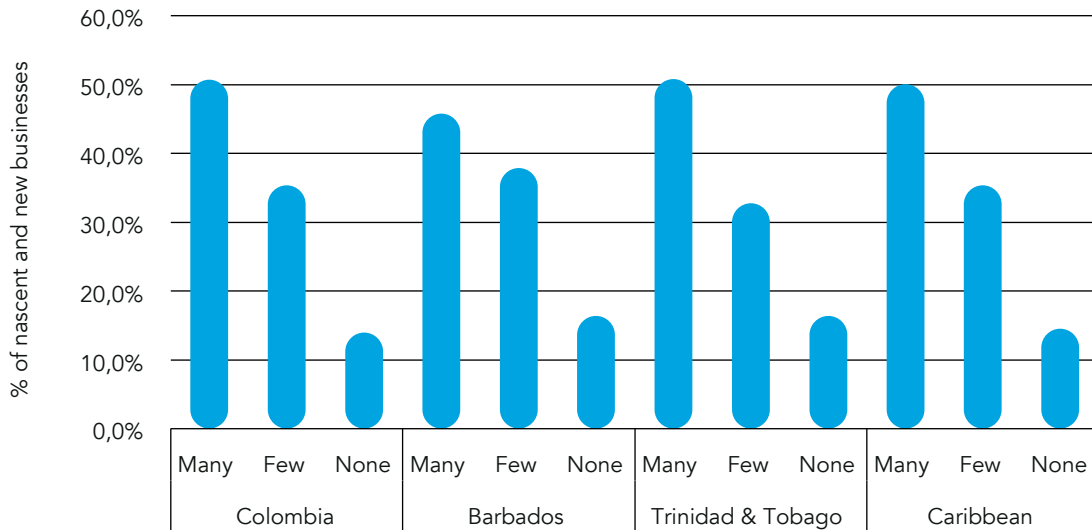
Participating in very high competitive markets is not by itself a problem in the dynamics of the entrepreneurial sector; however, when there is no business differentiation due to a low level of development of new products, based on the previous data, the only possible strategy to gain customers is through the offer of low prices with all the consequences this might have.

Another element associated with innovation is the technology used by the new enterprises. GEM classifies technologies by the length of time they have been available in the market. The latest means it has been available in the market less than 1 year; the new means it has been available in the market between 1 and 5





**Figure 31.** Number of direct competitors in markets entered by nascent and new businesses (2012).



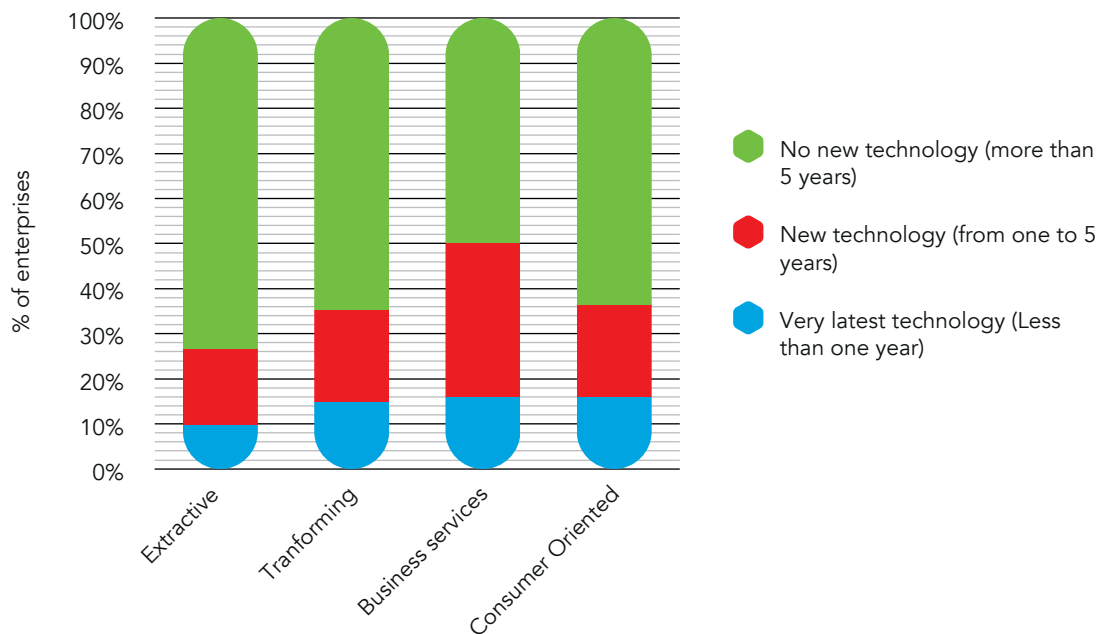
Source: Compiled by authors.

years; the old means it has been available in the market for more than 5 years.

Figure 32 shows that, in all the economic sectors, the nascent and new enterprises

use mainly old technologies (percentages between 49.6% and 73.2%). A low percentage of nascent and new enterprises in each economic sector that applied the latest technologies to their processes (between 9.8% and 16.2%).

**Figure 32.** Newness of technology used in nascent and new businesses by sector (2012)



Source: Compiled by authors.

When the three elements of innovation: new products/services, markets with low number of competitors and use of modern technology are taken into consideration, the new Caribbean enterprises show a significant disadvantage which requires the implementation of relevant changes in policy.

All the entrepreneurial development programs must explain and teach the concepts of innovation, flexibility, market orientation and widening market perspective as basic elements for success and growth of the new businesses.

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.

