



GLOBAL ENTREPRENEURSHIP MONITOR

## 2011 Global Report

*Donna J. Kelley, Slavica Singer, Mike Herrington*



# The Global Entrepreneurship Monitor

## 2011 Global Report

**Donna J. Kelley, Slavica Singer,  
and Mike Herrington**

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*Although GEM data were used in the preparation of this report, their interpretation and use are the sole responsibility of the authors.*

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# Introduction

In 2011, the Global Entrepreneurship Monitor (GEM) conducted its 13th annual survey of the rate and profile of entrepreneurial activity around the globe. GEM interviewed over 140,000 adults (18–64 years of age) in 54 economies, spanning diverse geographies and a range of development levels. Based on this survey, GEM estimated that 388 million entrepreneurs were actively engaged in starting and running new businesses in 2011. These included an estimated:

- 163 million women early-stage entrepreneurs
- 165 million young early-stage entrepreneurs between the ages of 18 and 35
- 141 million early-stage entrepreneurs who expected to create at least five new jobs in the next five years
- 65 million early-stage entrepreneurs who expected to create 20 or more new jobs in the next five years
- 69 million early-stage entrepreneurs that offer innovative products and services that are new to customers and have few other competitors
- 18 million early-stage entrepreneurs that sell at least 25% of their products and services internationally

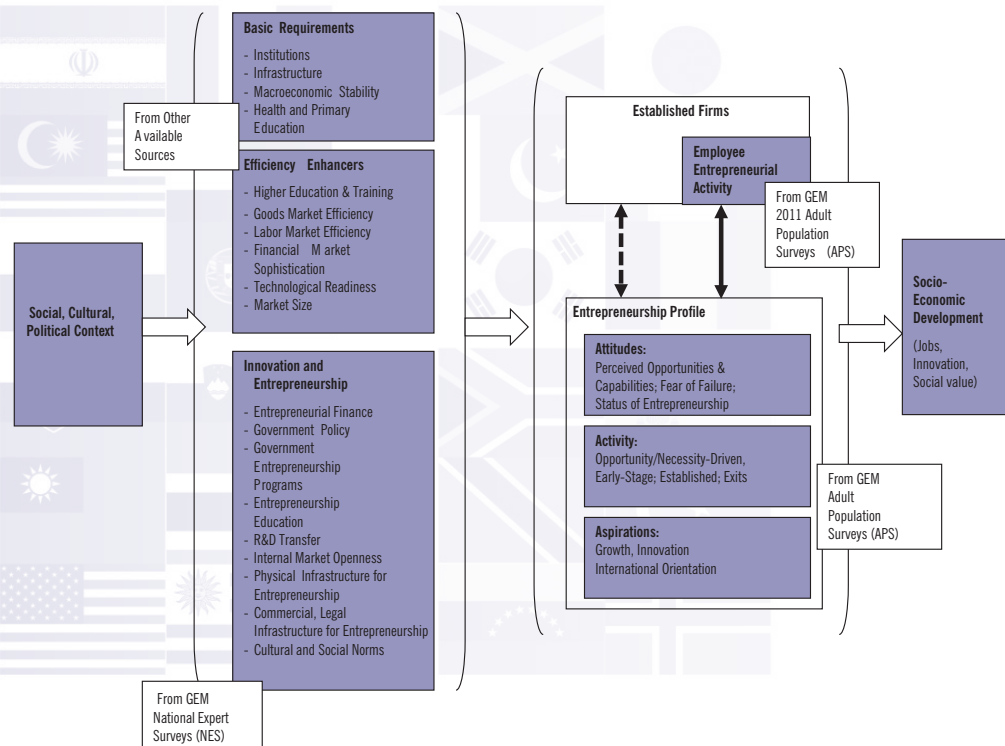
For 2011, the GEM consortium<sup>1</sup> additionally chose to research entrepreneurial employee activity (EEA) as a special topic, measured in 52 of the 54 participating

economies. In these economies, GEM estimates that 46 million employees had a leading role in entrepreneurial activities within existing organizations.

Figure 1 illustrates the GEM conceptual model of the institutional environment and its effect on entrepreneurship. As this figure shows, two sets of conditions—basic requirements and efficiency enhancers—are foundation conditions that influence the way a society functions and the well-being of its people. These have been adopted from the World Economic Forum’s (WEF) Global Competitiveness Report.<sup>2</sup> They are general framework conditions that effect economic activity more broadly, but they are critical to entrepreneurship because, without a solid institutional foundation, the entrepreneurship-specific conditions cannot function effectively.

