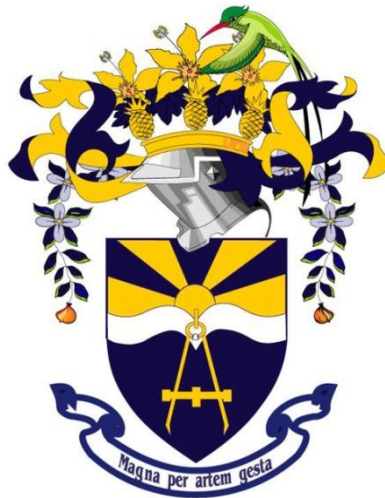




# GLOBAL ENTREPRENEURSHIP MONITOR

## 2013 JAMAICA REPORT



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## **DISCLAIMER**

The authors have attempted to ensure the accuracy and completeness of the information contained in this publication. However, no responsibility can be accepted for any errors and inaccuracies that occur. Whilst this work is based on data collected by the GEM consortium, responsibility for analysis and interpretation of those data is the sole responsibility of the authors.

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## EXECUTIVE SUMMARY

The Global Entrepreneurship Monitor (GEM) is the world's largest and longest standing globally focused entrepreneurship research. The samples in the GEM 2013 Global report represent an estimated 75 percent of the world's population and 90 percent of the world's total GDP. The study was conducted through the University of Technology, Jamaica. A total of 2,246 adults were surveyed for the Adult Population Survey (APS) in Jamaica. The National Expert Survey (NES) was administered to 36 experts from various fields allowing the measurement of the nine key Entrepreneurial Framework Conditions (EFCs).

One of the most cited GEM measures of entrepreneurial activity is the Total Early Stage Entrepreneurial Activity (TEA) rate. A country's TEA rate is the prevalence rate of individuals in the working age population who are either nascent entrepreneurs or new business owners. The Total Entrepreneurial Activity (TEA) for 2013 was 13.8%.

The majority (45.4%) of the respondents in Jamaica believed that good opportunities exist for starting a business where they live. The bulk of the respondents knew someone personally who had started a business in the past 2 years. The parish of St. Andrew (14.9%) had the highest cases of nascent entrepreneurs. There were more male (53.9%) entrepreneurs than female (46.1%). The majority (33.1%) of the TEA fell within in the age group 35 – 44 years.

Government, Health, Education and Social Services had the highest reported levels of entrepreneurial activity, 33.1% for TEA and 29.3% for established business. The majority of the Jamaican firms were consumer oriented, 48% for TEA and 44% for established business. Export intensity for both TEA and established business fell under 25%. Low use of technology was observed among all the entrepreneurs.

The special topics featured in this year's report are Well Being, Youth and Education. An interesting finding was that Jamaica had the lowest overall well being scores within the Latin and Caribbean region. The study found that the entrepreneurship climate seems to be less favorable for young adults than for the general population and 55% of the key experts believed that youth and young adults face greater constraints to entrepreneurship relative to the general adult population. The report concludes with policy recommendations to foster entrepreneurship in the country.

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## FOREWORD

Since independence in 1962, Jamaica's macro economy has not had any sustained and upward growth. With the exception of three main periods (1967-1972, 1986-1996 and 1999-2007) in which the economy grew significantly, economic growth has remained elusive. This low growth has been coupled with high debt which has resulted in sustained high unemployment rates, large-scale emigration of labour, and high poverty rates. Since the mid-1990s, real GDP growth averaged less than 1 percent per year. Public debt has risen to almost 150 percent of GDP, and market access has been greatly impaired.

The Minister of Finance and Planning in its Letter of Intent to the International Monetary Fund (IMF) dated April 2013 indicated that the Government of Jamaica (GoJ) has embarked on a comprehensive economic programme aimed at progressively raising the rate of real GDP and per capita income growth. The strategy of accelerating growth centres on attracting significant new investment in areas such as agriculture, tourism, shipping, logistics and business process outsourcing. This growth agenda is driven by fiscal and monetary policy reforms aimed at creating a stable, predictable and resilient macroeconomic environment; structural reforms aimed at significantly strengthening Jamaica's external competitiveness and productivity; catalytic and strategic private and public investments; and social stability.

Consistent with data from the Global Entrepreneurship Monitor (GEM) and other sources the GoJ has indicated its commitment to improving the business environment in the areas of enforcing contracts, registering a business, improving access to credit, especially for micro small and medium-size enterprises (MSME), and initiatives to reduce the cost of doing business. In essence the GoJ's major pillars of growth will be in the MSME sector.

To facilitate growth in the MSME sector the GoJ has proposed a MSME and Entrepreneurship Policy. The Policy seeks to offer a comprehensive, targeted and coherent framework that will create a highly entrepreneurial sector, characterized by innovative and competitive businesses and supported by a rewarding institutional and regulatory business environment.

The proposed strategies outlined in the MSME and Entrepreneurship Policy are largely congruent with those articulated under the Jamaica National Development Plan (Vision 2030) which sets out the strategic framework for improving the business environment. This Vision 2030 framework is underpinned by a set of national strategies that will ensure an efficient bureaucracy, adequate access to capital, supportive trade relations, a well-functioning labour market and improved opportunities for micro, small and medium-sized enterprises.

Since 2005 the College of Business and Management (COBAM) at the University of Technology, Jamaica partnering with the Global Entrepreneurship Monitor (GEM) have conducted an annual assessment of the entrepreneurial activity, aspirations and attitudes of Jamaicans. The Jamaican data collected is then harmonized with approximately one hundred other countries facilitating cross-national comparisons.

The 2013 Jamaican report, which follows, explores the role of entrepreneurship in national economic growth, unveiling detailed national features and characteristics associated with entrepreneurial activity. Special topics included are , Youth in Entrepreneurship Wellbeing and Education and Training.

## INTRODUCTION, BACKGROUND AND METHODOLOGY

### What is GEM?

The Global Entrepreneurship Monitor (GEM) project is an annual assessment of the entrepreneurial activities, aspirations and attitudes of individuals across a wide range of countries.

The 2013 GEM Global Report indicates that GEM was first conceived in September 1997 by Michael Hay of London Business School (LBS) and Bill Bygrave of Babson College. LBS and Babson funded a prototype study that year. Ten national teams (the G7 economies: Canada, France, Germany, Italy, Japan, United Kingdom and United States and three additional economies: Denmark, Finland and Israel) conducted the first GEM study in 1999 with Paul Reynolds as the principal investigator. The number of National Teams (participating countries) grew to 31 in 2003 and the 2013 report included 70 countries, with more than 197,000 individuals being surveyed. Over its fifteen years of life, GEM has measured entrepreneurship in 104 economies, and has gained widespread recognition as the most authoritative longitudinal study of entrepreneurship in the world. The 2013 edition of the study covered an estimated 75% of the world's population and 90% of the world's total GDP.

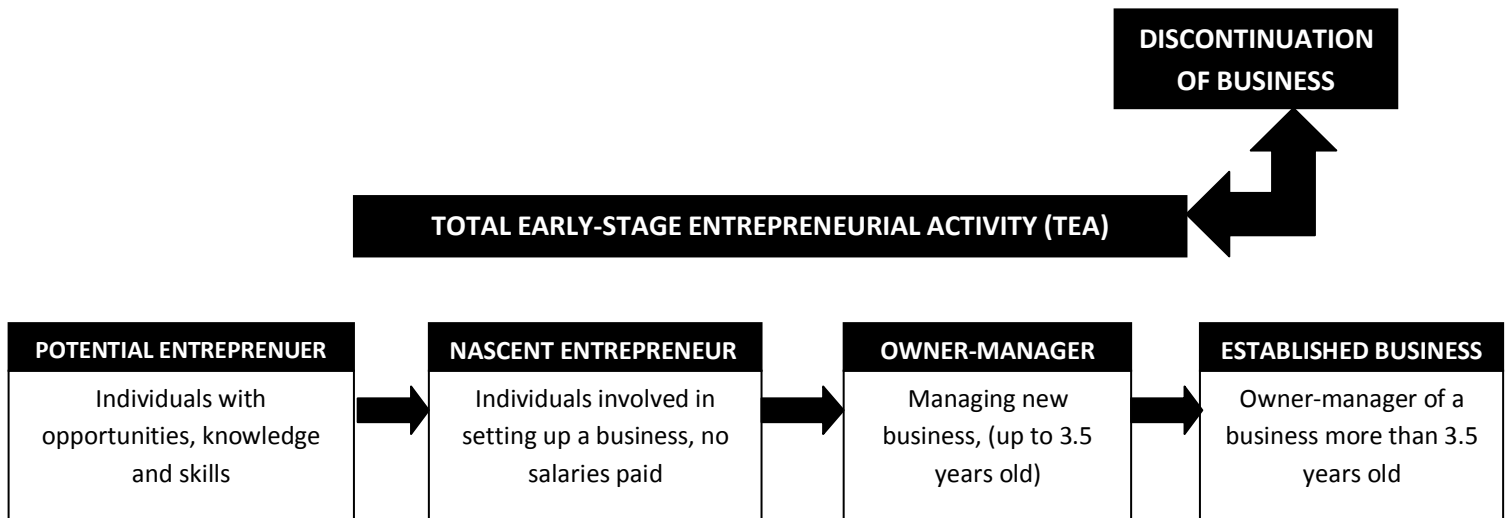
In order to govern the interests of the GEM National Teams, the Global Entrepreneurship Research Association (GERA) was formed in 2004 to serve as the oversight body for GEM. GERA is a not-for-profit organization governed by representatives of the national teams, the two founding institutions and sponsoring institutions. The GERA mission is to contribute to global economic development through entrepreneurship. GEM focuses on four main objectives as outlined in Table 1.

**Table 1: GEM Main Objectives**

<b>1</b>	To allow for comparisons with regard to the level and characteristics of entrepreneurial activity among different economies
<b>2</b>	To determine the extent to which entrepreneurial activity influences economic growth within individual economies
<b>3</b>	To identify factors which encourage and/or hinder entrepreneurial activity
<b>4</b>	To guide the formulation of effective and targeted policies aimed at stimulating entrepreneurship

## The Phases of Entrepreneurship

The GEM project has focused on entrepreneurship as a process comprising different phases, from intending to start, to just starting, to running new or established enterprises and even discontinuing a business. Figure 1 shows the entrepreneurship process and operational definitions as conceptualized by the GEM research framework.



**Figure 1: The Entrepreneurship Process and GEM Operational Definitions**

Source: GEM 2013 Report page 19.

## The GEM Conceptual Model

GEM developed a conceptual framework that sets out key elements of the relationship between entrepreneurship and economic growth and the way in which the elements interact. The model has been influenced by the World Economic Forum's (WEF) Global Competitiveness Report which grouped countries based on three main phases of economic development based on GDP per capita and the share of exports comprising primary goods.

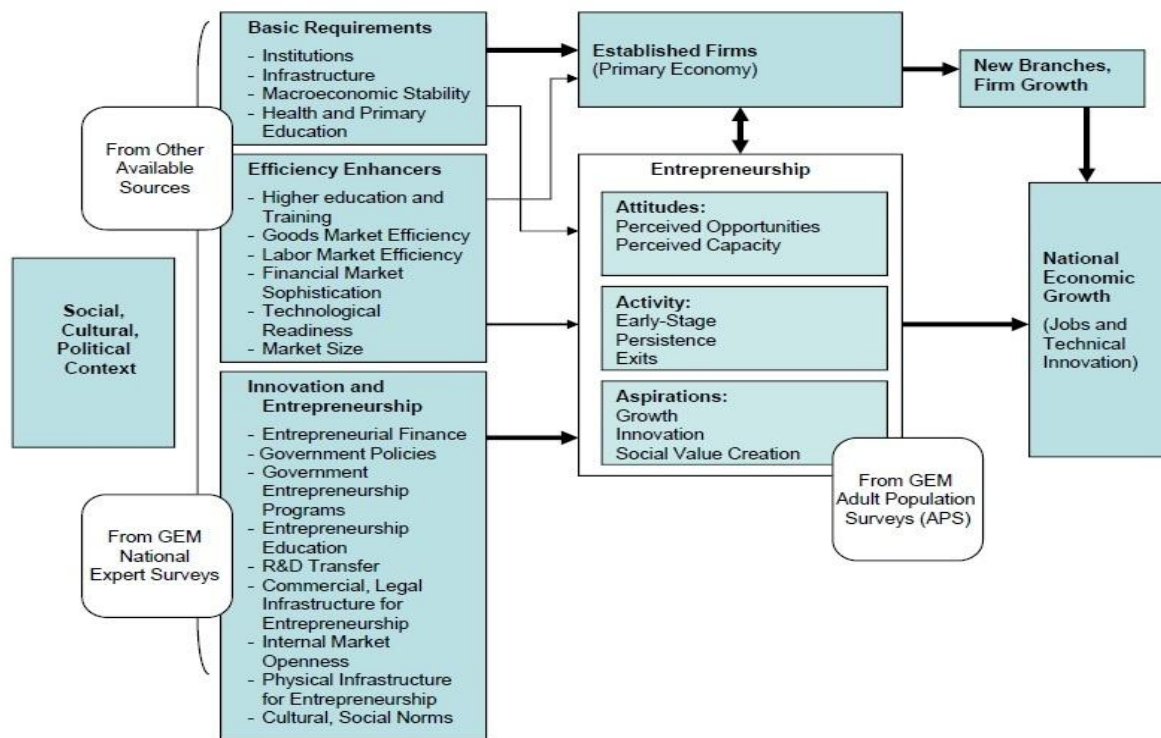
According to the WEF (2013) classification, the first stage of economic development is factor-driven. In this phase companies compete based on their factor endowments—primarily low-skilled labour and natural resources. Nineteen Companies compete on the basis of price and sell basic products or commodities with their low productivity reflected in low wages.

As a country becomes more competitive, productivity will increase and wages will rise with advancing development. Countries will then move into the *efficiency-driven* stage of development, when they must begin to develop more efficient production processes and

increase product quality because wages have risen and they cannot increase prices. At this point, competitiveness is increasingly driven by higher education and training, efficient goods markets, well-functioning labour markets, developed financial markets, the ability to harness the benefits of existing technologies, and a large domestic or foreign market.

Finally, as countries move into the *innovation-driven* stage, wages will have risen by so much that they are able to sustain those higher wages and the associated standard of living only if their businesses are able to compete with new and/or unique products, services, models, and processes. At this stage, companies must compete by producing new and different goods through new technologies and/or the most sophisticated production processes or business models.

The GEM framework incorporates the three main components that capture the multi-faceted nature of entrepreneurship: entrepreneurial attitudes, entrepreneurial activity, and entrepreneurial aspirations. These are included as components of a “black box” that produces innovation, economic growth and job creation, without spelling out in detail how they affect and reinforce each other. The framework also highlights the contributions of entrepreneurial employees as well as their role as potential future independent entrepreneurs. The current GEM conceptual framework is shown in Figure 2. This figure also shows how GEM measures different components, such as entrepreneurial framework conditions using the national expert survey, and the entrepreneurship profiles, encompassing entrepreneurial attitudes, activity and aspirations using the adult population survey.



**Figure 2: GEM Conceptual Model**

Source: GEM 2013 Report page 21

### Research Methodology

GEM data is derived from two sources: (1) Adult Population Survey (APS) which tracks the entrepreneurial attitudes, activity and aspirations of individuals and; (2) the National Expert Survey (NES) which monitors entrepreneurial framework conditions – nine aspects of a country’s socio-economic milieu that are believed to have a significant impact on national entrepreneurship.

### Survey Design: Adult Population Survey

Each participating economy conducts an APS survey of a random representative sample of at least 2,000 adults (over 18 years old). Surveys are conducted at the same time of year (generally between April and June), using a standardized questionnaire developed by the GEM consortium.

Jamaica’s Adult Population Survey for 2013 was carefully designed to reflect the majority of the characteristics of the voting age population of Jamaica, based on the 2011 Population Census. The sample was configured to be representative of all Jamaicans 18 to 64 years of age who reside permanently in the country and live in private dwellings. The sample excluded persons who live in institution type residences such as the army camp, school dormitories and guest houses.



A multi-stage, stratified probability sampling procedure was employed. Stage one involved the division of the country according to the 14 parishes. Stage two of the process involved further stratification into rural /urban areas, in an attempt to ensure that sampling units were selected in the same proportion that they were distributed in rural and urban districts across the island. The final stage was the selection of the primary sampling units (PSUs) – Enumeration Districts (EDs). The primary sampling units (PSU) are EDs with 80 or more dwellings at the time of the Population Census.

The PSUs in this design were carefully chosen using a proportional to size selection process. The EDs and maps were procured from the Statistical Institute of Jamaica (STATIN). A total of 2,246 adults were surveyed in the period of August 10<sup>th</sup> to September 20, 2013. All interviews were done face-to-face. The sample consists of 1053 (53%), females and 1193 (47%) males, age 18 to 64 years.