#### 7.4 INTERNATIONAL ORIENTATION

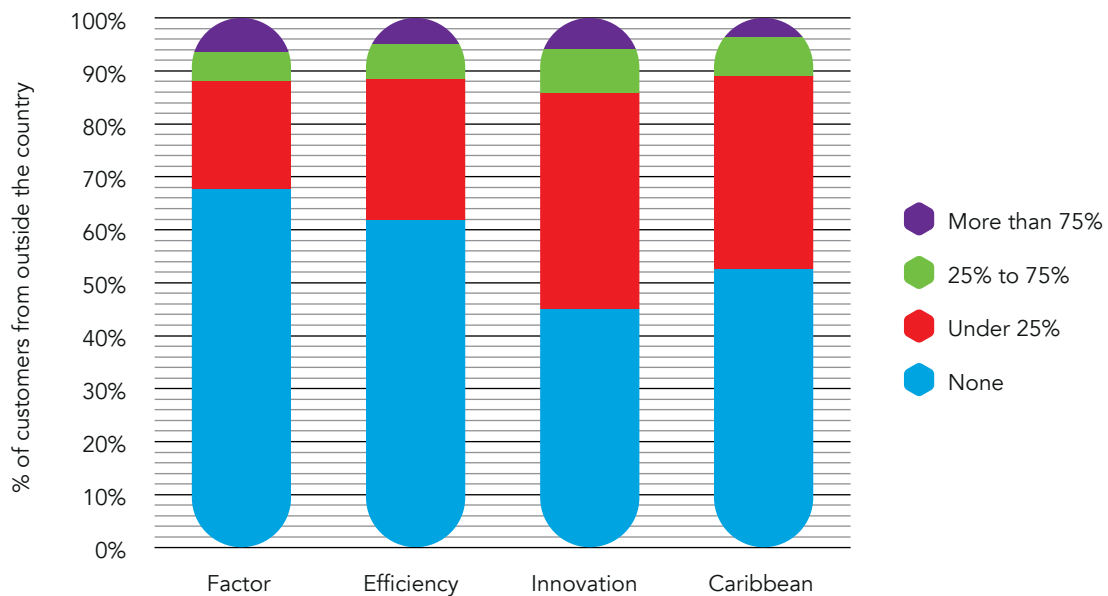
Another measurement of GEM is the extent in which entrepreneurs sell to customers

outside their economies, as an indicator of international orientation and international competitiveness. Figure 33, shows that of the established businesses in the Caribbean basin, 52.62% do not have foreign customers, just 10.8% have an international portfolio covering more than 25% of their total clients, which is low compared to the average of efficiency driven economies (11.6%) and of innovation driven economies (14.1%).

Table 13, also reflects that in most Caribbean countries the nascent/new enterprises have more propensity to the development of consumer outside the country. If the "more than 25% of the costumers are foreigner" indicate is used, in Barbados the situation will be 15% vs. 13%, in Colombia 15% vs. 11% and in Trinidad & Tobago 8% vs. 11%.

Given that the composition of the portfolio in terms of international costumers is low, a deeper research should be oriented to find out it the problem is lack of competitiveness in the international markets or lack of inter-

**Figure 33.** International Orientation by economic groups (2012)



Source: Compiled by authors.



national orientation. Support programs in both cases are needed.

**Table 13.** International orientation of Caribbean businesses (2012)

	Percentage of customers from outside the country	TEA	EB
<b>Barbados</b>	More than 75%	6%	2%
	25 to 75%	9%	11%
	Under 25%	39%	41%
	None	46%	48%
<b>Colombia</b>	More than 75%	4%	5%
	25 to 75%	11%	6%
	Under 25%	37%	38%
	None	48%	52%
<b>Trinidad &amp; Tobago</b>	More than 75%	2%	2%
	25 to 75%	6%	9%
	Under 25%	25%	25%
	None	67%	64%
<b>Caribbean</b>	More than 75%	4%	3%
	26 to 75%	9%	9%
	Under 25%	34%	35%
	None	54%	55%

Source: Compiled by authors.





## YOUTH ENTREPRENEURSHIP

As mentioned in the section 6.2, TEA and all other indicators a change with the age groups, and the 25-34 years old is the group with the highest TEA. GEM decides in 2012 to include as special topic the option of research, youth entrepreneurship and several countries decided to include the specific questions in the APS.

The last decades had been showing a negative trend in terms of employment opportunities for young people. There are currently 1.2 billion young people in the world, and the number is expected to continue to rise until 2035. Young people are about 18% of the world population, but they represent about 40% of all the unemployed people in the world. About 200 million young people are earning under USD \$2/day and there is a need to create 600 million new jobs over the next 10 years just to sustain current levels of employment (Ellis, K., & Williams, C., 2012).

In Latin America and the Caribbean, the global young unemployment is 14.9% in 2012, twice as the overall unemployment rate in the region 6.7% (ILO, 2013a). The In-

ternational Labor Organization, projected for the period 2013-2018 that the young unemployment rate will oscillate between 13.2% and 13.6% (ILO, 2013b), for young males from 11.1% to 11.2% and for young females from 16.3% to 17%.

Chigunta (2002) proposes a broad categorization into three (transitional) phases.

I. Pre-entrepreneurs (in the age of 15-19 years): This is the formative stage. These younger youth are often in transition from the security of the home or education to the work place. But, as Curtain (2000) observes, for many young people, the transition from education to work is not a single step of leaving the educational system and entering the world of work.

II. Budding entrepreneurs (in the age of 20-25 years): This is the growth stage. These youth are likely to have gained some experience, skills and capital to enable them run their own enterprises. They often face three enterprise pathways: 1) remaining stuck in



marginal activities; 2) going out of business; and 3) running successful enterprises.

III. Emergent entrepreneurs (in the age of 26-29 years). This is the prime stage. With valuable experiences in business, emergent entrepreneurs have a higher level of maturity than youth in the lower age groups. Hence they are more likely to run more viable enterprises than younger people.

The W.K Kellog Foundation Youth and Education Unit (2006) define “Youth entrepreneurship” as the area that involves the development of entrepreneurial attitudes, skills and opportunities for young people, from middle school through young adulthood (from 18 to 34 year olds).