#### **Survey Design: National Expert Survey**

The National Experts Survey provides insights into the entrepreneurial start-up environment in each economy with regard to the nine entrepreneurial framework conditions:

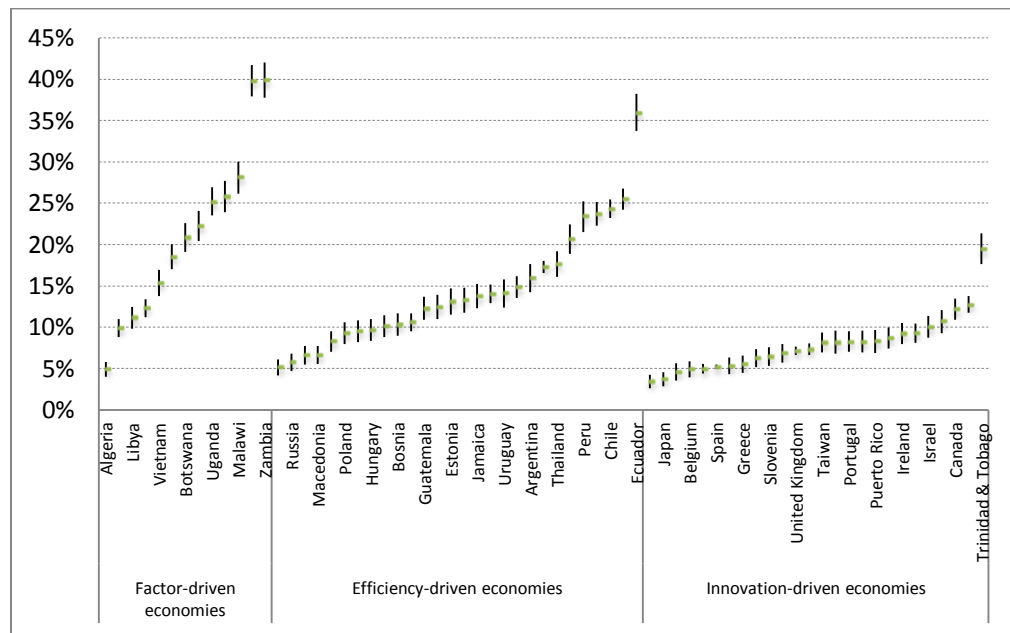
- Financing
- Governmental policies
- Governmental programs
- Education and training
- Research and development transfer
- Commercial infrastructure
- Internal market openness
- Physical infrastructure
- Cultural and social norms

The NES sample comprised a minimum of 36 respondents, with four experts drawn from each of the entrepreneurial framework condition categories. Of of this sample, a minimum of 25% were entrepreneurs or business owners, and 50% professionals. Additional aspects such as geographic distribution, gender, the public versus private sector, and level of experience were taken into account in selecting the sample.

The NES sample had 36 respondents with four respondents for each of the nine entrepreneurial framework conditions. The minimum conditions of 25% of the respondents being entrepreneurs or business owners, and 50% being professionals were satisfied. The entire NES was conducted face-to-face.

## ENTREPRENEURIAL ACTIVITY

One of the most cited GEM measures of entrepreneurial activity is called the Total Early Stage Entrepreneurial Activity (TEA) rate. It is one of the most important measures constructed by GEM. Over the years, generally higher TEA rates have been observed for factor-driven economies as against countries in the other two categories representing higher levels of development. The TEA rates for the 67 participating countries in 2013 are shown in Figure 3. The average TEA for efficiency-driven countries (7.9%) was nearly twice that prevalent in efficiency-driven economies (14.4%), while the average for factor-driven states stood at 21.1%, nearly three times that for innovation-driven states (Figure 3).



Source: GEM 2013 Global Report, p.33.

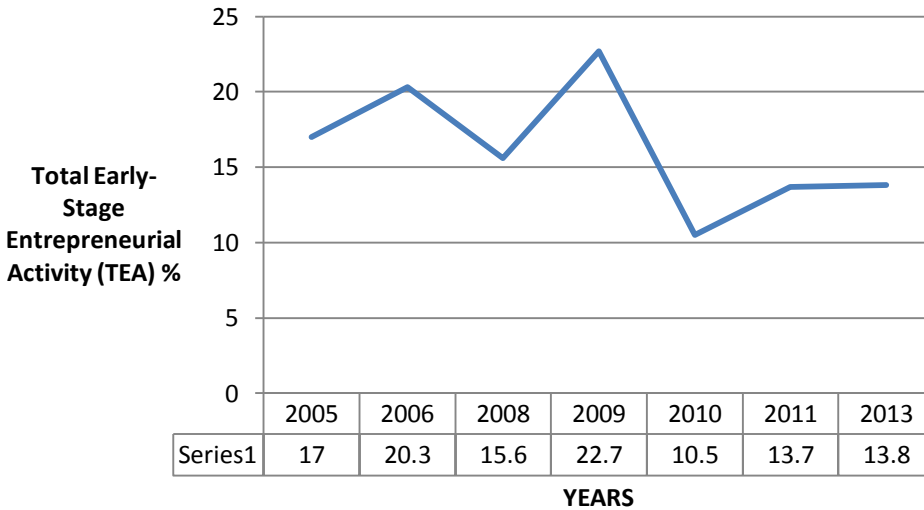
**Figure 3: GEM 2013 TEA Rates by Phase of Economic Development**

Earlier GEM Global Reports recorded generally higher TEA in factor-driven (and transition) countries while the lowest rates were seen in innovation-driven states.

Historical TEA rates for Jamaica (2005-2013) are shown in Figure 4. Jamaica did not participate in GEM in 2007 and 2012. When the recent global recession began in 2008, the TEA rate was 15.6%. It climbed to 23% in 2009 probably due to the employment shock of the recession resulting in rising unemployment. In 2010 the TEA rate declined dramatically to 10.5% but rose marginally to 13.7% in 2011. It stabilized at the same level in 2013 (13.8%).

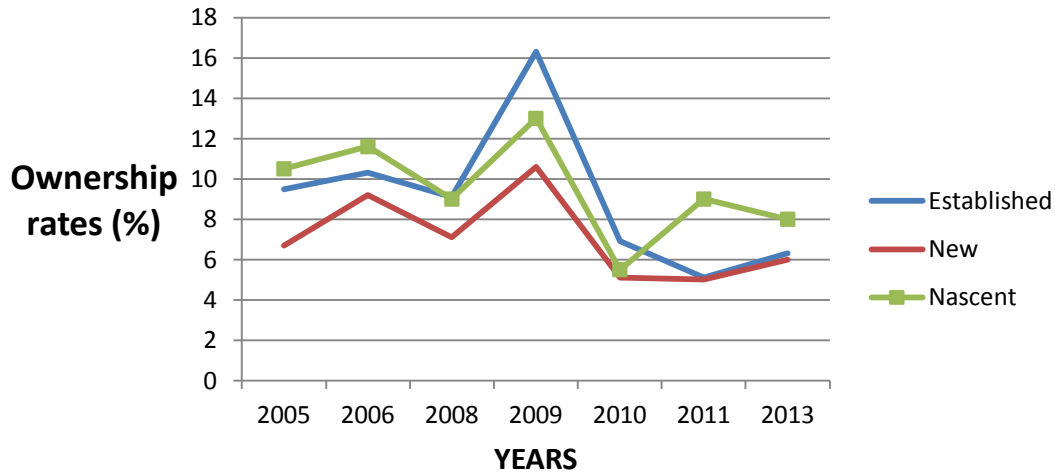
### Total Entrepreneurial Activity (TEA)

Total Entrepreneurial Activity (TEA) for 2013 was 13.8%. Jamaica reported a lower TEA than Trinidad and Tobago for the same period with Trinidad & Tobago's TEA at 19.5%. Jamaica is classified as an Efficiency-Driven Economy and according to the GEM 2013 Global Report, TEA rates tend to be highest for the factor-driven economies.



**Figure 4: Total Early-Stage Entrepreneurial Activity (TEA) rates for Jamaica: 2005-13 established, new and nascent ownership rates.**

Figure 5 illustrates ownership rates for established, new, and nascent businesses in Jamaica. In 2005, the established business ownership rate was 9.5%. It soared to 16.3% in 2009 but fell precipitously by approximately 61% to register 6.3% in 2013. This is not a favourable sign and an analysis of the reasons for business discontinuities should be very informative. The new business ownership rate increased steadily from 7.1% in 2008 to a high of 10.6% in 2009. Thereafter, it generally declined to record 6% in 2013. Nascent businesses exhibited a similarly decreasing general trend from a high of 13% in 2009 to only 8% in 2013, the lowest level since 2005, excepting 2010 which showed 5.5%.

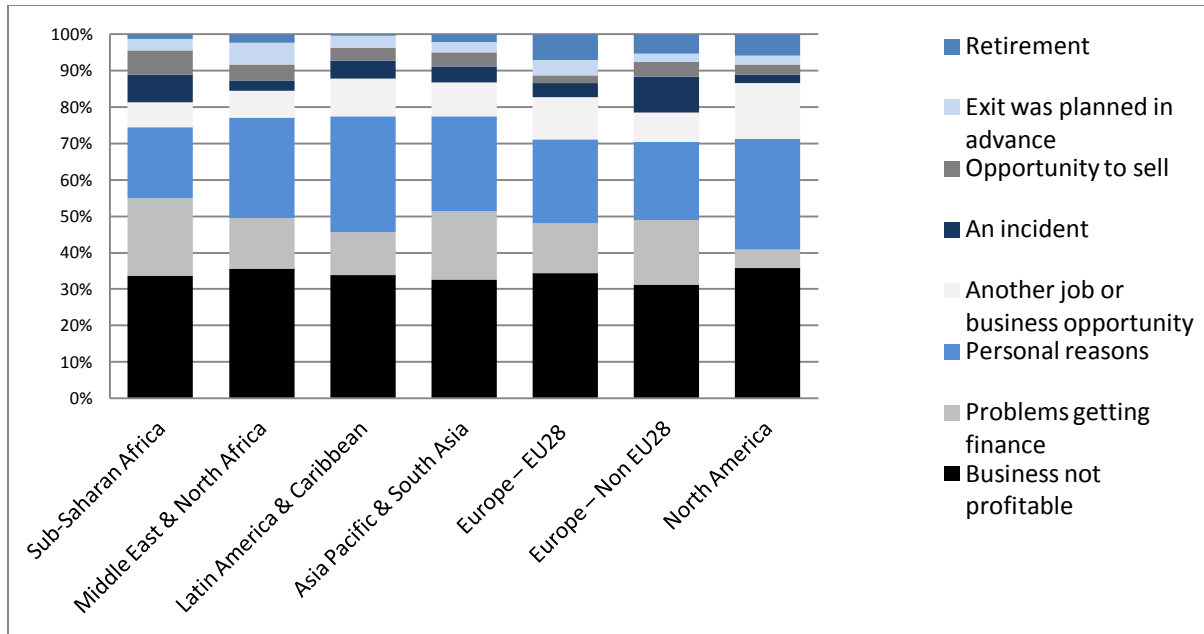


**Figure 5: Established new and Nascent ownership rates 2005-13**

### Business Discontinuation

GEM’s business discontinuation rate measures the proportion of the working age population that discontinued businesses over the past twelve months through selling, shutting down or otherwise severing an owner/management entrepreneurship relationship with the business. As seen in appendix 1 innovation-driven economies exhibit the lowest rate of business discontinuation (2.8%), followed by efficiency-driven states (4.2%). The highest rate (12.6%) is recorded for factor-driven countries. Jamaica’s discontinuation rate of 7.4% for 2012 is among the highest in all 28 efficiency-driven economies. Additionally, 76% of discontinued businesses in Jamaica ceased operations altogether.

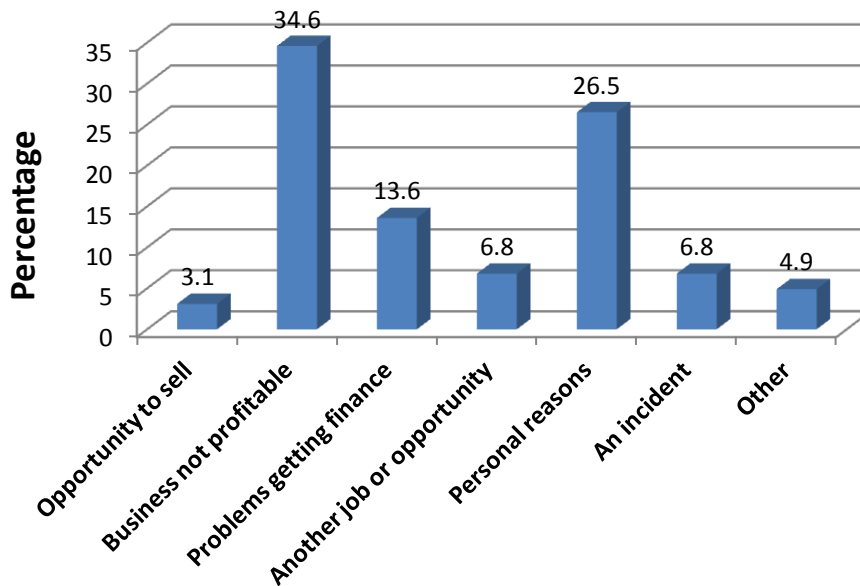
The results are summarized by geographic divisions in Figure 6. The most significant reason for discontinuation in all country a grouping is finance averaged approximately 48% for all regions taken as a whole.



Source: GEM 2013 Global Report, p.36.

**Figure 6: Reasons for Business Discontinuation by Region**

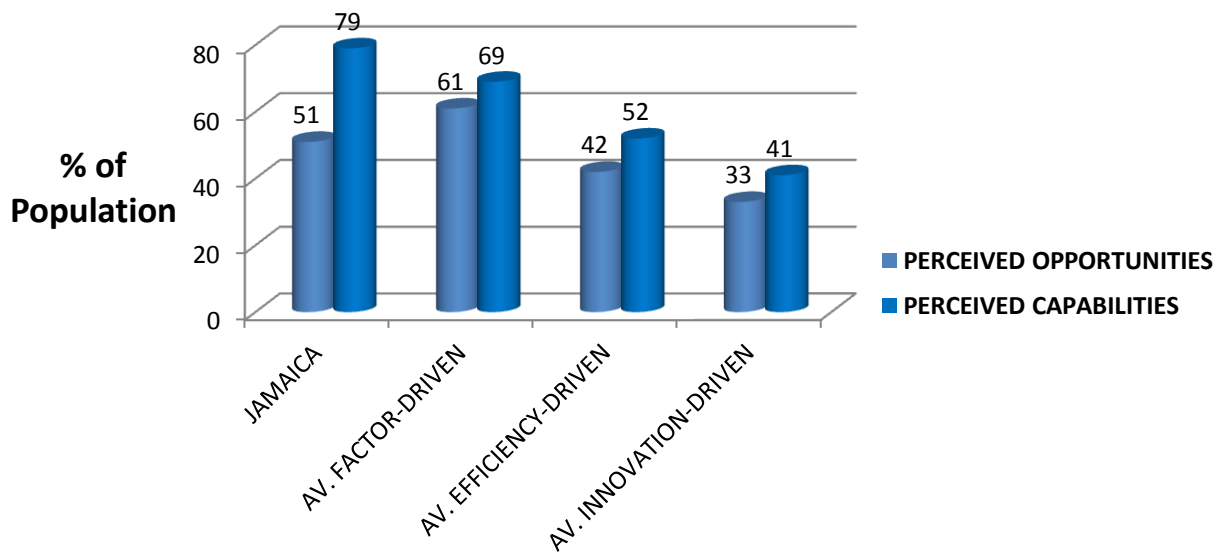
Figure 7 indicates that the most cited reasons by Jamaicans for discontinuing businesses are “business was not profitable” (34.6%), “personal reasons” (26.5%), and “problems getting finance” (13.6%). Thus, financial reasons accounted for nearly 50% of all firms that discontinued businesses in 2013.



**Figure 7: Most important reasons for discontinuation of business in Jamaica**

### Perceived Opportunities and Perceived Capabilities

Various factors contribute towards people’s perceptions of opportunities for creating businesses. Such factors include the prevailing socio-economic environment as well as the political climate and cultural factors. The global APS reveals that individuals in factor-driven economies demonstrate higher perceptions of business opportunities (61%) in comparison to individuals in efficiency-driven (42%) and innovation-driven countries (33%) (Appendix 2). Fifty-one percent of Jamaicans stated that they see good opportunities to start businesses while 42% of efficiency-driven economies saw such opportunities (Figure 8). This puts Jamaicans at “above average” in terms of perceiving opportunities to start businesses. In terms of perceived capabilities, the trend is similar. Seventy-nine percent of Jamaicans declared that they are quite capable of starting their own businesses. This rate is much higher than the average for factor-driven states (69%) and also represents the highest rate for all 28 efficiency-driven countries which averaged only 52%.



**Figure 8: Jamaica: Perceived Opportunities and Perceived Capabilities**

### Fear of Failure

According to GEM definitions, the rate of fear of failure is computed as the percentage of the working age population with positive perceived opportunities who indicate that a fear of failure would deter them from starting a business. Jamaica registered a relatively low rate of only 27%, much lower than the average rate for countries in the middle rank. This entrepreneurial courageous outlook may augur well towards fostering business venturing if the correct set of policies is instituted to enhance business opportunities. A favorable business climate may

persuade potential entrepreneurs to take advantage of business opportunities. Interestingly, Trinidad and Tobago, classified as an innovation- driven economy reported a fear of failure rate of only 19%, the lowest among all countries in the two higher stages of economic development. However, people need to be taught the importance of calculated risk-taking in making the decision to start businesses as recklessness in initiating business ventures may militate against successful entrepreneurship.

### **Entrepreneurial Intentions**

The entrepreneurial intention rate is the percentage of individuals in the working age population (excepting those who are currently involved in any stage of entrepreneurial activity) who plan to create a business within three years. The highest intention rates (45%) were observed for countries in the lowest tier of economic development - nearly four times higher than that recorded for the most developed economies (12%). The intention rate for Jamaica in 2013 (39.5%) was twice that of 2011 (19.5%), when the island previously participating in the GEM APS data collection. Such a high rate, coupled with a low rate of fear of failure and a relatively high perceived opportunity rate indicate that Jamaicans are highly entrepreneurial.

### **Career Choice, Status, and Media Attention**

Jamaicans continue to view entrepreneurship as a highly favourable career choice (see Figure 9). A huge proportion of the working age populations in the poorest countries (75%) agree with the statement that in their country, most people consider starting a business as a desirable career choice. Jamaica fell in the efficiency-driven group of countries which averaged 68%, yet nearly 80% of Jamaicans look at entrepreneurship favourably in terms of career choice. The picture is similar in terms of status. An overwhelming majority of persons in the 18-64 age group (80%) in countries grouped in the lowest phase of development revealed that high status is accorded to successful entrepreneurs, and 81% percent of Jamaicans made a similar claim. However, only 67% of persons in efficiency-driven states made such a declaration.

An overwhelming majority of Jamaicans (82%) revealed that they often saw stories in the public media regarding successful new businesses. Such claims were not as pronounced in factor-driven and efficiency-driven economies which averaged 70% and 61%, respectively. In terms of career choice, status, and media attention, innovation-driven countries recorded 54%, 67%, and 56%, respectively – the lowest among the three categorized of levels of economic development.