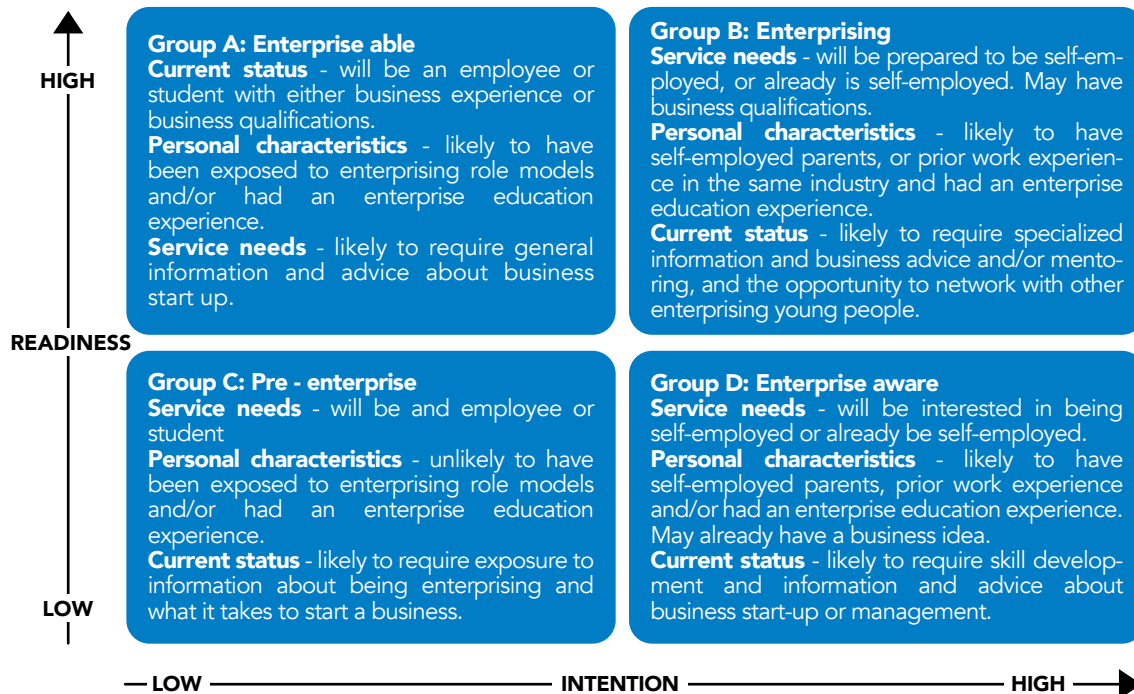
Lewis and Massey (2003) provide a diagnostic framework for young entrepreneurs. Depending on the level of readiness (level of skill and/or exposure to enterprise) of young

people to engage in business and the level of intention to be enterprising, the authors distinguish four different groups of potential young entrepreneurs (Figure 34). This kind of framework can assist researchers, planners and policy-makers to obtain a better understanding of the particular needs of the young people as a group, and to identify appropriate methods and promotion programmes to improve the enterprise culture in a selected country or region.

For the youth entrepreneurship study, GEM segmented the young in two groups: The group from 18 to 24 years old is called “Youth” and the group from 25 to 34 years old is called “Young Adults”.

GEM included, in the APS and the NES questions to characterize the young entrepreneur. These two categories “youth” and “young adults”, use age ranges that traditionally GEM has used, and in that sense, it is possible to

**Figure 34.** Diagnostic framework for youth entrepreneurs



Source: Lewis and Massey (2003)

compare some variable and factors of the 2012 cycle with data from the previous cycle.

A special report about young Caribbean entrepreneurship has been developed. It could be consulted in:

<http://www.gemcaribbean.org>

The main results obtained for Caribbean young population were:

- The social perception of entrepreneurship among the young population (18-34) is high. In 2011 was 73% and in 2012 was 75%.
- The potential entrepreneurs are also high: 66% in 2011 and 64% in 2012. In 2012, 55% of young Caribbean considered that they are able to perceive opportunities, 60% considered they have the capabilities to establish and run an enterprise and 73% were not afraid to start their business due to the risk of failure.
- The level of intentional entrepreneurs in young Caribbean was 50% in 2011 and 55% in 2012.
- When gender is analyzed, it was found that among the young males 59.7% are intentional male entrepreneurs and among the young females 49.5% are intentional young female entrepreneurs.
- A very important data is that when young people were asked about their long term preferences, 98% of the Caribbean young indicated "Running my own business" and only 2% indicated "Employed by others" or "no preference". This perception should be seriously considered by educators and should move them to include in the curricula more entrepreneurial education.
- The nascent entrepreneurial rate among young Caribbean was 13.5% for 2011 and 12.9% for 2012.
- For nascent young entrepreneurs in the Caribbean region some important elements were identified:
  - 80.8% already made their first sale.
  - 40.8% of them made their first sale in the last three months, 15.0% made it between the last 3 and 6 months ago, 13.6% made it between 6 and 12 months ago, and finally, 30.6% made their first sale more than 12 months ago.
  - 95.5% have clearly defined the product or service that they will offer.
  - 60.4% have a business plan.
  - 39.7% have established contact with other people to finance their business.
  - 50.3% have a support group for the development of their business.
  - 37.9% already have purchased machinery, equipments, inputs, implements for their business.
  - 35.9% already have bought raw material, inputs, products or services from suppliers.
  - 24.9% consider that their enterprise is in operation.
- The new entrepreneurial rate among Caribbean young was 6.8% for 2011 and 7.7% for 2012.
- There are several elements that the new young entrepreneurs in the Caribbean region shows:
  - 94.4% already made their first sale.
  - 98.8% consider that they have defined the product and/or the services they have for their customers.



- 63.3% have a business plan.
- 48.8% have had a meeting with banks and other financial sources to search for financial resources.
- 48.8% have a support entrepreneurial group.
- 69.6% have purchased machinery, equipments, inputs, implements for their business.
- 73.3% have bought raw material/products or services from suppliers.
- 90.4% consider that their enterprise is in operations.
- The total early entrepreneurial activity (TEA) for young Caribbean was 21% for 2011 and 21.2% for 2012.
- When gender was considered for the young population the male propensity to early entrepreneurial activities (TEA) 24.1% was significantly higher than the female propensity 18.3%. These results again confirm the gender disparity along the entrepreneurial pipeline.
- The established entrepreneur rate for the young Caribbean entrepreneur is 4%.
- The discontinuance rate for the young Caribbean is 5.6% in 2011 and 5.2% in 2012. Lower in the male young population (4.9%) than in the female young population (5.5%).
- The main finance sources for the nascent and new young Caribbean entrepreneurs are: personal savings (54.0%), banks and financial institutions (21.7%), family savings (14.6%) and friends (4.2%).





## IMMIGRATION AND ENTREPRENEURSHIP

Through the years, the idea that immigrants have a stronger orientation toward entrepreneurship has been expressed and exemplified (Jews in different countries, Cuban and Latin America in U.S.A, Chinese and Indies all over the world, Middle East people in many countries). Even inside the countries, immigrants from one region to other region had been mentioned as more entrepreneurial than the locals.

GEM tooks the decision to research, in the 2012 cycle, this important variable in the entrepreneurial process, because as globalization grows every country will have a growing effect in their social, cultural, economic structure from the different immigrant groups and the entrepreneurial interactions with other countries will grow.

"An especial set of questions on immigration in the APS and in the NES questionnaire were included to measure the entrepreneurial activities and motivation of immigrants in 69 economies. The analysis specifically considers the impact of immigrants' entrepreneurial activity in the economies in which they

operate and measure variables as: growth-, innovation- and internationalization-orientation" (Roland, X, et al.,2013).

"International migration is a key contributor to globalization in cultures and in business. Today there are more than 210 million international immigrants worldwide and the long-term trend indicates a further increase within the next decades. Since the year 2000 alone, the number of international immigrants increased by 50 million" (United Nations, 2013).

"An important area of debate on the socio-economic effects of immigration, and on the implementation of corresponding strategies, centers on the labor-market. In economies with large numbers of immigrants, this debate focuses on facilitating the economic and social integration of the immigrant population as well as on regulations to ease the immigration-related pressure on the labor-market. In particular, the inflow of highly-qualified immigrants is considered beneficial in many recipient economies to the extent it alleviates a shortage of skilled labor.





On the other hand, for economies of origin, emigration is usually associated with negative development prospects regarding the selectivity of migration. In many emigration economies, the outflow of highly-qualified persons raises concerns about a “brain-drain” and the loss of development potential. However, in the past decade emigration has also been related to positive effects in economies of origin. In this respect, social ties of emigrants to their community of origin, financial remittances and return migration potentially induce economic development.

Discussions on the labor-market issues of immigration usually view immigrants as dependently-employed, which is arguably the typical case. Only recently has the potential self-employment of immigrants been considered a vehicle for their socio-economic integration and a catalyst for economic growth. In this respect, empirical evidence from a number of economies suggests that immigrants differ from the non-in migrant population in their prevalence for entrepreneurial activity, their attitudes toward self-employment as well as their motivation for starting a firm” (Roland, X, et al.,2013).

In the Caribbean region, the influx of immigrants in many entrepreneurial activities has been recognized through the years; but, also many caribbean entrepreneurs that emigrated to other countries have had a significant role on the entrepreneurial context of those countries. Many of them have contributed very significantly to the local economy for the money they send back for their families development, and in some cases when they return, are better equipped (Knowledge, experiences and resources) to start a local business. In all areas related to immigration, the studies are quite limited, and it is necessary to increase the knowledge about the effects they have in the economy.

“Immigrants leave their home country in most of the developing countries because

the local economies do not offer many opportunities for the development and they have the idea that developed economies will provided them those opportunities. In entrepreneurial terms the main motivation will be necessity driven immigration.

The migration of the developed countries to the developing countries, even though may have some necessity driven situations, in many cases is more an opportunity driven process where the immigrants have especial knowledge or relations that gave them a competitive advantage to the development of a new enterprise.

It’s important to keep in mind that many immigrants when they arrive to the new country may have very difficult time finding a good job and developing a career inside an enterprise, not only due to lack of contacts, lack of languages in some cases, but also due to their personal expectations and their cultural differences” (Roland, X, et al.,2013).

For the study GEM identified two levels in the immigration process:

- **First generation migrants** which include individuals that were born outside the country in which they now reside.
- **Second generation migrants** which include individuals that were born in the country in which they now reside, but any one of their parents was born outside the country.

In the Caribbean case, only 1.3% of the sample identifies itself as first or second immigrant generation. Table 14 presents the results obtained in total early entrepreneurial activity (TEA), in Caribbean countries and different areas of the world, in first and second generation, and compares the results with the TEA of the general population of those regions or countries

**Table 14.** TEA for immigrants (first and second generation). 2012

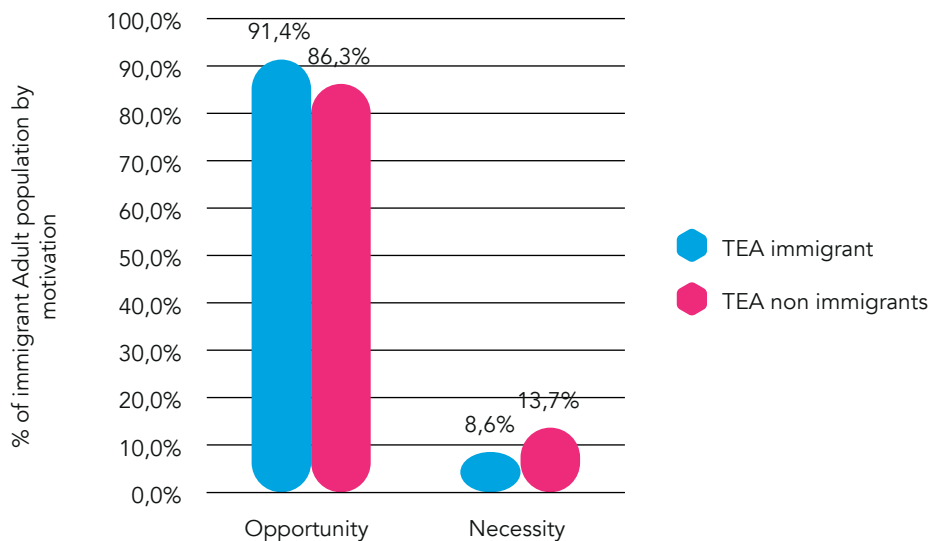
World Region	TEA (Total Population)	TEA (First Generation)	TEA (Second Generation)
Barbados	17.1%	18.3%	18.5%
Colombia	20.1%	15.9%	16.2%
Trinidad & Tobago	15.0%	8.2%	14.4%
Caribbean	18.6%	16.5%	16.8%
South and Central America	18.8%	17.1%	17.5%
U.S.A	12.9%	16.4%	12.3%
Western Europe (Including Israel)	6.1%	8.2%	7.9%
Eastern Europe (Including Russia)	8.2%	8%	9.9%
ASIA	9.4%	11.7%	9.8%
Middle East and North Africa	9.3%	10.6%	12.3%
Sub-Saharan Africa	26.8%	31.3%	30.4%

Source: Compiled by authors

The differences in TEA in the different regions of the world for the total population are kept for the immigrants of first and second generation. In the Caribbean case, neither the first generation nor the second generation pre-

sents higher TEA than the overall population. Similar behavior is shown in South and Central America. In other regions, the first generation shows higher TEA than the one of the overall population.