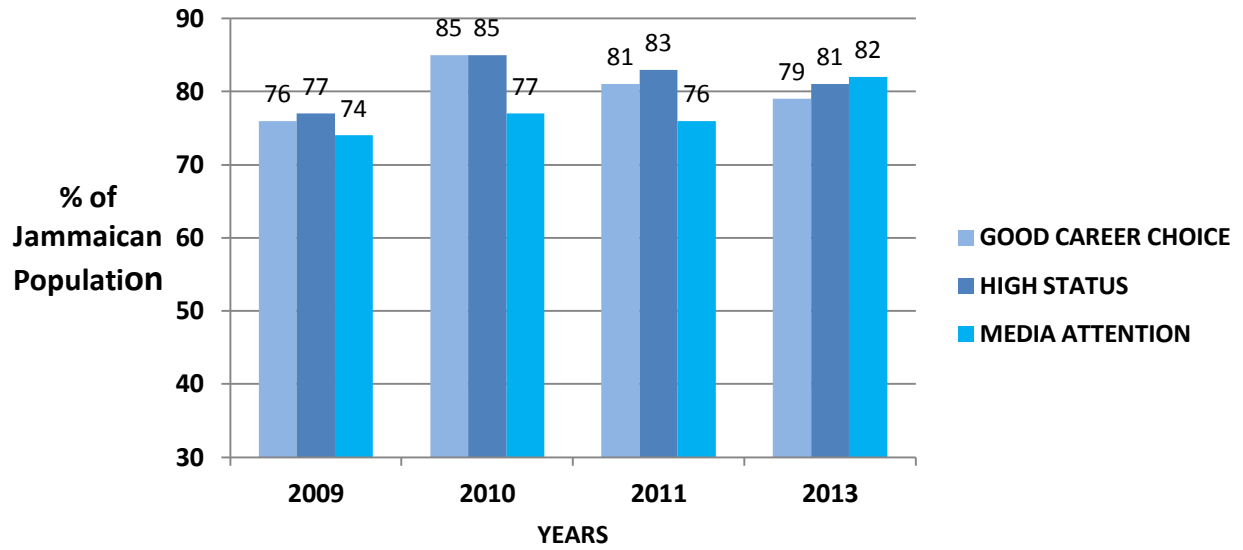


Figure 9: Career choice, status and media attention



## ENTREPRENEURIAL CHARACTERISTICS

The characteristics of the GEM 2013 Jamaican population have shown only slight changes and none in some cases over previous years. Although there have been significant changes in the economy with most start ups and established businesses being motivated by necessity, the demographics have remained fairly constant over time.

### Gender Total Entrepreneurial Activity (TEA)

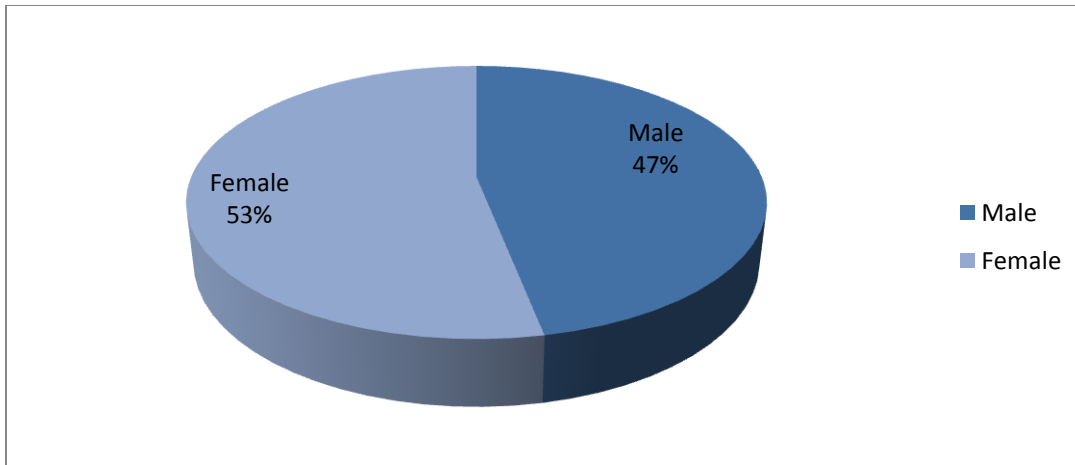
Most of the respondents were from the parishes of St. Catherine, St. Andrew, and Clarendon with more females being involved in the study than males (Table 2).

**Table 2: Gender Distribution by Parish**

*Gender Distribution by Parish*

<u>Parish</u>	<u>Male</u>	<u>Female</u>	<u>Parish Total</u>
Kingston	27	51	78
St. Andrew	150	181	331
St Thomas	45	44	89
Portland	19	45	64
St Mary	66	51	117
St Ann	77	97	174
Trelawny	29	38	67
St James	87	87	174
Hanover	39	42	81
Westmoreland	77	89	166
St Elizabeth	71	82	153
Manchester	78	96	174
Clarendon	100	106	206
St Catherine	188	184	372
<b>Totals (N = 2246)</b>	<b>1053</b>	<b>1193</b>	<b>2246</b>

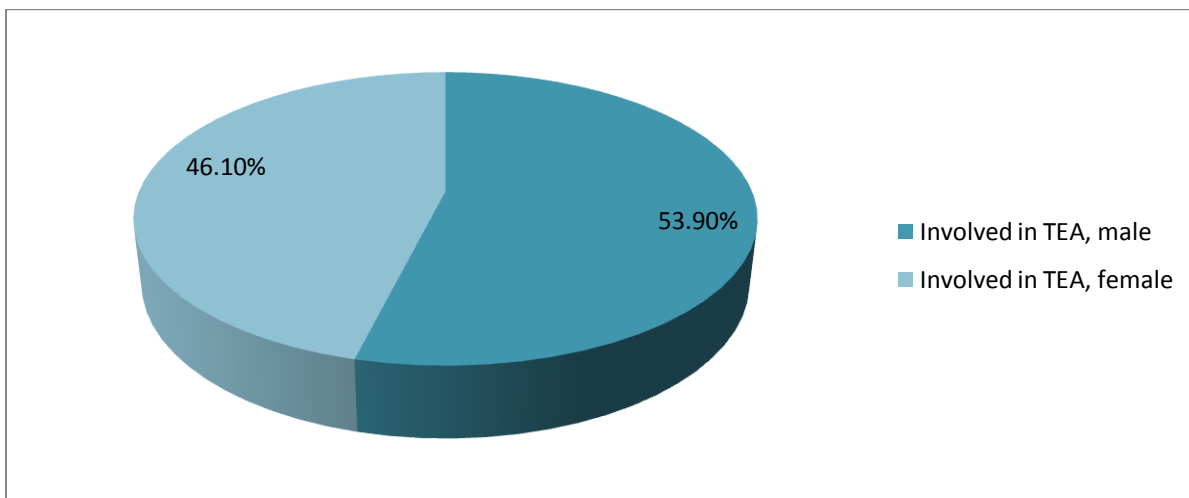
The sample consisted of 1193 (53%) females and 1053 (47%) males, age 18 to 64 years according to Figure 10.



**Figure 10: Gender Distribution**

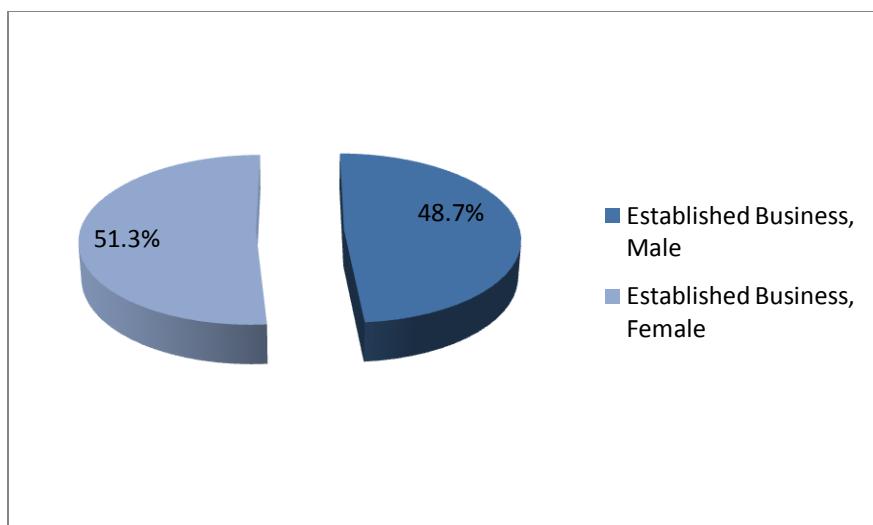
### Entrepreneurship by Gender

More males (53.9%) than females (46.10%) were involved in entrepreneurial activity (Figure 11). This is consistent with GEM 2013 results which confirmed that in most economies, the female entrepreneurs are outnumbered by males.



**Figure 11: TEA by Gender**

However, as it relates to Established Business ownerships, Figure 12 shows that more cases were reported for females (51.3%) than males (48.7%).



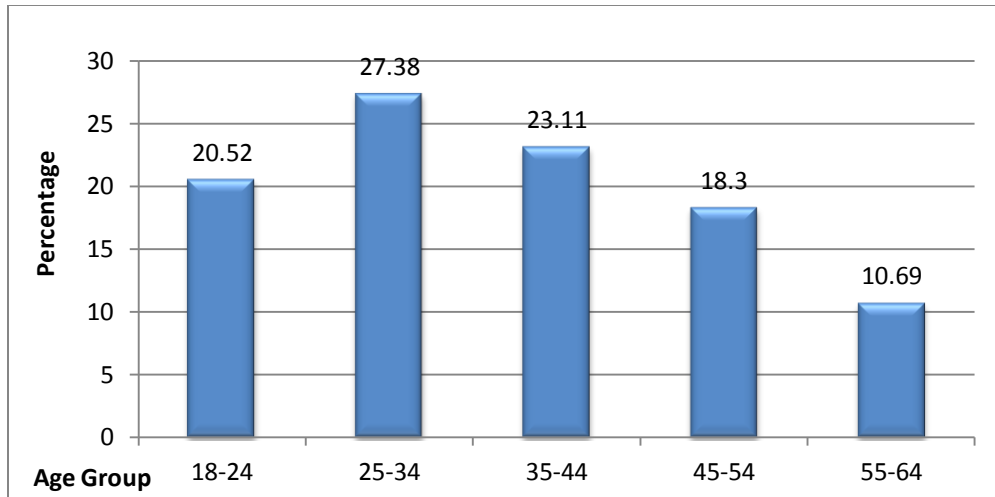
**Figure 12: Established Business Ownership by Gender**

### Age and Entrepreneurship

The APS 2013 had a similar distribution of age groups as that of the Jamaican Population Census for 2011 (Table 3 and Figure 13), with the majority of adults in the 25 to 34 (27.4%) and 35 to 44 (23.1%) age groups.

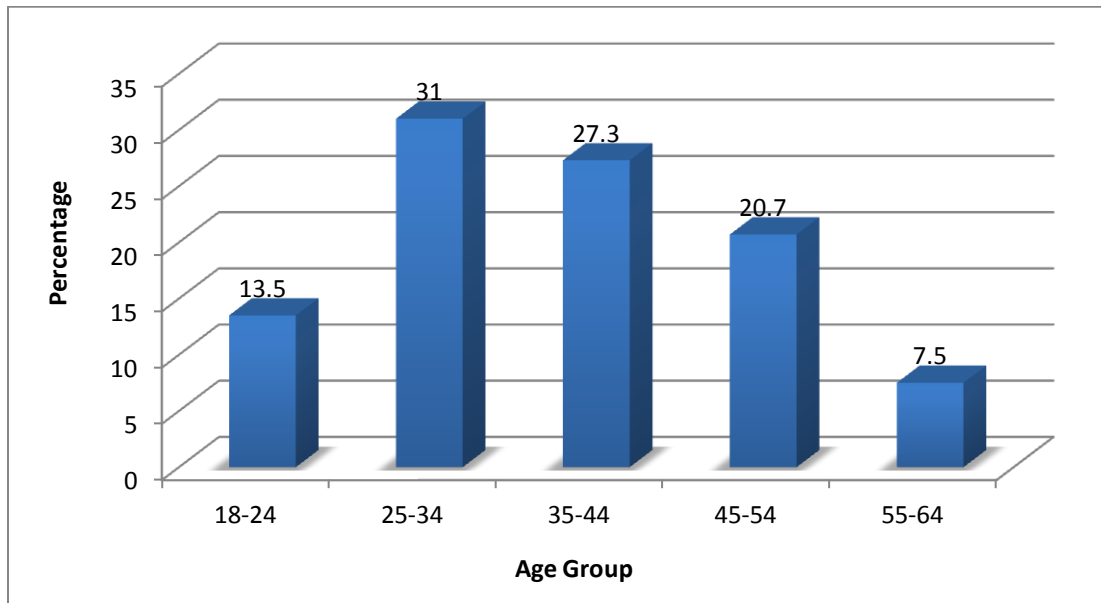
**Table 3: Comparison of Age Distribution of Population Census (2011) and the APS 2013 in Jamaica**

<i>Comparison of Age Distribution of Population Census (2011) and the APS 2013 in Jamaica</i>				
<u>Age Group</u>	<u>Population Census (2011)</u>	<u>Percentage</u>	<u>APS2013</u>	<u>Percentage</u>
18-24	364872	22.2	461	20.5
25-34	421482	25.6	615	27.4
35-44	357629	21.7	519	23.1
45-54	303909	18.5	411	18.3
55-64	199011	12	240	10.7
Totals	1646903	100	2246	100



**Figure 13: Age Distribution in Jamaica**

According to Figure 14, TEA was most prominent in the 25 to 34 (31%) age group and the 35 to 44 age group (27.3%). This was consistent with GEM 2013 Global Report which revealed that the distribution of early-stage entrepreneurship is roughly similar for all regions, with highest prevalence rates in the 25 to 34 and 35 to 44 age groups (GEM Global 2013, p. 36)



**Figure 14: TEA 2013 by Age Group**

### Employment and Entrepreneurial Activity

Employment status of the participants shows that 30.7% of the population was self-employed, 24.5% were employed by others in fulltime work, 22.2% were seeking employment, 10.4% were employed by others in part-time work, 9.1% reported being full-time home-makers, 6.8% were students and 3.1% were not working because they were either retired or disabled (Table 4).

**Table 4: Employment Status of Respondents**

<i>Employment Status of Respondents</i>		
<u>Employment Status</u>	<u>Frequency</u>	<u>Percentage</u>
Self-employed	689	30.7
Employed by others in fulltime work	550	24.5
Seeking employment	498	22.2
Employed by others in part-time work	233	10.4
Full-time home-maker	205	9.1
Student	153	6.8
Retired or disabled	69	3.1

### Motives for Entrepreneurial Activity

Table 5 illustrates that necessity was the main motive for involvement in entrepreneurship for TEA (45%) and Established Businesses (56%). The Review of Economic Performance for July to September 2013, released by the Planning Institute of Jamaica (PIOJ) in November 2013, showed that the unemployment rate for July 2013 was 15.4% compared with 13.1 % in July 2012. The total unemployed labour force increased by 34,200 (20.4%) persons in July 2013 compared with the level recorded in July 2012. There was a slight decline (0.5%) in the unemployment rate in the last quarter of 2013. The unemployment rate for October 2013 was 14.9% compared with 15.4% in July 2013.

The 2013 TEA data according to Table 5 was consistent with the 20% increase in unemployment rates as the majority of the decision of early-stage entrepreneurs (TEA) were based on necessity (45%) with 37.9% being motivated solely by opportunity.

**Table 5: TEA and Established Business Motives**

*TEA and Established Business Motives*

<u>Motive</u>	<u>TEA</u>		<u>Established</u>	
	Frequency	Percentage	Frequency	Percentage
Necessity Motive	134	45	75	56
Solely Opportunity Motive	113	37.9	42	31.3
Partly Opportunity Motive	51	17.1	17	12.7
Total		100		100

***Income Distribution/Levels***

Table 6 shows that 36.55 % of the respondents earned below the minimum wage of J\$195,360 annually, the equivalent of US\$0.0 – US\$1783.62. This has implications for the ability of respondents to accumulate funds for business startup.

**Table 6: Income Distribution**

*Income Distribution of Respondents (n = 747 or 33.3% of the sample)*

<u>Income Ranges</u>	<u>Frequency</u>	<u>Percentage</u>
< JMD \$195,360	273	36.55
JMD \$195360 - JMD \$287999	150	20.08
JMD \$288000 - JMD \$479999	131	17.54
JMD \$480000 - JMD \$959999	93	12.45
JMD \$960000 - JMD \$1439999	42	5.62
JMD \$1440000 - JMD \$2879999	40	5.35
JMD \$2880000 and over	18	2.41
Total	747	100.00

**Education and Entrepreneurship**

Many argue that education is not necessary for entrepreneurial development. It is undisputable however, that education and training foster a wide range of skills development including creative thinking, teamwork, risk management and financing. More than half (55.7%) of the participants have received secondary level education (see Table 7). On the other hand, post secondary education and training have been accessed by only 24.76%.

**Table 7: Levels of Education**

*Levels of Education*

---

<u>Level of Education</u>	<u>Frequency</u>	<u>Percentage</u>
None	6	0.27
Pre Primary	13	0.58
Primary/All Age/Elementary	362	16.23
Secondary High	1242	55.70
Vocational High	55	2.47
Commercial/Business		
College	53	2.38
University	223	10.00
Community College	121	5.43
HEART Programme	155	6.95
Total	2230	100.00

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## ENTREPRENEURIAL ASPIRATIONS

Entrepreneurs vary in their aspirations to introduce new products and new production processes as well as in their willingness to engage with foreign markets. These aspirations if realized can significantly affect the socio economic impact of entrepreneurial behavior. Entrepreneurs who are likely to create jobs, be involved in international trade and offer new products and services are of particular interest in Jamaica since these factors help drive the growth of the economy. Presented indicators of entrepreneurial aspirations are product innovation, job-growth expectation and international orientation.