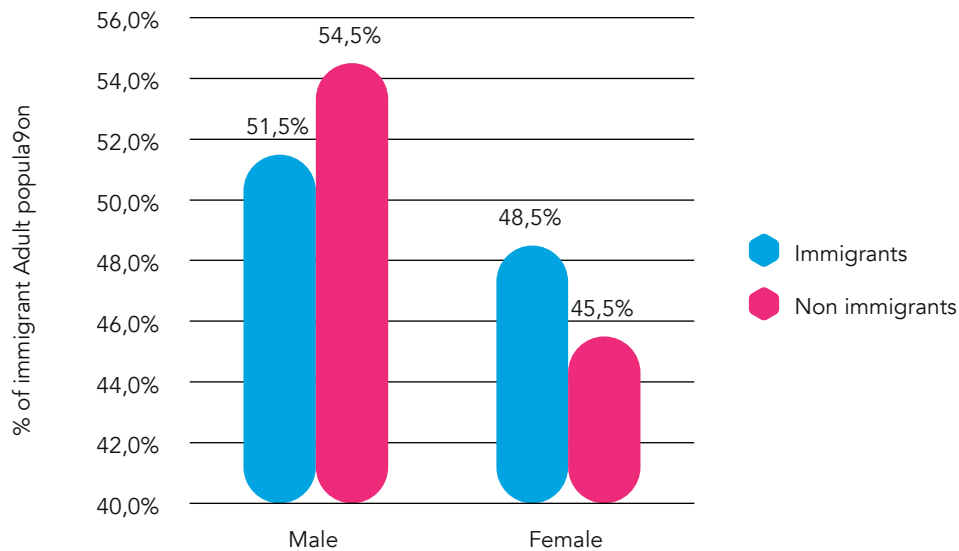
**Figure 35.** Immigrants entrepreneurs: opportunity vs. necessity. Caribbean (2012)



Source: Compiled by authors



**Figure 36.** Immigrants entrepreneurs by gender. Caribbean (2012)



Source: Compiled by authors

These differences in TEA show that there are many more significant variables in the behavior of the people that the fact of being or not immigrant in a country of the region. The competences of the immigrants, the level of development of the country, the entrepreneurial framework condition, are very significant variables, in the decision to become an entrepreneur.

Figure 35 shows a significant difference between immigrants and the overall population in the Caribbean region in terms of motivation to start new entrepreneurial activities. Only 8.6% of the immigrant entrepreneurs do it by necessity meanwhile 13.7% of the entrepreneurs do it by necessity.

In terms of gender, difference in the proportion between men and women immigrants shows the same trend that in the rest of the population. Most of the immigrants (51.5%) and most of the non-immigrants (54.5%) are male.

In terms of job creation, the study shows that first and second generation of immigrants entrepreneurs are more growth ori-

ented than natives ones, in all three economic groups (Innovation, efficiency and factor driven).

In terms of innovation measured by the novelty of the products brought to the market, there are no significant differences between immigrants and the native entrepreneurs, neither in innovation driven or in factor driven economies, but there is a significant difference in efficiency driven toward the immigrants.

As mentioned before, the framework conditions had a very significant influence in the decision to become entrepreneurs and the development of the enterprise. GEM evaluated through the national expert survey several elements, and they are presented in table 15.

The experts evaluation is not conclusive enough to identify specific advantages for immigrants vs. native people. It seems that the system just consider them as if they were native ones. The low level of immigrants identify in the region (13%) may be the reason for the inexistence of special conditions for immigrants.

**Table 15.** Entrepreneurship and immigration. NES 2012<sup>1</sup>

	Colombia	Trinidad & Tobago	Barbados	Jamaica	Caribbean
Laws and regulations to promote and support entrepreneurial activity of migrants coming from developing countries are adequate.	2,32	2,87	2,96	3,70	2,96
Laws and regulations to promote and support entrepreneurial activity of migrants coming from developed countries are adequate.	2,55	3,39	3,41	3,73	3,27
Foreigners from developing countries experience a greater number of formal restrictions than natives, when they want to start-up a business.	2,79	3,08	3,64	2,50	3,00
Foreigners from developed countries experience a greater number of formal restrictions than natives, when they want to start-up a business.	2,93	2,50	2,77	2,00	2,55
Entrepreneurs who have migrated from developing countries have worse access to private sector finance than native entrepreneurs	3,16	3,19	3,55	2,55	3,11
Entrepreneurs who have migrated from developed countries have worse access to private sector finance than native entrepreneurs.	2,75	2,41	2,36	2,44	2,49
Entrepreneurs who have migrated from developing countries have worse access to start-up support programs than native entrepreneurs	2,90	2,90	3,41	2,48	2,92
Entrepreneurs who have migrated from developed countries have worse access to start-up support programs than native entrepreneurs	2,94	2,71	2,57	2,32	2,63
Migration and integration policy explicitly identifies the potential of entrepreneurial activity.	2,35	2,25	2,75	2,74	2,52

Source: Compiled by authors

1 Each component are evaluated using a Likert scale from 1 to 5, where 1=strongly disagree and 5=strongly agree



# 10

## ENTREPRENEURIAL FRAMEWORK CONDITION

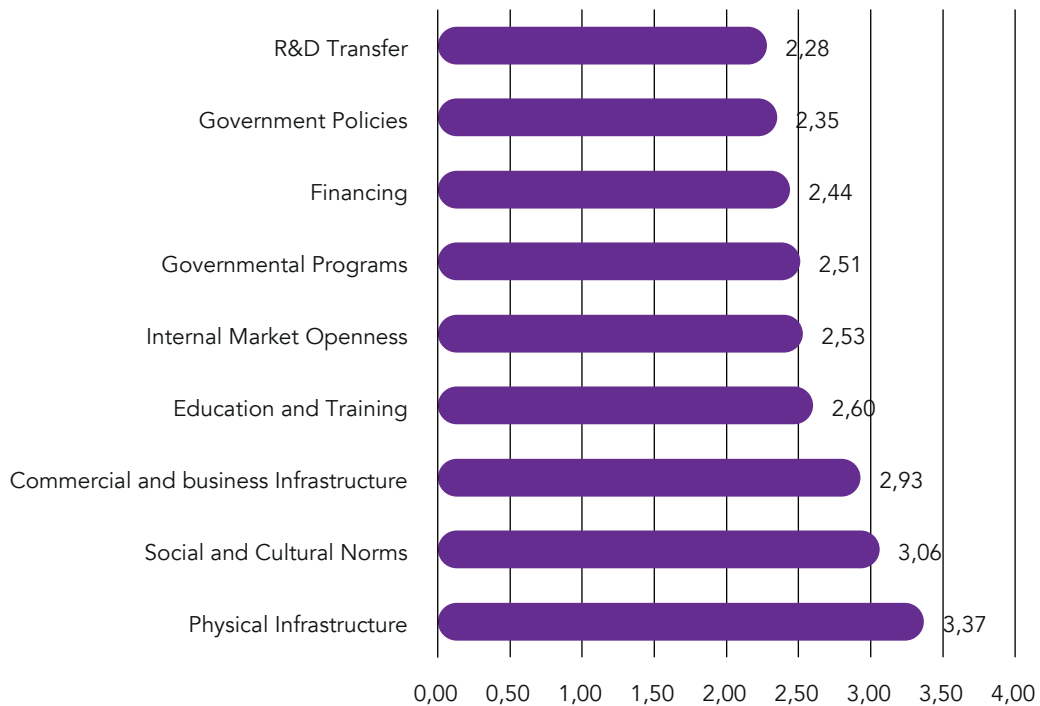


Since its inception, the GEM project has proposed that early stage entrepreneurial activity is influenced by a set of factors called: Entrepreneurship Framework Conditions (EFC). The EFC are “the necessary oxygen of resources, incentives, markets and support institutions to the growth of

new companies” (Bosma et al. 2008). Also, the GEM conceptual model has established a clear relationship between the EFC, entrepreneurship dynamic and economic growth.

According to the GEM conceptual model, the EFC may be present at any stage of eco-

Figure 37. NES scores 2012



Source: Compiled by authors.



conomic development, but can exert more influence when the basic requirements (primary education, health, infrastructure, etc.) and the efficiency enhancers (higher education, efficient market goods, proper functioning of the labor market, financial markets developed, etc.) are consolidated.

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

In 2012, Barbados surveyed 34, Colombia 50, Trinidad & Tobago 36 and Jamaica 39 experts (entrepreneurs, policy makers, business and support services providers, Investors, financiers, bankers, educators, teachers, entrepreneurship researchers) in the 9 different areas indicated in the GEM model: Social and cultural norms, physical infrastructure, internal market openness, commercial and business infrastructure, R&D transfer, edu-

cation and training, government programs, government policies, financing.

Each expert, evaluates a different set of statements using a Likert scale from 1 to 5, where 5 indicates that the statement foster entrepreneurship and 1 that the statement block entrepreneurship.

As indicated by Figure 37, the results for Caribbean are discouraging; only two of the overall (9) conditions have scores above 3.0 (Social and cultural norms and physical infrastructure), and worryingly, three are below 2.5 (financing, Government Policies, R&D Transfer). To be able to produce new policy requirements, it is very important to analyze in detail some of these conditions.

## 10.1 RESEARCH & DEVELOPMENT TRANSFER

Research & Development Transfer is a critical element to foster innovation in businesses. Sadly, this condition received a low score by

**Table 16.** Research & development transfer (2012)

In my country...	Colombia	Trinidad & Tobago	Barbados	Jamaica	Caribbean
<b>New technology, science, and other knowledge are efficiently transferred from universities and public research centers to new and growing firms</b>	2,5	2,3	2,1	2,1	2,2
<b>New and growing firms have just as much access to new research and technology as large, established firms</b>	2,3	2,6	2,2	2,2	2,3
<b>New and growing firms can afford the latest technology</b>	2,1	2,1	1,8	2,0	2,0
<b>There are adequate government subsidies for new and growing firms to acquire new technology</b>	2,4	2,2	2,1	1,6	2,1
<b>The science and technology base efficiently supports the creation of world-class new technology-based ventures in at least one area</b>	3,3	2,3	2,5	3,2	2,8
<b>There is good support available for engineers and scientists to have their ideas commercialized through new and growing firms</b>	2,6	2,1	2,0	2,2	2,2

Source: Compiled by authors.

the experts and it is probably the reason for the low levels of innovation that new and established businesses presented.

The experts determined that new technology is not efficiently passed on from the research center to the new businesses (2.2), that it is difficult for new businesses to afford the latest technology (2.0), that there are no adequate subsidies to acquire new technology (2.1). Another important aspect is that researchers, scientists and engineers do not have an efficient support system to exploit their ideas commercially thereby restricting the emergence of new businesses, which may be considered of high impact or which contribute to accelerated growth (2.2).

## 10.2 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 17, in all the statements regarding the Caribbean financial support, the scores given

were low (From 2.2 to 2.8). In general terms, Trinidad & Tobago presents the best financial support situation. According to these results, the lack of financial resources may be the reason new businesses start small, use low-end technology and are not oriented to competitive markets.

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 guarantees, may improve this basic framework condition for the different businesses that are created in the Caribbean countries. Another option is to provide fiscal stimulus for potential investors in new enterprises in order to encourage the financing of new businesses.