### Growth Expectations

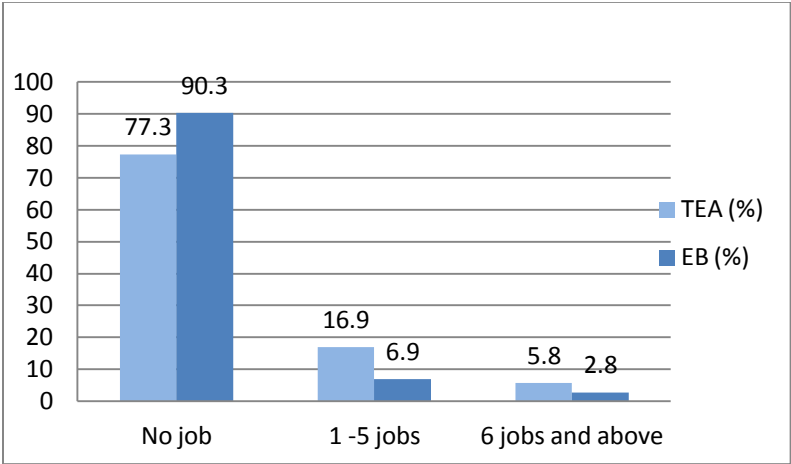
**Table 8: Persons working for the Business currently and in five years**

Number of Persons	Currently working for the Business (%)	Working for the business in five years time (%)
0	35	21
1	18.4	7
2	16.5	18
3	13.6	10
4	3.9	5
5	4.9	16
6	1.9	2
7	1.9	6
8	-	3
9	-	-
10	1.9	4
15	-	1
25	-	1
26	1.0	-
30	-	2
50	-	2
100	-	1

A significant impact of entrepreneurial activity is job creation. Due to the prevailing high unemployment rate in Jamaica it is interesting to examine growth expectations of entrepreneurs as it relates to job creation. The unemployment rate was 15.4% at the end 2013 with a youth unemployment rate of 38.3% (Statin, 2013). GEM assesses how many employees businesses currently have and how many additional employees they expect to have in five years. High growth entrepreneurs contribute a disproportionate share of all the new jobs created by firms (Autio, 2007). Table 8 shows that majority of Jamaican businesses had less than



five employees 92.3 % currently working in the business. With the exception of the owner, the majority of businesses had no employees working in the business (35%), so these owners created jobs for themselves. Similarly, in five years most entrepreneurs indicated that they expected to have no one employed in the business (21%) other than the business owner. Eighteen percent of the entrepreneurs believed that they would have at least 2 employees and 16 % believed that they would have 5 employees working in the business in 5 years. Overall most businesses only expected to hire few employees over time. As shown in figure 15 established business entrepreneurs expected limited job growth in the next five years in comparison to the early stage entrepreneurs who expected to hire more employees. The results show that Jamaican entrepreneur’s exhibit limited business growth aspirations.

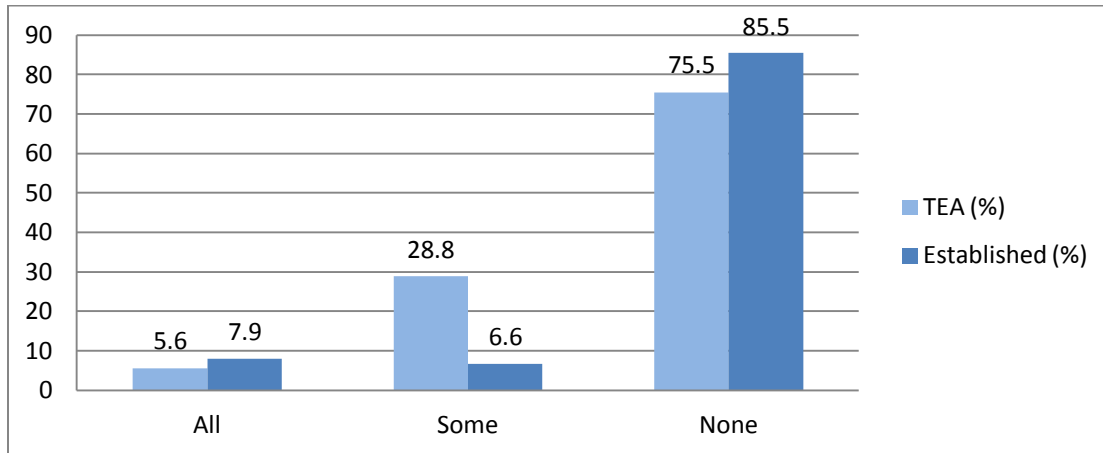


**Figure 15: Expected Job Growth in 5 years TEA and EB**

**Innovation**

GEM measures innovation in terms of the novelty of the product or services, the extent of competition in making the same products and the application of new technology. Using these criteria most Jamaican business activities do not exhibit much innovation as most of the entrepreneurs created products known to customers. Majority of TEA (59.6%) and EBO (62.5%) entrepreneurs believed that there were many other businesses offering the same products and services as seen in figure 17. Most entrepreneurs in both TEA (85.5%) and EBO (75.5%) indicated that they did not believe that they offered products that were considered new or unfamiliar. The findings varied with early entrepreneurs. More early entrepreneurs were of the view that some potential customers thought that the products they offered were new. This may be because new businesses tend to launch more innovative products in order to compete and gain customers whereas established business may be more inclined to continue to exploit the same opportunities. The findings related to product innovation are concerning because most Jamaican entrepreneurs are going into markets with numerous direct competitors. Jamaican entrepreneurs will need to carefully reflect on how they articulate their unique selling

proposition. They will need to carefully consider how they will differentiate their business from the competition and they will also need to work on innovating their product and service lines.

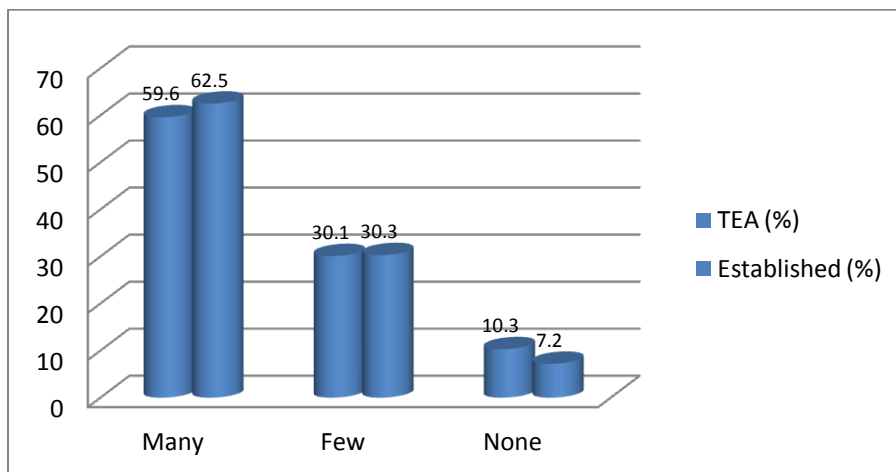


**Figure 16: Potential Customers considering product new/unfamiliar**

Table 9 shows that early stage entrepreneurs in the business services sector had the most customers who believed that the products were new or unfamiliar followed by the extractive sector.

**Table 9: TEA Sector and Product Innovation**

TEA Customers consider product new/unfamiliar	Extractive (%)	Transforming (%)	Business Services (%)	Consumer Oriented (%)
All	10.7	3.9	22.2	6.2
Some	14.3	15.5	33.3	17.8
None	75	80.6	44.4	76



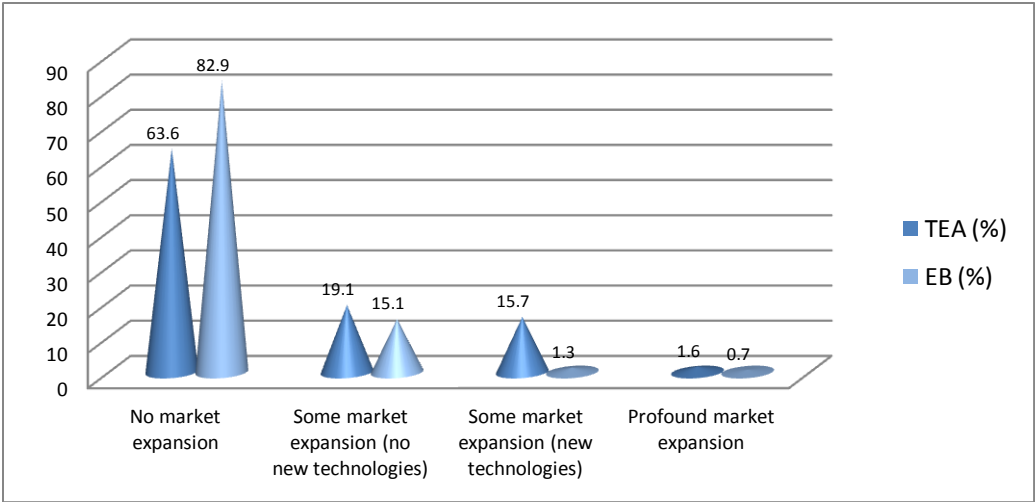
**Figure 17: Businesses offering the same products**

Figure 17 shows that early stage entrepreneurs in the business services sector contend that there were not many businesses offering the same product indicating that there is less competition in this sector for early stage entrepreneurs. Table 10 shows that within the Business services sector appears to have the highest level of innovation.

**Table 10: TEA Sector and Product Innovation**

TEA How Businesses offer the same products	Extractive (%)	Transforming (%)	Business Services (%)	Consumer Oriented (%)
Many	53.6	66.0	55.6	57.4
Few	39.3	24.3	33.3	32.6
None	7.1	9.7	11.1	10.1

A greater number of respondents in both TEA (63.6%) and EB (82.9%) categories reported no business expansion as seen in Figure 18. However, more respondents in have TEA category were of the view that there was some market expansion with no new technologies (19.1%) as well as and market expansion with new technologies (15.7%) than in established businesses than those who thought there had been some market expansion (15.1%) and market expansion with new technologies (1.3%).



**Figure 18: Market Expansion Mode**

In Table 11 both the TEA and established businesses majority of entrepreneurs (TEA 62.4%) and (EB 88.2) indicated that they their businesses are using old technology. The availability of the latest technology in the early stage is higher than is indicated in established businesses. Nearly

20.4 % of the early stage entrepreneurs indicated that they used available technology which appeared in the last 1 to 5 years and 62.4 % used technology that was available more than 5 years ago.

**Table 11: Availability of up to date Technology**

<b>Available technology</b>	<b>TEA (%)</b>	<b>EB (%)</b>
Very latest technology (newer than one year)	17.2	2.0
New Technology (one to five years)	20.4	9.9
No new technology (more than five years)	62.4	88.2

### Technological Levels

As shown in table 12 the early stage entrepreneurs in the transforming sector had the very latest technology (newer than one year) while the business services sector had the highest level of new technology (one to five years).

**Table 12: TEA Availability of the latest Technology and Sector**

<b>TEA How many businesses offer the same products</b>	<b>Extractive (%)</b>	<b>Transforming (%)</b>	<b>Business Services (%)</b>	<b>Consumer Oriented (%)</b>
Very latest technology (newer than one year)	7.1	15.5	0	20.2
New Technology (one to five years)	17.9	21.4	44.4	20.2
No new technology (more than five years)	75	63.1	55.6	59.7

### Technology Sector TEA and EB

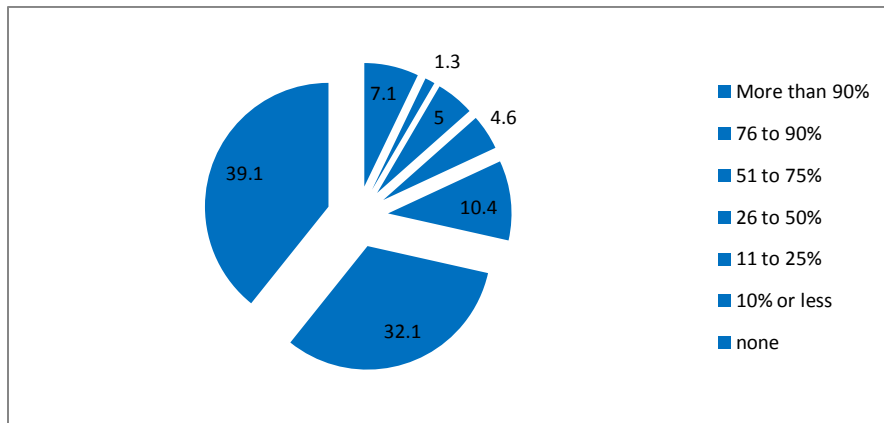
The findings indicate limited involvement in the technology sector. Nearly all (99.62%, TEA, 100% EB) of the entrepreneurs in the TEA and EB category reported using no/low technology (Table 13).

**Table 13: TEA and EB by Technology Sector**

<b>Level of Technology</b>	<b>TEA (%)</b>	<b>EB (%)</b>
No/ Low Technology	99.62	100
Medium or High	0.38	0

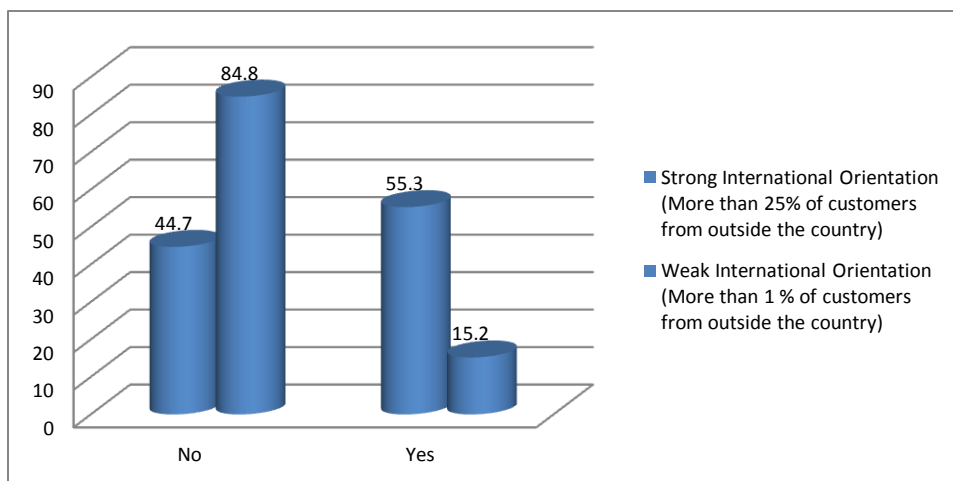
## Internationalization

International orientation measures the extent to which businesses sell to customers from outside their economies. It relates to exports and international customers who buy products online or visit the country as tourists or for work purposes. Hessels and Von Stel (2009) found that export oriented entrepreneurship is a driver of economic growth. Gonzalez Pernia and Pena Legazkue (2013) found that regions with higher members of adults involved in exported oriented entrepreneurship had a higher GDP growth. Figure 19 shows there are low rates of internationalization among entrepreneurial firms in Jamaica. Most (39.1%) entrepreneurs had no customers living outside the country.

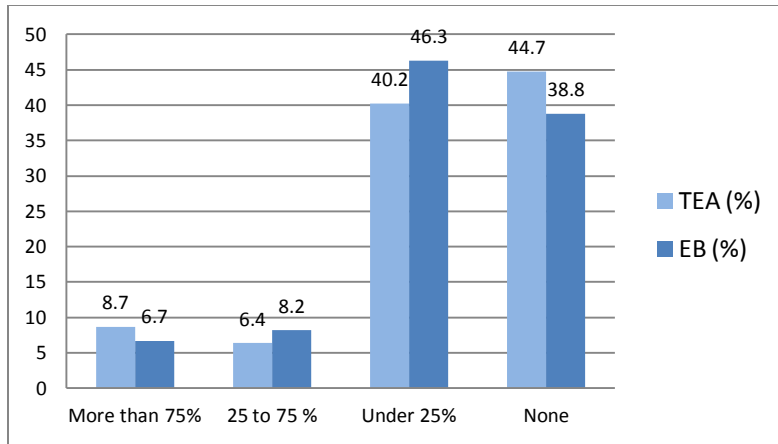


**Figure 19: Proportion of firm's customers who live outside the country**

In terms of international orientation Jamaica reports a low level of international orientated entrepreneurs with just 84.8% of entrepreneurs having more than 1% of customers from outside the country (Figure 20). Increasing sales outside of the country will allow Jamaican entrepreneurs to gain the advantage of business opportunities in global markets.



**Figure 20: International Orientation TEA and EB**



**Figure 21: Export Intensity TEA and EB**

In terms of early stage entrepreneurs the findings suggest that only 8.7 % are involved in export activity above 75% (Figure 21). It further reveals that only 6.4% are involved in export activity between 25% to 75% as seen in figure 21. There are 40.2 % involved in under 25% while 44.7 % are not involved in exporting at all. In terms of the established business as the findings are more encouraging. Only 6.7% of established businesses are involved in export activity above 75%. The export intensity for both TEA and EB vary. Export was less intense among the early stage entrepreneurs who relied more on domestic markets. Established businesses in their later stage of maturity were more involved in export activity in the under 25% category.

## SPECIAL TOPIC: YOUTH ENTREPRENEURSHIP

In recent times, and particularly after the recent global recession in 2007-2009, it has been increasingly difficult for young Jamaicans to find employment given the deteriorating state of the economy. Between 2007-2010, the unemployment rate rose from 9.9% to 12.9%. It fell slightly to 12.6% in 2011, climbed again to nearly 13.7% in 2012, and reached approximately 15.4% in the third quarter of 2013. It is crucial that the educational system should, from as early as the primary level, train youth to have an appreciation of the value of entrepreneurship in creating self-employment and jobs.

It is encouraging to learn that a high percentage of experts in the NES (88.6%) revealed that youth have easy access to primary and secondary education. The majority of experts (68.6%) stated that after this point most of the youth have no option other than to find work. The implication is that youth, in pursuit of business ideas, have been forced to do so out of necessity. In fact, the overwhelming majority of the experts (80%) agreed that youth are pushed into business activities out of necessity. This is corroborated by the majority of the key experts (61.8%) who observed that youth involved in business activities are more likely to be self-employed than to be an employee (that is, to work for someone else). This indicates that the support given to youth entrepreneurship, according to the experts, was not adequate. But because getting jobs are becoming increasingly difficult, it is imperative that entrepreneurship be encouraged at all levels of the educational system.