## 10.3 GOVERNMENT POLICIES

The importance of the government in the formulation and application of policies oriented toward promoting and supporting entrepreneurship, facilitating the creation of

**Table 17.** Financial support (2012)

In my country, there is sufficient...	Colombia	Trinidad & Tobago	Barbados	Jamaica	Caribbean
Equity funding available for new and growing firms	2,1	3,0	2,2	2,6	2,5
Debt funding available for new and growing firms	2,3	3,4	2,5	2,8	2,8
Government subsidies available for new and growing firms	2,8	3,0	2,5	2,1	2,6
Funding available from private individuals (other than founders) for new and growing firms	2,5	2,5	2,1	2,2	2,3
Venture capitalist funding available for new and growing firms )	2,2	2,9	2,1	2,1	2,3
Funding available through initial public offerings (IPOs) for new and growing firms	2,1	2,3	1,9	2,5	2,2

Source: Compiled by authors.





new enterprises and providing legal stability to both investors, as well as entrepreneurs, is widely recognized.

For 2012, the statements about government policies received scores between 1.8 and 2.9, showing that entrepreneurship and entrepreneurial development are not, according to the experts, a priority at the national level policy (2.8), neither at the local level (2.5). In addition to that, there are deficiencies in: public procurement (2.1), ease for obtaining permits and licenses (1.8), taxes (2.9). The 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 of Caribbean become a nascent business (0-3 months) and even less maintains the business to 3-42 months or longer than 42 months.

## 10.4 GOVERNMENT PROGRAMS

The role of government programs is critical to support entrepreneurship and one of the pillars to promote it. The performance of the government programs plays an important role in the entrepreneurial activity development.

This dimension (which addresses issues such as centralization, support incubators, effectiveness and competence of the programs, etc) score between 2.1 and 2.8. The main criticism is that there is not a single point from which to obtain information on government support for new and growing companies.

The availability of science parks and business incubators that provide an effective support for new and growing firms has a low score (2.4).

In an additional research action of the GEM Caribbean group, it was possible

**Table 18.** Government policies (2012)

In my country...	Colombia	Trinidad & Tobago	Barbados	Jamaica	Caribbean
<b>Government policies (e.g., public procurement) consistently favor new firms</b>	2,8	2,0	1,8	1,9	2,1
<b>the support for new and growing firms is a high priority for policy at the national government level</b>	3,4	2,5	3,0	2,4	2,8
<b>the support for new and growing firms is a high priority for policy at the local government level</b>	3,1	2,2	2,8	2,0	2,5
<b>new firms can get most of the required permits and licenses in about a week</b>	2,4	1,5	1,6	1,5	1,8
<b>The amount of taxes is NOT a burden for new and growing firms</b>	2,5	2,6	1,9	1,8	2,2
<b>Taxes and other government regulations are applied to new and growing firms in a predictable and consistent way</b>	3,0	3,1	3,1	2,5	2,9
<b>Coping with government bureaucracy, regulations, and licensing requirements it is not unduly difficult for new and growing firms</b>	2,6	1,8	2,0	2,0	2,1

Source: Compiled by authors.

to identify that in all the countries, in the last years, the government has been proposing new entrepreneurial policies and implementing different support programs. Thus the difference in the experts perceptions and the governmental actions indicates that there is a need to socialize better the policies and the programs and to expand and improve them.

## 10.5 EDUCATION AND 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, abilities and skills) the individual may have developed and they depend on, the type and quality of education obtained, and the training and the skill development received.

As shown on Table 20, the experts provided very low scores for the education and

training components (1.7 to 3.1), specifically in primary and secondary entrepreneurial education. 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 and so on), 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 (2.7 to 3.1) indicating that there is a need for improving the entrepreneurial education in these levels.

**Table 19.** Government programs (2012)

In my country...	Colombia	Trinidad & Tobago	Barbados	Jamaica	Caribbean
<b>A wide range of government assistance for new and growing firms can be obtained through contact with a single agency</b>	2,6	1,9	2,2	1,6	2,1
<b>Science parks and business incubators provide effective support for new and growing firms</b>	2,9	2,1	2,3	2,2	2,4
<b>There are an adequate number of government programs for new and growing businesses</b>	3,2	3,1	2,6	2,2	2,8
<b>The people working for government agencies are competent and effective in supporting new and growing firms</b>	3,2	2,6	2,7	2,3	2,7
<b>Almost anyone who needs help from a government program for a new or growing business can find what they need</b>	2,8	2,5	2,6	2,1	2,5
<b>Government programs aimed at supporting new and growing firms are effective</b>	2,8	2,6	2,8	2,3	2,6

Source: Compiled by authors.



## 10.6 WOMEN SUPPORT TO STARTUP

In the APS results, a significant difference in TEA was found between men and women. According to the experts in the Caribbean, as shown on Table 21, men and women have more or less the same level of knowledge and skills to start a new business (3.7), women have support system which will enable them to work and care for their family (3.1), receive encouragement to be self-employed or to start a new business (3.3), receive exposure to good opportunities (3.4) and gain social acceptability when they select entrepreneurship as a career option (3.8).

Barbados presented the highest national experts scores in women support, but it has the biggest disparity measured by the ratio

of Men TEA / Women TEA (1.8). If the Caribbean countries are 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.

**Table 20.** Education and training (2012)

In my country...	Colombia	Trinidad & Tobago	Barbados	Jamaica	Caribbean
Teaching in primary and secondary education encourages creativity, self-sufficiency, and personal initiative	2,6	2,4	2,2	2,5	2,4
Teaching in primary and secondary education provides adequate instruction in market economic principles	2,3	2,2	1,9	2,2	2,2
Teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation	2,3	1,9	2,0	2,0	2,1
Colleges and universities provide good and adequate preparation for starting up and growing new firms	2,9	2,6	2,7	2,7	2,7
The level of business and management education provide good and adequate preparation for starting up and growing new firms	3,4	3,3	2,9	3,0	3,1
The vocational, professional, and continuing education systems provide good and adequate preparation for starting up and growing new firms	3,1	3,1	3,2	3,1	3,1

Source: Compiled by authors.