The generally unfavourable economic conditions of numerous Jamaican households, as brought about by the historically poor state of the economy over the past forty years were manifested from the NES as 83.9% of experts believed that households generally look forward to youth contributing to the family's income. The business climate does not seem very supportive of youth and young adults in pursuing entrepreneurship. Just over 50% of the experts agreed that youth and young adults have many opportunities to develop "micro businesses". In fact, 60.7% disagreed that governmental programmes effectively train and support youth entrepreneurs. While, an overwhelming majority of experts (75.8%) concluded that self-employed youth learn to develop their business activities largely through their own experiences and relationships.

The entrepreneurship climate seems to be less favourable for young adults compared to that for the general population and 55% of the key experts believed that youth and young adults face greater constraints to entrepreneurship relative to the general adult population.

Indeed, 94.3% of experts interviewed believed that young adults consider life/work opportunities outside the country to be more attractive. The challenges facing these young entrepreneurs were clearly evident from the responses of the experts; most of them (61.4%)

revealed that there was an inadequate system of business incubators that can be accessed by young adults. Additionally, assistance from financiers does not seem to be readily available to young adults as only half of all experts interviewed were of the opinion that banks, informal investors, business angels, and other financiers support young adult entrepreneurs to start businesses. However, the majority (53%) of experts stated that micro-credit facilities for young adults to start a business are efficient.

Yet the role of family members in encouraging and supporting entrepreneurship was clearly evident from nearly all the experts (about 91.4%) who disclosed that it was 'somewhat true' or 'completely true' that the vast majority of young adults who became entrepreneurs have been assisted in starting up by their families, close relatives or friends.



## SPECIAL TOPIC: WELL BEING

The GEM global special topic this year focuses on entrepreneurship and subjective well-being. Subjective wellbeing refers to the manner in which people experience their lives and includes both emotional and cognitive judgments. The Five Item Satisfaction with Life scale developed by Pavot and Diener (2008) was used. The scale has a range of -3 (lower subjective well being) to +3 (highest rate of subjective wellbeing) using conventional limits of a standardized normal distribution. Single indicators were calculated using the principal components technique, and then averages for each country were determined for the whole population and for various groups (TEA, EB, Necessity, Opportunity, Male and Female). Standardized scores were used in the well-being tables.

**Table 14: Subjective Well Being: General Results for the Latin American & Caribbean by Geographic Region**

Latin and Caribbean Region	18-64 population	Early-Stage entrepreneurial activity (TEA)	Established business ownership	Non TEA or established	TEA opportunity	TEA necessity	TEA Male	TEA Female
Argentina	0.41	0.39	0.52	0.41	0.46	0.20	0.40	0.38
Brazil	0.17	0.14	0.22	0.17	0.28	-0.21	0.23	0.05
Chile	0.58	0.65	0.76	0.57	0.73	0.30	0.67	0.61
Colombia	0.17	0.27	0.31	0.17	0.33	0.03	0.30	0.24
Ecuador	0.54	0.62	0.56	0.54	0.68	0.49	0.69	0.54
Guatemala	0.37	0.44	0.40	0.37	0.49	0.32	0.46	0.41
Jamaica	-0.53	-0.42	-0.44	-0.54	-0.44	-0.37	-0.23	-0.63
Mexico	0.21	0.22	0.39	0.21	0.37	0.07	0.18	0.28
Panama	0.72	0.66	0.73	0.72	0.67	0.61	0.73	0.55
Peru	0.46	0.71	0.42	0.46	0.77	0.51	0.75	0.66
Suriname	0.01	0.39	0.02	0.01	0.50	0.01	0.42	0.34
Uruguay	0.29	0.34	0.43	0.28	0.34	0.33	0.33	0.35
Trinidad & Tobago	0.38	0.37	0.70	0.38	0.37	0.38	0.36	0.39
<b>Region Average</b>	<b>0.29</b>	<b>0.37</b>	<b>0.39</b>	<b>0.29</b>	<b>0.43</b>	<b>0.20</b>	<b>0.41</b>	<b>0.32</b>

\* Green indicates the most satisfied and red indicates less satisfied populations Source GEM Global, 2013

Based on the findings the Jamaican population (18-64) was less satisfied with their personal life than the average (Table 14). Jamaica registered the lowest score in the Latin and Caribbean Region. In examining the TEA and EB entrepreneurs there was little difference between well being scores for the early stage entrepreneurs and the established business owners. Both reflected the lowest scores in the Latin and Caribbean Region.

Although the overall satisfactory scores were low, the Jamaican TEA males were found to be more satisfied than the females. This reflects a difference between the two genders with respect to the whole population and to the other groups identified. The findings indicate that entrepreneurs are more satisfied than the rest of the population but this only happens if they are male. The opposite is true if they are female. These findings are not surprising. In the 2013 Women's Venture Scope Report Jamaica ranked last in the overall environment for female entrepreneurs to do business in Latin America and the Caribbean. According to the report Jamaica presents a greater challenge for women than men to do business. Social services, the entrepreneurial business environment and high business operating risks were listed as the areas needing the most development.

TEA necessity entrepreneurs were found to be more satisfied than TEA opportunity. This is an interesting finding as the opposite to be true is usually found. It may be that the high percentage of women in the sample influenced the average scores causing the findings to be negative. In Jamaica there are high levels of necessity based entrepreneurs many see entrepreneurship as a means of survival and a way to combat poverty. Many of these entrepreneurs may be satisfied that they have found the means to support themselves and their families in the absence of other employment opportunities.

Well being scores varied widely across the world regions. In the world region, Latin and North America had the highest rates. Jamaica had the lowest overall well being scores within the Latin and Caribbean region, much lower than Trinidad and Tobago (Table 14). The only other Caribbean countries represented in the Caribbean region are Trinidad and Tobago and Suriname this does not allow for adequate Caribbean comparison. One useful research study on wellbeing is the Annual World Happiness Report. However it does not capture information from the Bahamas, Barbados, Grenada, Guyana and most members of Caricom.

The results here are in keeping with the 2013 World Happiness Report. All of the countries listed in the Latin and Caribbean Region had higher rankings than Jamaica in the World Happiness Report. In the 2013 World Happiness report Trinidad and Tobago was considered the happiest country in the Caribbean with a rank of 30. Suriname also ranked higher (40) than Jamaica (75) on the 2013 World Happiness report. Jamaica ranked 94<sup>th</sup> out of 144 countries on

the World's Economic Forum's 2013-2014 Global Competitiveness Report. According to the 2013-2014 Global Competitiveness Report the most challenging factors for doing business in Jamaica is inefficient government bureaucracy, crime and theft , corruption, tax rates, access to financing, tax regulations and poor ethic in the national labor force. It could be that Jamaica's entrepreneurs well being scores are low because the conditions are harsher than those faced by entrepreneurs in other regions in Latin America and the Caribbean. Jamaica ranked 94<sup>th</sup> out of 189 countries in the World Bank's Doing Business 2014 report. Jamaica's rank in the Doing Business index has been steadily declining over the past nine years. Jamaica was ranked 43<sup>rd</sup> in the 2006 report. In terms of the Doing Business rankings in 2014 Trinidad and Tobago was ranked 66<sup>th</sup>. Interestingly Jamaica surpassed Suriname with a rank of 161.

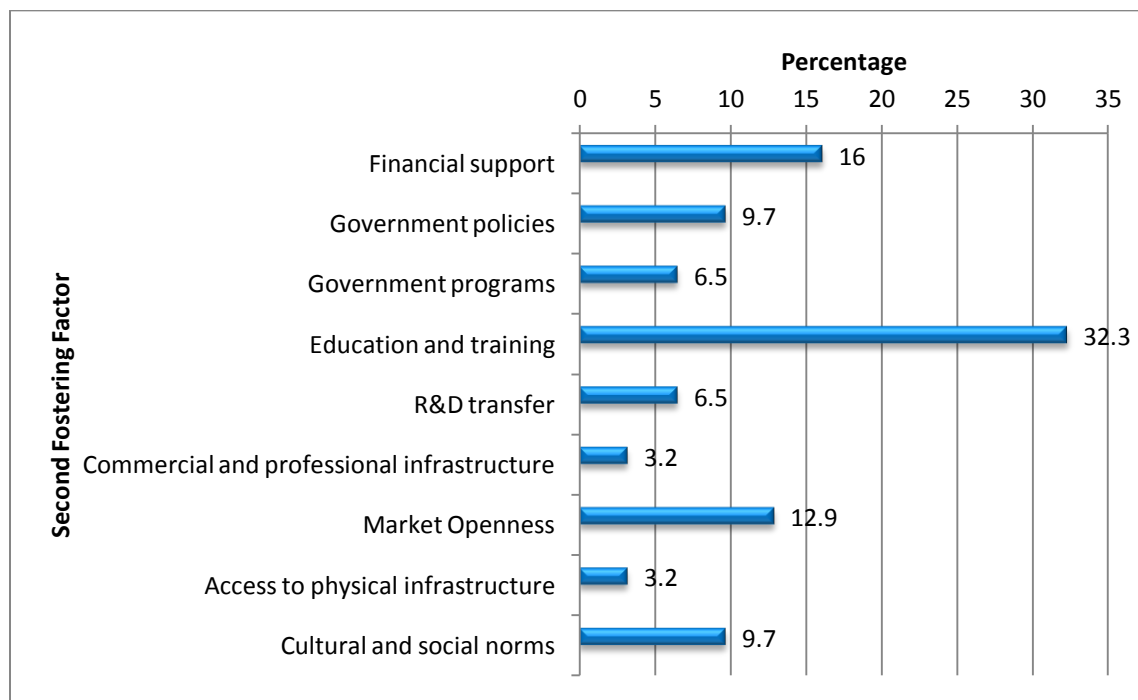
Countries in factor driven economies had the lowest subjective well being scores particularly in Sub-Saharan Africa. Interestingly, however several countries with factor driven economies had higher subjective well being scores than Jamaica such as Algeria, Angola, and Vietnam (Appendix 3). Algeria (73), Vietnam (63) and Angola (61) all ranked higher than Jamaica (75) on the World Happiness Report.

As seen in Appendix 4 it shows that most countries with efficiency driven economies had higher well being scores than factor driven economies. Jamaica ranked as an efficiency driven economy and had the second lowest scores in the efficiency region behind Russia.

Overall, established entrepreneurs had the highest rates of subjective well-being in factor driven, efficiency driven and factor driven economies.

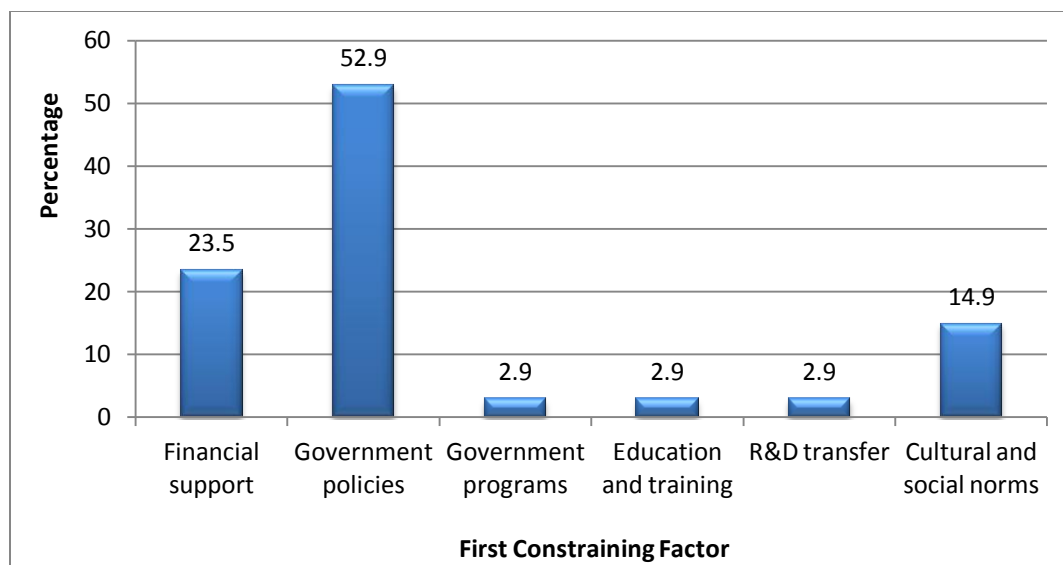
## SPECIAL TOPIC: EDUCATION AND TRAINING

The Network for Teaching Entrepreneurship (NFTE) supports a popular saying, “Teach a man to fish rather than give him a fish and he’ll never be hungry again” and argues that the benefits of teaching young people how to launch and run a business extend beyond developing the next generation of world-changing entrepreneurs. Entrepreneurship education and training in Jamaica continues to be a popular discussion among many interest groups and experts, with some even predicting that this will directly impact our country’s ability to achieve the goals set out in the National Development Plan (Vision, 2030), especially as it relates to the facilitation of an enabling business environment. Education and training was noted by 32.3% of the experts (Figure 22) in the 2013 GEM National Expert Survey (NES) as the second fostering factor for entrepreneurial activity in Jamaica.



**Figure 22: Training as the Second Fostering Factor for Entrepreneurial Activity**

The majority (94.1%) of the experts have maintained that teaching in primary and secondary education does not provide adequate attention to entrepreneurship and new firm creation. Education in entrepreneurship at basic levels (primary and secondary school) according to the GEM 2013 Global Report is judged rather unfavorably in the majority of economies. Approximately fifty three percent (53%) of the experts named government policies as the first area that is constraining entrepreneurial activity in Jamaica (Figure 23).



**Figure 23: Government Policies as the First Constraining Factor for Entrepreneurial Activity**

Report of consultations towards the preparation of the new Medium Term Socioeconomic Framework (MTF) 2012 – 2015 by the Planning Institute of Jamaica (PIOJ) highlighted that entrepreneurship must be integrated at the secondary and tertiary levels in the educational system. This need was also raised in the Youth Entrepreneurship Strategy, which is a holistic integrated strategy that seeks to create an enabling environment for the development of successful and sustainable youth-led businesses. One of the main goals is to integrate entrepreneurship education and training in the learning experience of students from the primary to the tertiary level.

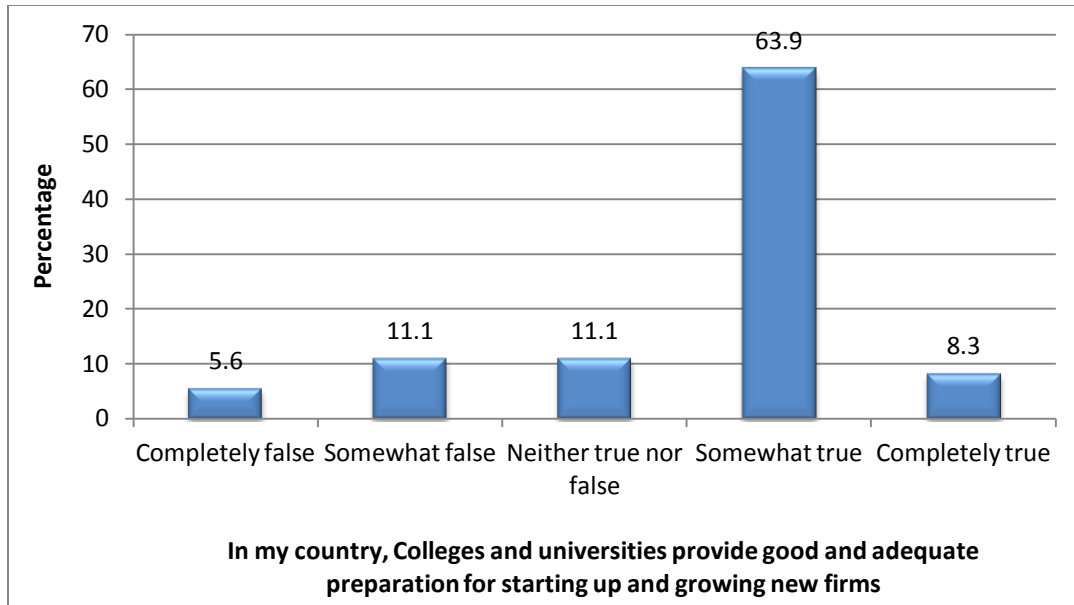
Reports received from the 44th meeting of the Caribbean Examinations Council (CXC) committee in Anguilla held in March 2014, revealed that plans are now moving ahead to integrate entrepreneurship in the high school curriculum. As confirmed in a communiqué, the School Examinations Committee has ratified the approval of the plan for the completion of Caribbean Advanced Proficiency Examination (CAPE) syllabus in Entrepreneurship. The CAPE Entrepreneurship syllabus will provide students with the mindset that supports creativity and innovation needed to transform ideas into ventures that create value and wealth. As recent as April 2014, orientation workshops were held in Jamaica with principals and educators who will be teaching entrepreneurship. The main objectives of these workshops were to sensitize people about the new CAPE subjects called “New Generation CAPE Subjects” (among which is entrepreneurship), familiarize participants with the syllabus and to enhance the knowledge base and skills required to interpret and implement these skills.

There have been several ongoing initiatives by government and non-government groups to develop the entrepreneurial skills of secondary and tertiary students through training and competitions. One such initiative is the Young Entrepreneurs *'I am the Change'* project

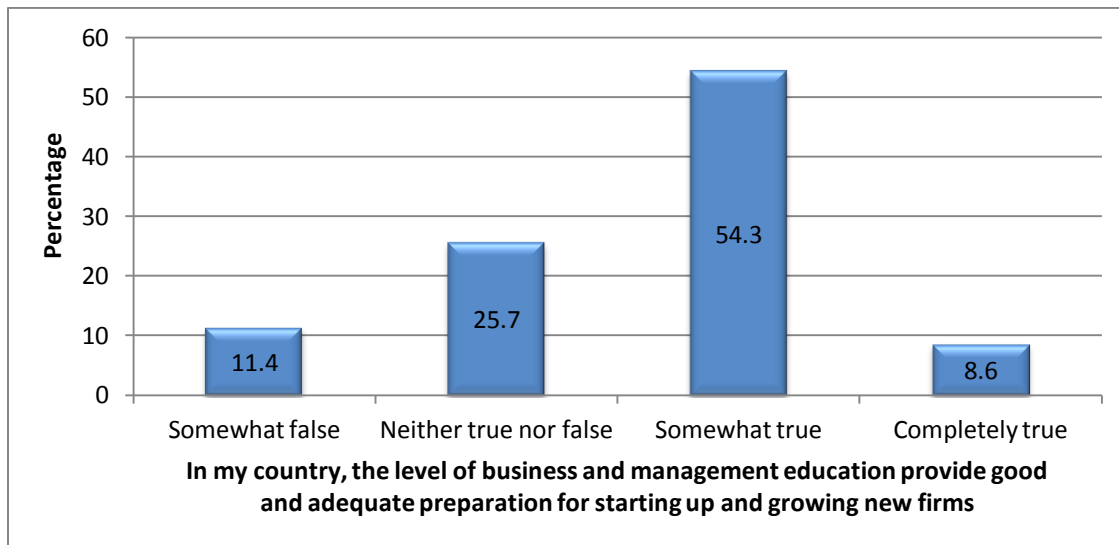
launched in 2011 which encourages innovation and business development through entrepreneurial activities. In 2012, 180 student entrepreneurs showcased a variety of innovative products and services offered by their school-based businesses. Another initiative is The National Business Model Competition conceived by the DBJ Venture Capital Conference in 2013 which saw Eleven (11) teams from Northern Caribbean University, the University of the West Indies, and the University of Technology facing off in March 2014. Students at all levels are bursting with innovative ideas!

Tertiary institutions continue to lead the way in the provision of entrepreneurial training. The University of Technology, Jamaica will be graduating its first cohort of students with the Bachelor of Science Degree in Entrepreneurship in 2014. Professor Alvin Wint, Pro-Vice-Chancellor at the University of the West Indies, (2012) stated that all departments across the university's territories in the region have reoriented their curricula to the production of entrepreneurs. Other institutions such as The Northern Caribbean University, HEART NTA and the Jamaica Business Development Centre have been providing tertiary level entrepreneurship education and training. Although institutions are obviously pushing the entrepreneurship agenda, most (69.4%) of the NES respondents did not believe that many people have experience in starting a new business, thus highlighting the need for education and training.

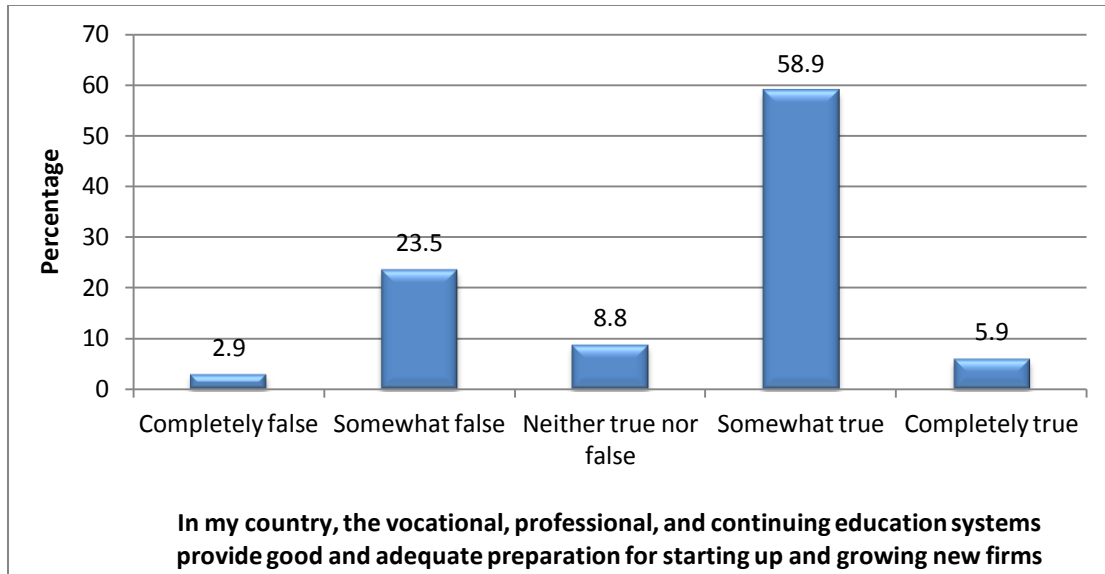
According to the NES data, the majority of the experts had favourable perceptions about tertiary level entrepreneurial programmes: 72.2% maintained that colleges and universities provide good and adequate preparation for starting up and growing new firms (Figure 24), 62.9% maintained that the level of business and management education provide good and adequate preparation for starting up and growing new firms (Figure 25) and 64.8% stated that vocational, professional, and continuing education systems provide good and adequate preparation for starting up and growing new firms (Figure 26).



**Figure 24: Experts Perception on the Adequacy of Colleges and Universities to provide preparation for starting up and growing new firms**



**Figure 25: Experts, perception on adequacy of Business and Management Education preparation for starting and growing new firms**



**Figure 26: Experts Perception on the Adequacy of Vocational, Professional and continuing education systems to provide for starting up and growing new firms**

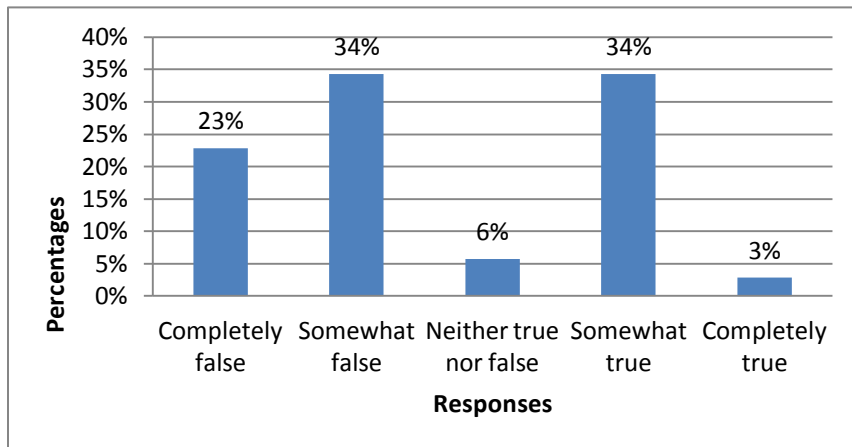
Entrepreneurship education and training should be viewed as planting the seeds to accomplish the goal of Vision 2030, which is to make 'Jamaica the place of choice to live, work, raise families and do business' by transforming potential job seekers into potential job-creators — young business people, who will employ best practices and contribute to economic growth across the island (Jarrett, 2011).



## ENTREPRENEURSHIP FRAMEWORK (NES)

### Finance

More than half (57%) of the experts surveyed believed that there was not enough equity funding available for new and growing firms (see figure 27).

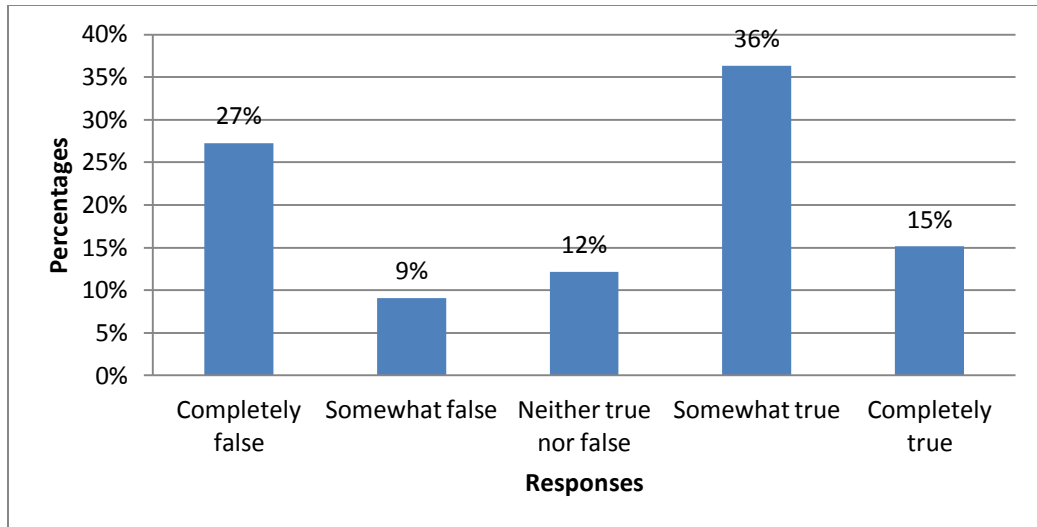


**Figure 27: Sufficient Equity Funding is available for new and growing firms**

The government through the Development Bank of Jamaica (DBJ) has been actively trying to develop a venture capital market in Jamaica. As part of this effort the DBJ hosted the first Venture Capital conference in Jamaica in September 2013. Despite positive developments the experts are essentially of the view that there is still not enough equity funding. If the country is to grow, then this situation needs to be addressed quickly.

There is some ambivalence regarding the availability of debt funding. Less than half of the experts interviewed claiming there is enough debt funding for new and growing firms. In fact the view of experts was evenly divided with 45% saying that there was enough and 45% saying there was not enough debt funding while 10% neither agreed nor disagree.

Two thirds (66%) of experts stated there were not enough government subsidies available for new and growing firms. Regarding availability of funding for new and growing firms from private individuals other than founders, 56% of experts believed there was sufficient funding. Surprisingly, 51% of experts believed there was sufficient venture capitalist funding (Figure 28).



**Figure 28: There is sufficient Venture Capitalist available for new and growing firms**

This is a reversal from the 2011 Jamaica GEM survey where most (66%) of the experts believed there was inadequate venture capital funding. The uptake of the junior stock market with a number of companies listing may have improved the perception of the availability of venture capital funding.

The bulk of the experts (61%) said there was enough funding via IPO's. This was a slight improvement over 2011 results where 57% said there was enough funding available through IPO's. Since 2009 twenty-three companies were successful in raising significant levels of funding via the junior stock market. This development could have resulted in the level of positive response obtained.

### Government Policies

The majority (83%) of the experts believed that government policies do not consistently favor new firms. In October 2013 government launched its newly formulated MSME and Entrepreneurship policy which in part is supposed to respond to the need of new firms. The Jamaica GEM 2013 survey was done just prior to the launch of the policy, however, the response to the policy does not appear to have had a positive impact on the experts' views on government policies related to new businesses.

Well over half (68%) of the experts believed that new firms could not get most of the required permits and licenses within a week. The larger number of the respondents (65%) stated that coping with government bureaucracy, regulations, and licensing requirements is unduly difficult for new and growing firms. This finding reflects the generally held sentiments in Jamaica

## Government Programmes

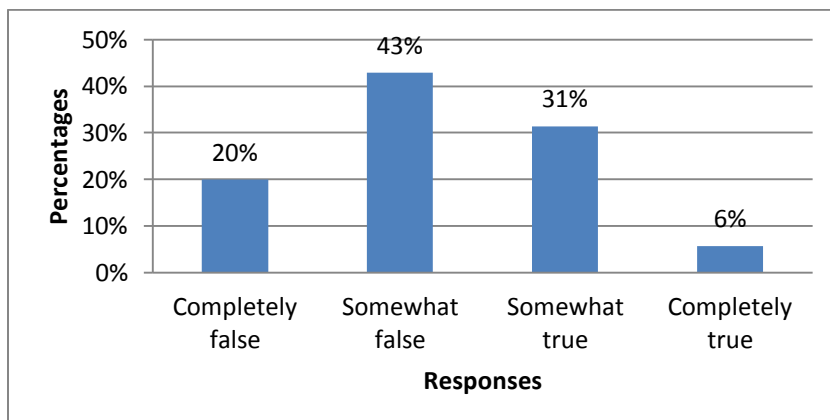
Noteworthy is the finding that sixty-six percent of the experts believed that the number of government programs for new and growing businesses are inadequate. On the other hand, majority of the respondents (66%) disagreed that almost anyone who needs help from a government program for a new or growing business can find what they need.

For the most part (70%) the experts did not think that that a wide range of government assistance for new and growing firms can be obtained through contact with a single agency. The Jamaica Business Development Corporation (JBDC) provides support services for Jamaican businesses in the micro, small and medium enterprise (MSME) sector. It could be that the institution may need to heighten awareness and improve the level of the services they offer.

Most experts (57%) did not think that science parks and business incubators provide effective support for new and growing firms. Almost the same number of the experts (54%) did not think that the people working for government agencies are competent and effective in supporting new and growing firms. Most experts (60%) believed that Government programs aimed at supporting new and growing firms are not effective.

## Research and Development Transfer

Interestingly, most (63%) of the experts did not agree that new technology, science, and other knowledge are efficiently transferred from universities and public research centres to new and growing firms (figure 29).



**Figure 29: New Technology, Science and other knowledge are efficiently transferred from universities and public research centres to new and growing firms**

The Scientific Research Council (SRC) also provides support to entities seeking to utilize science and technology in business.

Fifty-five percent of respondents were not of the view that new and growing firms had similar access to new research and technology as large, established firms.

A greater part (78%) of the experts believed new and growing firms were unable to afford the latest technology and most (73%) were of the view that government subsidies were inadequate for new and growing firms to acquire new technology. Fifty-nine percent did not believe that the science and technology base efficiently supported the creation of world-class new technology-based ventures in at least one area.

Most (70%) experts did not think the support available for engineers and scientists to have their ideas commercialized through new and growing firms.

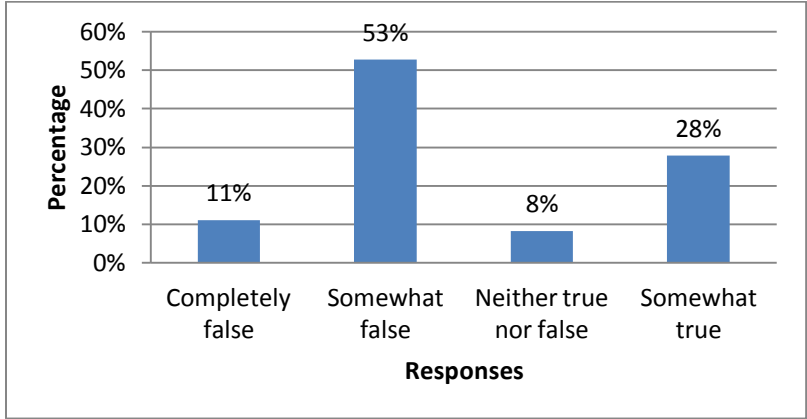
**Commercial Services and Infrastructure**

Forty eight percent of the experts believed there were enough subcontractors, suppliers, and consultants to support new and growing firms this percentage was lower than the findings in the last Jamaica GEM report (2011) in which 61% of experts had said this was adequate. Worth mentioning is that only 46% believed it was easy for new and growing firms to get good subcontractors, suppliers, and consultants.

In contradiction, 64% of the experts concluded that it was easy for new and growing firms to get good, professional legal and accounting services and it is easy for new and growing firms to get good banking services (chequing accounts, foreign exchange transactions, letters of credit, and the like).

**Market Openness**

A large number (67%) of experts thought the markets for consumer goods and services change dramatically from year to year. Most (66%) of these interviewed also believed the market for business-to-business goods and services change dramatically from year to year. Most (64%) experts thought that new and growing firms could not afford the cost of market entry (figure 30).



**Figure 30: New and growing firms can afford cost of market entry**

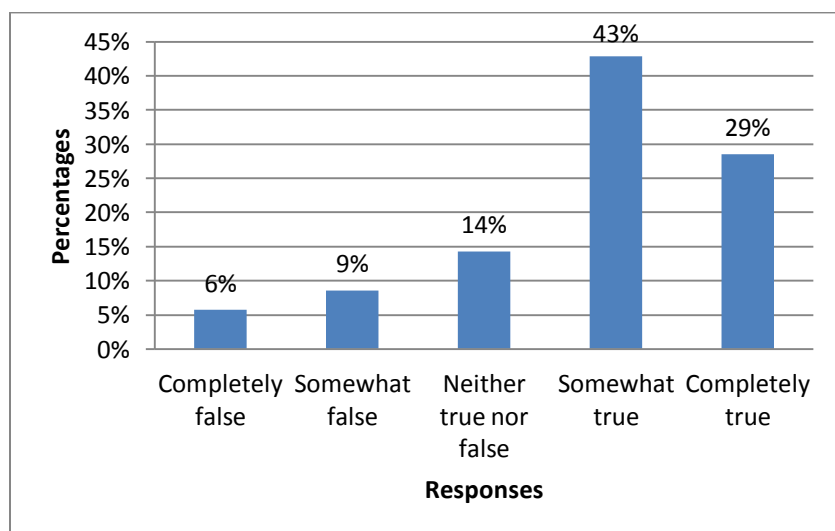
Only 27% of experts were of the view that new and growing firms can enter markets without being unfairly blocked by established firms. Fifty four percent believed that the anti-trust legislation designed is effective and well enforced.

### Physical Infrastructure

Overall the majority of the experts had favorable views about the physical infrastructure in Jamaica. Seventy one percent thought that the physical infrastructure (roads, utilities, communications, waste disposal) provides good support for new and growing firms. Seventy eight percent were of the belief that it is not too expensive for a new or growing firm to get good access to communications (phone, Internet, etc). Most (86%) experts thought a new or growing firm can get good access to communications (telephone, internet, etc) in about a week. The increased speed of access has occurred because of the competition between service providers. Timely access to utilities does not appear to be an issue in the view of the experts since 80% of experts believed new or growing firms can get good access to utilities (gas, water, electricity, sewer) in about a month. Furthermore, 61% thought new and growing firms can afford the cost of basic utilities (gas, water, electricity, sewer). This is interesting as the cost of electricity has been a major issue in the country.

### Cultural and Social Norms

The majority (63%) of experts thought the national culture emphasizes self-sufficiency, autonomy, and personal initiative and 53% of those interviewed also believed the national culture encourages entrepreneurial risk-taking. Interestingly as much as 72% of the experts were of the view that the national culture encourages creativity and innovativeness (figure 31).