**Table 21.** Women’s Support to Startup (2012)

In my country...	Colombia	Trinidad & Tobago	Barbados	Jamaica	Caribbean
there are sufficient social services available so that women can continue to work even after they start a family	2,9	2,9	3,8	2,7	3,1
starting a new business is a socially acceptable career option for women	3,3	3,4	4,1	4,2	3,8
women are encouraged to become self-employed or start a new business	3,2	2,7	3,6	3,5	3,3
men and women get equally exposed to good opportunities to start a new business	3,3	3,1	3,8	3,4	3,4
men and women have the same level of knowledge and skills to start a new business	4,0	3,5	3,8	3,3	3,7

Source: Compiled by authors.





## CONCLUSIONS



Even though in the reports all the main findings have been presented, there are some of them that provide basis for policy recommendations.

- The socio-cultural perception that Caribbean have is higher than innovation and efficiency driven economies and very similar to the factor driven economies.
- The potential entrepreneur indicator is higher than the ones for the three economic groups (Innovation, efficiency and factor).
- The Caribbean countries present a very low fear of failure in their entrepreneurial initiatives.
- In the intentional entrepreneur stage, the Caribbean entrepreneurs present a high value compared with the two economic groups (efficiency and innovation).
- There is a very significant leak, in the Caribbean entrepreneurial pipeline, in the transition from potential to intentional entrepreneurs (20 percentual points) and from intentional to nascent entrepreneurs (35 percentual points).
- The TEA is high in all the Caribbean countries, which indicates that there are growing orientations towards new business creation in the Caribbean.
- The propensity for established Caribbean entrepreneurs (8%) is higher than the new entrepreneurs (7%); this is a very good sign for the entrepreneurial pipeline growth and the improvement of the socio-economic indicator.
- The entrepreneurial pipeline for young people (18-34 years old) shows better indicator than the entrepreneurial pipeline for adults (35-64 years old) population, a positive finding looking to the entrepreneurial future of these countries.
- Gender disparity along all the entrepreneurial pipeline stages is a fact that requires the development of specific action



to improve young female entrepreneurial orientation.

- The motivation by opportunity among the Caribbean entrepreneurs is higher (57%) than the motivation by necessity (13%).
- Most of the nascent and new businesses created by Caribbean entrepreneurs have made a small contribution in terms of new jobs generated, but the perspective to 5 years is better.
- It is important to further strengthen the entrepreneurial education system because the level of education and the level of entrepreneurial activity are related. In the Caribbean region, the educational group with the highest TEA is post-secondary and graduate.
- Most of the new enterprises created by Caribbean entrepreneurs are in the consumer oriented sector, specifically in the category: "retail trade, hotels and restaurants".
- There are significant limitations in the enterprises in terms of use of recent technology, in international orientation and innovation. Special programs should be implemented to improve these limitations.
- The framework conditions for entrepreneurship have significant limitations for entrepreneurs, particularly in R&D transfer, government policies, financial support and education.

In terms of policy recommendations it is important to stress the importance of the following ones:

- The policy problems associated with the different levels of entrepreneurial activity (and entrepreneurial pipeline metrics) differ substantially among the three countries. This suggests that a number of contextual factors specific to each country affect the differing levels of entrepreneurial activity, indicating that there is no "one-size fits all" policy prescription that can be applied across the countries.
- The entrepreneurial pipeline concept shows to dissect the entrepreneurial process in well-defined stages and it should be used to identify in every country the "leaks" and to define the support system that is required to decrease the size of the "leaks". Goals for each stage and for each country should be formulated and the evaluation of the support system should be done against those goals.
- In all the countries some common deficiencies in the entrepreneurial support system were identified, at different levels and they require specific actions in every country.
- Insufficient focus on entrepreneurship in the educational and training systems, so more emphasis needs to be placed on integrating entrepreneurship curriculum in all levels of the educational and training system, including more focus on entrepreneurial education.
- Insufficient promotion of an entrepreneurial culture; so more promotion necessary to reduce the fear of failure and improve the perception of opportunities;
- Insufficient business development support, such as mentoring and coaching, to help build the confidence of potential entrepreneurs, assist nascent to bring more of their start-up efforts to fruition, and assist new business owners so they reach a higher level of sustainability and growth in the post-creation phase (including their potential to create more jobs);
- Insufficient support for the female entrepreneurship development – need for more

focused support programs to increase the level of confidence that adult females have in their ability to start and run a business and reduce their fear of failure, as well as to inspire their growth aspirations.

- Insufficient focus on innovativeness of nascent and new businesses, including their use of up-to-date technology in their enterprises – suggesting there should be more emphasis on entrepreneurship support programs on integrating innovation concepts and helping nascent entrepreneurs explore business ideas with more innovativeness in terms of products, services, markets, etc., as well as improving access to financing so they can acquire the latest technologies, which can help them improve the productivity of their businesses.
- Insufficient access to financing for start-ups and young businesses – which implicates development of sources of financing and instruments for start-ups, including seed capital funds, venture capital (for innovative enterprises with high-growth potential), guarantee funds, etc..
- Given the differences in TEA with the different age groups, it is necessary to identify the reason to become entrepreneurs in each age group and to define specific programs for them. The needs of the young (18-34) are quite different to the needs of the adult (55-64) in each one of the stages of the entrepreneurial pipeline.
- Special programs have to be designed for the growth of the new and the established enterprises, because they need an special environment to develop their full potential. Mentoring, coaching, entrepreneurial networks, training and growth management are basic elements in addition to financial support for growth, R&D, transfer, international orientation, innovation development. These special programs will

potentialize the socio economic impact of those enterprises.

Finally, some additional research initiatives are proposed in the report, but the following one are the most important ones:

- What is lacking in the entrepreneurial system to solve the disparity men-women in the entrepreneurial activity?
- How should be oriented the entrepreneurial education to develop better the entrepreneurial competences and avoid as much as possible, the leakages that the entrepreneurial pipeline shows?
- How to improve the proportion of nascent entrepreneur motivated by an opportunity and what should be provided as support system to them and to the ones that do it by necessity?
- How to evaluate the effect of government policies and programs in entrepreneurship?





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## NOTES

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