**Figure 31: The National Culture encourages Creativity and Innovativeness**

Sixty- six percent of experts thought the national culture emphasizes the responsibility that the individual (rather than the collective) has in managing his or her own life.

### Opportunities to start up

Most (64%) experts believed there are plenty of good opportunities for the creation of new firms. Only 25% of the experts agreed that there are plenty of good opportunities to create truly high growth firms.

### Abilities and Knowledge to start up

Most experts (75%) were of the view that not many people know how to start and manage a high-growth business (figure 32).

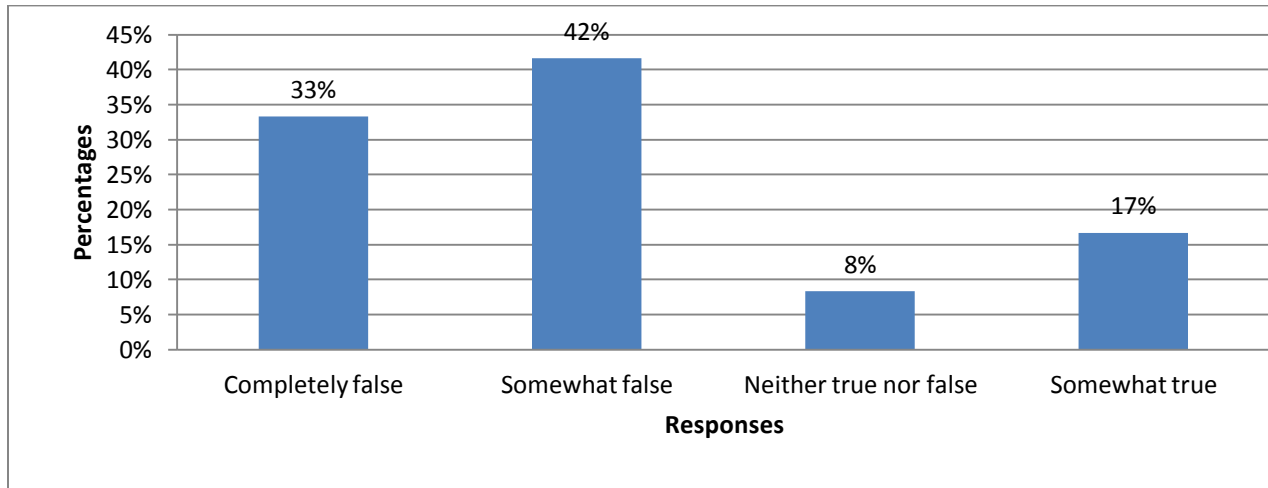


Figure 32: Many people know how to start and manage high growth business

Sixty three percent of the experts were of the view that not many people know how to start and manage a small business. Sixty-nine percent of experts were of the view that not many people have experience in starting a new business. Seventy two percent believed that many people were not able to react quickly to good opportunities for a new business. Seventy percent believed that many people do not have the ability to organize the resources required for a new business (figure 33).

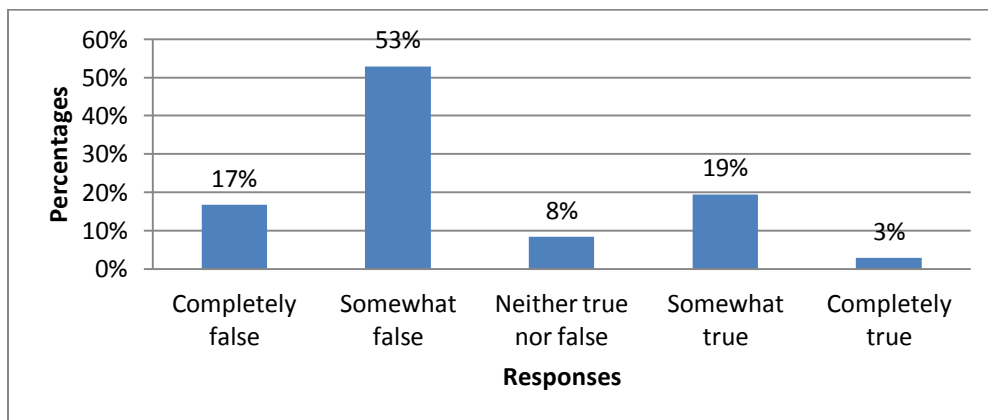


Figure 33: Many people have the ability to organize the resources required for a new business

### Entrepreneur Social Image

The social image of entrepreneurs in Jamaica is very high. The majority (89%) of the experts agreed that in Jamaica the creation of new ventures is considered an appropriate way to become rich. Seventy five percent said that most people consider becoming an entrepreneur as a desirable career choice.

Most (86%) experts were of the view that successful entrepreneurs have a high level of status and respect. Almost all (97%) of the experts agreed that they often see stories in the public media about successful entrepreneurs. The majority (88%) of experts thought most people think of entrepreneurs as competent, resourceful individuals.

### Intellectual Property Rights

A large percentage of experts (72%) held that the Intellectual Property Rights (IPR) legislation is comprehensive. However, less than half (45%) believed that the Intellectual Property Rights (IPR) legislation is being efficiently enforced. The majority (83%) were of the view that the illegal sales of 'pirated' software, videos, CDs, and other copyrighted or trademarked products are extensive in the country.

### Women's Support for Start up

Most (61%) experts believed there are not sufficient social services available so that women can continue to work even after they start a family. Less than half of the experts (48%) said starting a new business is a socially acceptable career option for women (figure 34).

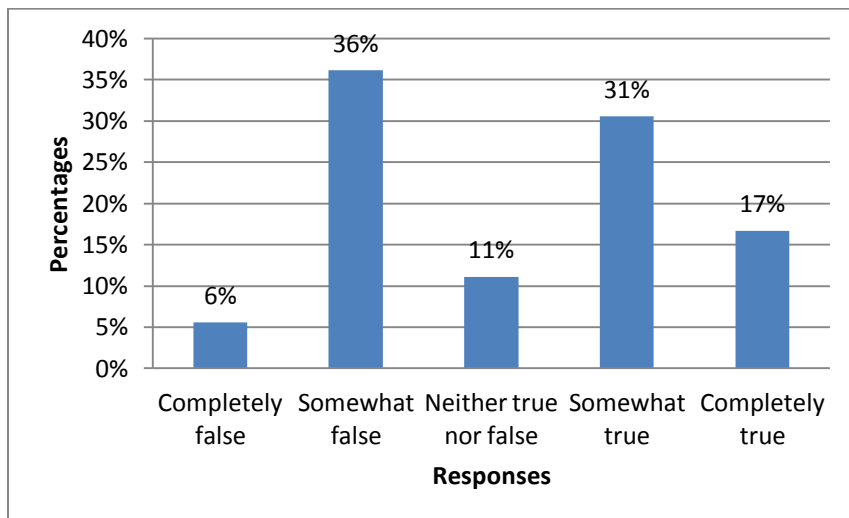


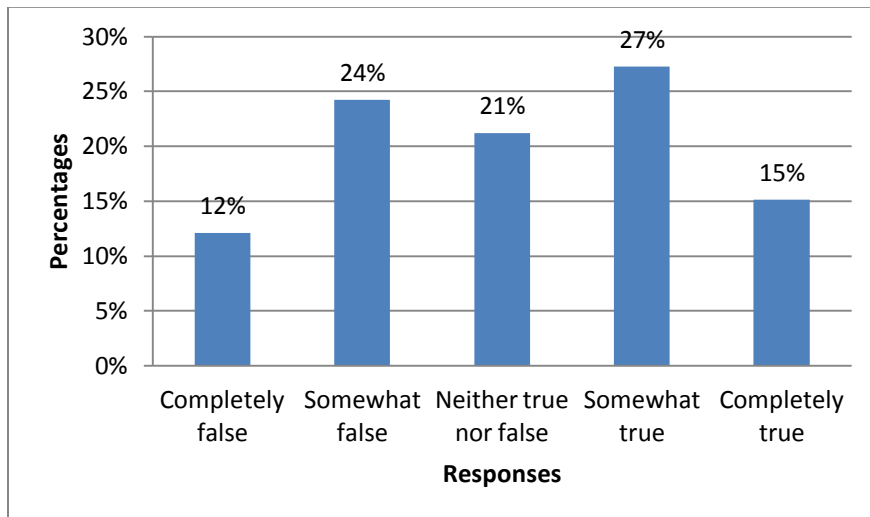
Figure 34: Starting a new business is a socially acceptable career option for women

### Attention to High Growth

Noteworthy is that only 39% of experts believed that support initiatives specially tailored for high-growth entrepreneurial activity exist. Most (48%) were of the view that there are not many support initiatives are specially tailored for high-growth entrepreneurial activity. Twelve percent were unsure.

Most experts (64%) were of the view that policy-makers were aware of the importance of high-growth entrepreneurial activity. But interestingly, less than half (42%) of experts believed that people working in entrepreneurship support initiatives have sufficient skills and competence to support high-growth firms. Thirty six percent said that these people do not have skills and competences to support high growth firms. Twenty one percent were uncertain (Figure 35).

Half of the experts believed that government programs are highly selective when choosing recipients of entrepreneurship support that the potential for rapid growth is often used as a selection criterion when choosing recipients of entrepreneurship support.



**Figure 35: People working in entrepreneurship support initiatives have sufficient skills and competence to support high-growth firms**

### *Interest in Innovation*

The majority (80%) of the respondents believed that companies like to experiment with new technologies and with new ways of doing things.



## RECOMMENDATIONS

### **Entrepreneurship Activity**

More research needs to be conducted on business discontinuation. An analysis of the reasons for business discontinuation should be very informative. In particular, an understanding of the factors contributing to business failures is critical for potential, new, and established entrepreneurs to address the challenges militating against entrepreneurial sustainability.

Jamaica registered a relatively low fear of failure rate of only 27% which is much lower than the average rate for countries in the middle rank. This entrepreneurial courageous outlook could augur well for business venturing if the correct set of policies is instituted to enhance business opportunities. People need to be taught the importance of calculated risk-taking in making the decision to start businesses as recklessness in initiating business venturing may impede entrepreneurship.

### **Entrepreneurial Aspirations**

Entrepreneurs need to innovate and offer a wider variety of new products and services. Entrepreneurs should look both within and outside their business for ideas. Entrepreneurs need to focus on talking to customers to find out their needs and to spawn new products ideas based on this feedback. Employees should be encouraged to find new and better ways to do their jobs.

Jamaica needs to raise the level of innovation by collaborating with high tech producers. Many companies and entrepreneurs in developed countries are interested in aspects of social entrepreneurship as many have a social mission to upgrade the lives of others and to provide social improvement and education from people in need. They see numerous opportunities in new markets for globalizing their industries. Jamaica can promote innovation through technology partnerships with technology being developed in a number of different countries with different final products and Jamaica being part of that development.

Numerous research grants look for globalizing initiatives The National Science Foundation in the United States is one such source. Local universities should seek partnerships with universities overseas on these types of grants. They should seek to partner on programs that will provide training and start production in Jamaica thus providing both new skills and new technology. More faculty exchange programs are needed to share both talents and resources. Additionally, closer ties need to be forged between industry, academia and government for the creation of new industries.

The Jamaican Government can do more to foster an innovation and technology culture by enforcing international standards, building awareness by having more technology competitions, seminars, conferences, exhibitions and talks to arouse the interest of the general public in innovation and technology. The government can also assist by funding more programs that encourage businesses to develop innovative ideas and technology businesses and developing more science and technology parks to promote innovation and technology.

## **Youth**

More youth need to be exposed early to entrepreneurship as a long term career option particularly at the elementary level. Increased emphasis in community colleges would also help. Hands-on experiences rather than just theoretical knowledge are essential.

## **Wellbeing**

Further research studies are needed to examine subjective wellbeing within the Caribbean so cross country wellbeing comparisons among Caricom countries can be made. This is important since more countries worldwide have started to measure their progress in terms of the happiness of their citizens. Jamaican National and Caribbean statistics offices should incorporate questions on individual's life satisfaction, affect and eudemonic wellbeing in their regular surveys. Many countries including Canada, France, Italy, Mexico, Morocco, New Zealand, United Kingdom, United States and the European Union have begun to use subjective well being measures in their national statistics. Measuring wellbeing has become a key priority for OECD and the UNDP. Both organizations now produce annual well being reports. OECD developed the How's Life report and UNDP's produces the Human Development report. Well being statistics provide relevant information that other more traditional measures cannot provide. It can provide vital information on Jamaican human behavior which is important as policymakers often seek to adjust human behavior. National and regional trends can be observed. It can also help recognize areas of affliction so intervention programs can be developed.

Further research studies should be conducted to examine well being in other professions so that individuals can find information regarding the average life satisfaction on different careers. The findings in this report are preliminary and so more research needs to be conducted to discover why entrepreneurs in Jamaica are not very happy.

## **Education**

CAPE Entrepreneurship will be offered in Jamaica in September, 2014 and more teachers will be needed to teach these classes in the future. There is a need for more certified entrepreneurship educators. More high school teachers will need to specialize in entrepreneurship and receive training. There is also a dire need for more entrepreneurship educators in Jamaica with advanced degrees (Masters and PhD's). The results of the survey also suggest the need for more education and training in entrepreneurship for employees working in government agencies that provide support to entrepreneurs.

Educational institutions (at all levels tertiary, secondary and elementary) need to take greater steps to incorporate creativity and innovation into their curriculum. The current offerings are may be inadequate to teach students how to be creative and innovative. More CSEC subjects need to incorporate innovation and creativity in the curriculum.

Entrepreneurship should be offered at the CSEC level. Numerous high students do not continue their education after high school and their parents are unable to afford to send their children to sixth form to pursue CAPE studies. Logistics should be offered as a subject in CAPE in

preparation for the proposed Logistics Hub. The CAPE Logistics curriculum should expose students to the myriad of entrepreneurial opportunities to be derived from the Jamaica logistics hub.

Entrepreneurship Educators need to incorporate more experiential activities to encourage and prepare students to start their own businesses. Experiential approaches need to go beyond just having students preparing a business plan to include entrepreneurship cases, business models, greater use of entrepreneurs in the classroom, having students conduct entrepreneurial audits, simulations, marketing inventions, entrepreneurship internships, mentoring and being involved in consulting projects. Students who are unable to fund college tuition can venture into business startup.

Jamaica needs more high technology businesses. Individuals that have both education and experience in scientific fields tend to start new technology firms. Greater expertise is needed in the STEM fields. Educational institutions need to do more encourage and promote STEM related entrepreneurship across all areas of science, technology mathematics and engineering. Schools teaching entrepreneurship need to offer courses that examine the entire process of science and technology based enterprise creation from ideation to invention to technology transfer and commercialization to growth of high tech firms.

### ***NES Recommendations***

Private and public efforts must continue to provide additional equity funding for new and growing firms. More debt funding is required on more favorable terms to support the development of new and growing businesses. Government itself needs to find innovative ways to provide more subsidies to new and growing firms. Efforts to create a venture capital ecosystem must continue.

Increased awareness of the MSME and Entrepreneurship policy and its contents is needed so that all stakeholders can better understand and benefit from its provisions. Several different marketing initiatives may be necessary to raise awareness. These could include conferences, seminars, training, TV, print ads and other visible promotions.

More attention needs to be paid to the creation, development, management and support of high growth firms. Support initiatives that are specially tailored for high-growth entrepreneurial activity need to be increased. Government should seek to provide new and growing firms with more assistance to enter new markets while encouraging them to. Action needs to be taken to encourage new and growing firms to diversify into new areas.

The number of business incubators accessible to the general adult population needs to be increased.

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## APPENDICES

Appendix 1: Entrepreneurial activity and perceptions in the GEM economies in 2013 by phase of economic development

Entrepreneurial Activity and Perceptions in the GEM Economies in 2013 by Economic Development		Nascent entrepreneurship rate	New business ownership rate	Early-stage entrepreneurial activity (TEA)	Established business ownership rate	Discontinuation of businesses	Necessity-driven (% of TEA)	Improvement driven opportunity (% of TEA)
Stage 1: factor driven (includes transition countries to phase 2)	Algeria	2.2	2.6	4.9	5.4	3.3	21.3	62.3
	Angola	8.0	14.7	22.2	8.5	24.1	26.1	40.3
	Botswana	11.0	10.2	20.9	3.4	17.7	26.3	52.0
	Ghana	8.5	17.7	25.8	25.9	8.3	33.3	44.1
	India	5.1	4.9	9.9	10.7	1.5	38.8	35.9
	Iran	6.4	6.1	12.3	10.6	5.7	38.0	35.8
	Libya	6.6	4.7	11.2	3.4	8.1	8.1	60.3
	Malawi	10.1	18.8	28.1	12.0	30.2	43.7	29.4
	Nigeria	20.0	20.7	39.9	17.5	7.9	25.4	52.3
	Philippines	12.0	6.7	18.5	6.6	12.3	43.6	38.0
	Uganda	5.6	20.0	25.2	36.1	20.1	25.1	47.5
	Vietnam	4.0	11.5	15.4	16.4	4.2	25.1	62.2
	Zambia	22.6	18.0	39.9	16.6	19.8	38.8	37.2
	<b>Total</b>	<b>9.4</b>	<b>12.0</b>	<b>21.1</b>	<b>13.3</b>	<b>12.6</b>	<b>30.3</b>	<b>46.0</b>
Stage 2: efficiency driven (includes transition countries to phase 3)	Argentina	10.5	5.6	15.9	9.6	5.5	29.8	47.4
	Bosnia	5.8	4.6	10.3	4.5	6.2	58.9	22.0
	Brazil	5.1	12.6	17.3	15.4	4.7	28.6	57.4
	Chile	15.4	9.6	24.3	8.5	7.6	20.1	57.7
	China	5.2	8.9	14.0	11.0	2.7	33.9	35.9
	Colombia	13.6	10.3	23.7	5.9	5.4	18.1	26.7
	Croatia	6.3	2.0	8.3	3.3	4.5	37.4	29.8
	Ecuador	25.3	13.6	36.0	18.0	8.3	33.6	32.1
	Estonia	8.8	4.5	13.1	5.0	2.1	14.8	50.1
	Guatemala	7.6	4.9	12.3	5.1	3.0	31.4	44.2
	Hungary	6.0	3.7	9.7	7.2	2.9	28.0	38.7
	Indonesia	5.7	20.4	25.5	21.2	2.4	25.4	43.7
	Jamaica	<b>8.0</b>	<b>6.0</b>	<b>13.8</b>	<b>6.3</b>	<b>7.4</b>	<b>40.6</b>	<b>34.2</b>
	Latvia	8.1	5.3	13.3	8.8	3.5	21.2	52.7
	Lithuania	6.1	6.4	12.4	8.3	3.5	23.3	55.2
	Macedonia	3.4	3.5	6.6	7.3	3.3	61.0	22.9
	Malaysia	1.5	5.2	6.6	6.0	1.5	18.4	64.9
	Mexico	11.9	3.3	14.8	4.2	6.6	6.7	26.3
Panama	15.4	5.2	20.6	3.5	3.4	18.6	39.8	

Stage 3: innovation driven	Peru	17.8	5.9	23.4	5.4	4.2	22.5	54.2
	Poland	5.1	4.3	9.3	6.5	4.0	47.4	32.7
	Romania	6.2	4.2	10.1	5.3	4.3	31.6	31.6
	Russia	3.0	2.8	5.8	3.4	1.6	35.4	42.0
	Slovakia	6.1	3.6	9.5	5.4	5.5	40.2	40.2
	South Africa	6.6	4.0	10.6	2.9	4.9	30.3	31.5
	Suriname	3.9	1.3	5.1	1.7	0.8	17.8	57.6
	Thailand	7.9	10.4	17.7	28.0	3.5	18.7	67.8
	Uruguay	8.5	5.7	14.1	4.9	3.4	12.0	36.8
	<b>Total</b>	<b>8.4</b>	<b>6.4</b>	<b>14.4</b>	<b>8.0</b>	<b>4.2</b>	<b>28.8</b>	<b>42.0</b>
	Belgium	3.1	1.9	4.9	5.9	1.9	29.0	43.9
	Canada	7.8	4.7	12.2	8.4	4.4	15.1	66.9
	Czech Republic	4.9	2.7	7.3	5.3	3.4	22.7	60.3
	Finland	2.7	2.7	5.3	6.6	2.0	17.9	66.0
	France	2.7	1.8	4.6	4.1	1.9	15.7	60.9
	Germany	3.1	2.0	5.0	5.1	1.5	18.7	55.7
	Greece	3.3	2.3	5.5	12.6	5.0	23.5	35.8
	Ireland	5.5	3.8	9.2	7.5	2.5	18.0	43.8
	Israel	5.3	4.8	10.0	5.9	4.8	17.4	49.2
	Italy	2.4	1.1	3.4	3.7	1.9	18.7	18.4
	Japan	2.2	1.5	3.7	5.7	1.5	25.0	59.6
	Korea	2.7	4.2	6.9	9.0	2.5	36.5	51.1
	Luxembourg	6.0	2.8	8.7	2.4	2.8	5.6	56.6
	Netherlands	4.7	4.8	9.3	8.7	2.1	8.0	67.1
	Norway	2.9	3.4	6.3	6.2	1.6	4.0	60.8
	Portugal	4.2	4.2	8.2	7.7	2.8	21.4	50.7
	Puerto Rico	6.6	1.8	8.3	2.0	1.8	21.5	42.9
	Singapore	6.4	4.4	10.7	4.2	3.3	8.4	68.8
	Slovenia	3.6	2.9	6.5	5.7	2.6	24.1	53.4
Spain	3.1	2.2	5.2	8.4	1.9	29.2	33.2	
Sweden	5.9	2.5	8.2	6.0	2.4	9.7	58.4	
Switzerland	4.5	3.7	8.2	10.0	2.3	7.5	67.2	
Taiwan	3.3	5.0	8.2	8.3	5.0	28.7	45.8	
Trinidad & Tobago	11.4	8.5	19.5	11.4	4.1	11.2	76.0	
United Kingdom	3.6	3.6	7.1	6.6	1.9	16.1	45.2	
USA	9.2	3.7	12.7	7.5	3.8	21.2	57.4	
<b>Total</b>	<b>4.7</b>	<b>3.3</b>	<b>7.9</b>	<b>6.7</b>	<b>2.8</b>	<b>18.3</b>	<b>53.7</b>	

Source: GEM 2013 Global Report, pp.80-81.

Appendix 2: Entrepreneurial attitudes and perceptions in GEM countries

Entrepreneurial Attitudes and Perceptions in the GEM Economies in 2013 by Economic Development		Perceived opportunities	Perceived capabilities	Fear of failure	Entrepreneurial intentions	Entrepreneurship as a good career choice	High status to successful entrepreneurs	Media attention for entrepreneurship
Stage 1: factor driven (includes transition countries to phase 2)	Algeria	61.9	55.5	32.9	36.0	79.6	84.2	47.4
	Angola	56.7	56.3	63.7	38.3	66.8	72.6	62.1
	Botswana	65.9	67.4	18.6	59.2	80.7	83.7	85.6
	Ghana	69.3	85.8	24.6	45.6	81.6	94.1	82.4
	India	41.4	55.8	38.9	22.8	61.5	70.4	61.4
	Iran	37.0	56.5	36.4	30.6	64.1	82.4	59.9
	Libya	52.3	58.6	33.0	62.1	85.2	84.3	38.2
	Malawi	78.9	89.5	15.1	66.7			
	Nigeria	84.7	87.0	16.3	46.8	81.2	61.9	76.5
	Philippines	47.9	68.4	36.2	44.1	84.9	79.3	86.8
	Uganda	81.1	83.8	15.0	60.7	88.3	95.3	87.5
	Vietnam	36.8	48.7	56.7	24.1	63.4	81.5	80.5
	Zambia	76.8	79.6	15.4	44.5	66.5	71.2	69.0
	<b>Average (unweighted)</b>	<b>60.8</b>	<b>68.7</b>	<b>31.0</b>	<b>44.7</b>	<b>75.3</b>	<b>80.1</b>	<b>69.8</b>
Stage 2: efficiency driven (includes transition countries to phase 3)	Argentina	40.9	61.7	24.9	31.0			
	Bosnia	23.3	50.5	26.1	21.8	82.3	71.9	39.2
	Brazil	50.9	52.6	38.7	27.2	84.6	82.2	84.1
	Chile	68.4	59.6	28.0	46.5	69.1	67.2	66.3
	China	33.1	36.3	34.3	14.4	69.6	73.5	71.3
	Colombia	67.7	57.8	31.8	54.5	90.9	71.4	67.5
	Croatia	17.6	47.2	35.2	19.6	61.5	43.1	42.9
	Ecuador	57.3	74.3	34.9	39.9	66.5	67.7	79.1
	Estonia	46.1	40.0	38.8	19.4	53.2	58.6	40.7
	Guatemala	58.8	66.4	33.3	39.0	86.8	71.5	55.1
	Hungary	18.9	37.5	44.8	13.7	45.7	74.1	28.4
	Indonesia	46.7	62.0	35.2	35.1	70.8	79.8	75.3
	Jamaica	<b>51.2</b>	<b>79.1</b>	<b>27.0</b>	<b>39.5</b>	<b>79.4</b>	<b>80.9</b>	<b>81.7</b>
	Latvia	34.8	47.8	41.6	22.7	61.4	59.5	58.6
	Lithuania	28.7	35.4	41.7	22.4	68.6	57.2	47.6
	Macedonia	37.2	49.7	35.6	29.1	69.5	67.9	66.8
	Malaysia	40.7	28.0	33.3	11.8	41.8	45.0	62.2
	Mexico	53.6	58.5	31.6	16.9	57.8	62.3	50.8
	Panama	58.7	66.4	28.9	27.0	64.4	59.2	70.4
	Peru	61.0	62.2	25.7	33.9	70.4	71.2	71.5
Poland	26.1	51.8	46.7	17.3	66.8	59.9	58.5	
Romania	28.9	45.9	37.3	23.7	73.6	72.6	61.3	



	<b>Russia</b>	18.2	28.2	29.0	2.6	65.7	68.0	49.0
	<b>Slovakia</b>	16.1	51.0	33.2	16.4	49.2	58.5	51.7
	<b>South Africa</b>	37.9	42.7	27.3	12.8	74.0	74.7	78.4
	<b>Suriname</b>	52.7	53.5	24.4	13.1	75.6	79.3	65.9
	<b>Thailand</b>	45.3	44.4	49.3	18.5	74.5	74.8	77.2
	<b>Uruguay</b>	47.9	61.1	26.9	25.3	58.1	56.0	57.5
	<b>Average (unweighted)</b>	<b>41.7</b>	<b>51.8</b>	<b>33.8</b>	<b>24.8</b>	<b>67.8</b>	<b>67.0</b>	<b>61.4</b>
<b>Stage 3: innovation driven</b>	<b>Belgium</b>	31.5	33.8	46.6	7.8	54.8	52.2	43.9
	<b>Canada</b>	57.4	48.5	35.2	13.5	60.6	70.1	69.6
	<b>Czech Republic</b>	23.1	42.6	35.8	13.7		47.8	
	<b>Finland</b>	43.8	33.3	36.7	8.3	44.3	85.5	68.5
	<b>France</b>	22.9	33.2	41.1	12.6	55.3	70.0	41.4
	<b>Germany</b>	31.3	37.7	38.6	6.8	49.4	75.2	49.9
	<b>Greece</b>	13.5	46.0	49.3	8.8	60.1	65.1	32.4
	<b>Ireland</b>	28.3	43.1	40.4	12.6	49.6	81.2	59.9
	<b>Israel</b>	46.5	36.2	51.8	24.0	60.6	80.3	49.1
	<b>Italy</b>	17.3	29.1	48.6	9.8	65.6	72.4	48.1
	<b>Japan</b>	7.7	12.9	49.4	4.1	31.3	52.8	57.6
	<b>Korea</b>	12.7	28.1	42.3	12.1	51.3	67.8	67.6
	<b>Luxembourg</b>	45.6	43.3	42.9	14.1	39.4	70.6	36.3
	<b>Netherlands</b>	32.7	42.4	36.8	9.1	79.5	66.2	55.2
	<b>Norway</b>	63.7	34.2	35.3	5.2	49.3	75.5	56.9
	<b>Portugal</b>	20.2	48.7	40.1	13.2			
	<b>Puerto Rico</b>	28.3	53.0	24.6	13.1	17.9	50.1	68.8
	<b>Singapore</b>	22.2	24.8	39.8	15.1	50.9	59.4	75.3
	<b>Slovenia</b>	16.1	51.5	29.6	12.4	57.4	68.1	50.5
	<b>Spain</b>	16.0	48.4	36.3	8.4	54.3	52.3	45.6
	<b>Sweden</b>	64.4	38.8	36.6	9.5	52.0	71.5	58.5
	<b>Switzerland</b>	41.5	44.7	28.2	9.8	40.5	65.0	47.8
	<b>Taiwan</b>	42.0	27.2	40.7	27.8	73.0	64.5	87.1
	<b>Trinidad &amp; Tobago</b>	58.0	75.3	19.8	28.7	79.5	72.0	61.0
	<b>United Kingdom</b>	35.5	43.8	36.4	7.2	54.1	79.3	49.6
	<b>USA</b>	47.2	55.7	31.1	12.2			
	<b>Average (unweighted)</b>	<b>33.4</b>	<b>40.6</b>	<b>38.2</b>	<b>12.3</b>	<b>53.5</b>	<b>67.3</b>	<b>55.7</b>

### Appendix 3: Subjective Well Being General Results for Jamaica and Factor-Driven Economies by Geographic Region

Region	18-64 population	Early-Stage entrepreneurial activity (TEA)	Established business ownership	Non TEA or established	TEA opportunity	TEA necessity	TEA Male	TEA Female
<b>Jamaica</b>	-0.53	-0.42	-0.44	-0.54	-0.44	-0.37	-0.23	-0.63
<b>Middle East &amp; North Africa</b>								
Algeria	-0.43	-0.33	-0.31	-0.43	-0.29	-0.044	-0.34	-0.32
Iran	-0.015	-0.011	-0.09	-0.15	0.01	-0.31	-0.19	0.14
Libya	-0.42	-0.31	-0.21	-0.42	-0.28	-0.49	-0.24	-0.044
Region Average	<b>-0.23</b>	<b>-0.15</b>	<b>-0.09</b>	<b>-0.23</b>	<b>-0.08</b>	<b>-0.33</b>	<b>-0.18</b>	<b>-0.05</b>
<b>Sub-Saharan Africa</b>								
Angola	-0.31	-0.02	0.38	-0.31	0.15	-0.45	0.13	-0.18
Botswana	-1.06	-0.96	-0.73	-1.06	-0.90	-1.12	-0.88	-1.05
Ghana	-0.55	-0.55	-0.37	-0.55	-0.41	-0.80	-0.48	-0.61
Malawi	-0.70	-0.65	-0.61	-0.70	-0.057	-0.75	-0.64	-0.66
Nigeria	-0.22	-0.24	-0.05	-0.22	0.26	-0.18	-0.31	-0.17
Uganda	-0.47	-0.55	-0.66	-0.46	-0.68	-0.13	-0.63	-0.47
Zambia	-1.26	-1.29	-1.23	-1.26	-1.31	-1.26	-1.28	-1.30
Region Average	<b>-0.63</b>	<b>-0.55</b>	<b>-0.42</b>	<b>-0.63</b>	<b>-0.51</b>	<b>-0.61</b>	<b>-0.53</b>	<b>-0.56</b>
<b>Asia Pacific &amp; South Asia</b>								
India	0.27	-0.01	-0.009	-0.32	-0.25	-0.34	-0.25	-0.32
Philippines	-0.23	-0.03	0.00	-0.23	0.01	-0.11	-0.24	-0.18
Vietnam	-0.26	0.27	0.07	-0.27	-0.23	0.41	-0.32	-0.22
Region Average	<b>-0.11</b>	<b>-0.11</b>	<b>0.06</b>	<b>-0.11</b>	<b>0.05</b>	<b>-0.27</b>	<b>-0.18</b>	<b>0.02</b>

\* Red indicates less satisfied populations

\*Source GEM Global, 2013

#### Appendix 4: Subjective Well Being General Results in Efficiency-Driven Economies by Geographic Region

Region	18-64 population	Early-Stage entrepreneurial activity (TEA)	Established business ownership	Non TEA or established	TEA opportunity	TEA necessity	TEA Male	TEA Female
<b>Latin and Caribbean region</b>								
Argentina	0.41	0.39	0.52	0.41	0.46	0.20	0.40	0.38
Brazil	0.17	0.14	0.22	0.17	0.28	-0.21	0.23	0.05
Chile	0.58	0.65	0.76	0.57	0.73	0.30	0.67	0.61
Colombia	0.17	0.27	0.31	0.17	0.33	0.03	0.30	0.24
Ecuador	0.54	0.62	0.56	0.54	0.68	0.49	0.69	0.54
Guatemala	0.37	0.44	0.40	0.37	0.49	0.32	0.46	0.41
<b>Jamaica</b>	<b>-0.53</b>	<b>-0.42</b>	<b>-0.44</b>	<b>-0.54</b>	<b>-0.44</b>	<b>-0.37</b>	<b>-0.23</b>	<b>-0.63</b>
Panama	0.72	0.66	0.73	0.72	0.67	0.61	0.73	0.55
Peru	0.46	0.71	0.42	0.46	0.77	0.51	0.75	0.66
Suriname	0.01	0.39	0.02	0.01	0.50	0.01	0.42	0.34
Uruguay	0.29	0.34	0.43	0.28	0.34	0.33	0.33	0.35
<b>Region Average</b>	<b>0.29</b>	<b>0.37</b>	<b>0.39</b>	<b>0.29</b>	<b>0.43</b>	<b>0.20</b>	<b>0.41</b>	<b>0.32</b>
<b>Sub-Saharan Africa Region</b>								
South Africa	-0.49	-0.11	-0.07	-0.49	-0.06	-0.20	-0.16	-0.04
<b>Region Average</b>	<b>-0.63</b>	<b>-0.55</b>	<b>-0.42</b>	<b>-0.63</b>	<b>-0.51</b>	<b>-0.61</b>	<b>-0.53</b>	<b>-0.56</b>
<b>Europe EU28 Region</b>								
Croatia	-0.31	-0.05	-0.14	-0.32	0.12	-0.35	-0.08	0.03
Estonia	-0.12	0.20	0.07	-0.12	0.21	-0.04	0.07	0.41

<b>Region</b>	18-64 population	Early-Stage entrepreneurial activity (TEA)	Established business ownership	Non TEA or established	TEA opportunity	TEA necessity	TEA Male	TEA Female
Hungary	-0.29	-0.19	-0.06	-.029	0.03	-.077	-0.27	-0.06
Latvia	-0.20	0.02	-0.13	-0.20	0.12	-0.34	-0.01	0.08
Lithuania	-0.08	0.11	0.18	-0.08	0.15	-0.06	0.13	0.05
Poland	-0.16	0.00	-0.03	-0.16	0.13	-0.12	-0.05	0.11
Romania	-0.11	0.17	0.19	-0.12	0.27	-0.06	0.18	0.15
Slovakia	-0.21	-0.09	0.04	-0.21	0.13	-0.41	-0.16	0.02
<b>Region Average</b>	<b>0.00</b>	<b>0.10</b>	<b>0.13</b>	<b>0.00</b>	<b>0.19</b>	<b>-.021</b>	<b>0.08</b>	<b>0.16</b>
<b>Europe –NON EU28</b>								
Bosnia and Herzegovina	-0.14	0.11	0.10	-0.14	0.34	-0.06	0.13	0.06
Russia	-0.81	-0.60	-0.27	-0.81	-0.46	-.083	-0.55	-0.64
<b>Region Average</b>	<b>0.03</b>	<b>0.16</b>	<b>0.31</b>	<b>0.03</b>	<b>0.28</b>	<b>-0.09</b>	<b>0.13</b>	<b>0.23</b>

\* Red indicates less satisfied populations

Source GEM Global, 2013