Figure 1 also shows nine entrepreneurship framework conditions (EFC). GEM national teams collect information on these conditions through a national expert survey (NES). The determinants of entrepreneurship are complex; the extent to which specific variables can be tied to the rate or profile of entrepreneurship in a particular economy is not well understood. The institutional environment is critical to the study of entrepreneurship, however, because it creates conditions that entrepreneurs must navigate and that policy makers can address.

Figure 1 — The Institutional Context and Its Relationship to Entrepreneurship

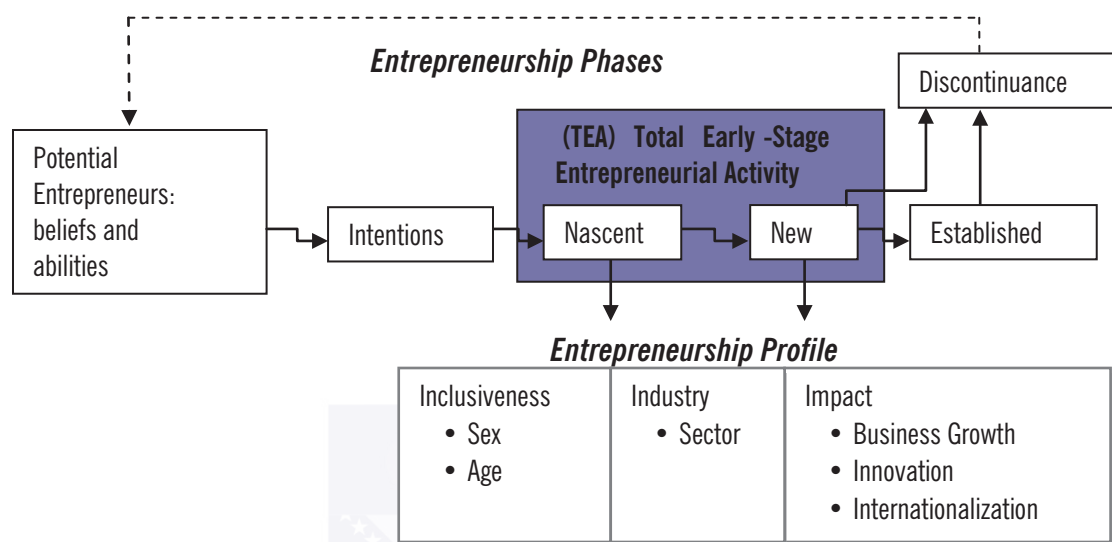


# The Phases and Profile of Entrepreneurship

GEM recognizes that an economy's prosperity depends greatly on a dynamic entrepreneurship sector. This is true across all stages of development. Yet the rate and profile of entrepreneurs vary considerably. Figure

2 illustrates the GEM measures across phases of entrepreneurial activity, with an added emphasis on profile factors.

Figure 2 — The Entrepreneurship Process and GEM Operational Definitions



## Phases

GEM measures multiple phases of entrepreneurship. Because the conditions that affect entrepreneurship in different societies are diverse, complex and interdependent, it is difficult to determine that one phase necessarily leads to another. For example, a society with many potential entrepreneurs may have a low rate of entrepreneurial activity due to particular environmental constraints. Consequently, the arrow connecting the phases is uneven, suggesting that the relationship is not definitive.

This multiple-phase perspective provides opportunities for assessing the state of entrepreneurship across phases in a society. For example, an economy with few established business owners may also see few individuals start new businesses and therefore have a low supply of entrepreneurs that could otherwise become business owners. At the same time, a lot of startup activity accompanied by a relatively low number of established businesses could point either to a lack of sustainability among those startups or to environmental constraints that make it difficult to stay in business.

The phases start out with potential entrepreneurs: those that see opportunities in their area and believe they have the capabilities to start businesses. Other beliefs include the extent to which individuals would not be deterred by fear of failure in pursuing opportunities. In addition, the broader society can influence the spread of entrepreneurship through perceptions about this activity as a career choice, the status of entrepreneurs in society and positive representation of entrepreneurs in the media.

The cycle continues: intent to start a business is followed by nascent activity, defined as entrepreneurs who are in the first three months of running a new business. New business owners are former nascent entrepreneurs; they have been in business more than three months, but less than three and a half years. Together, nascent and new entrepreneurs compose total early-stage entrepreneurial activity (TEA).

Additional phases include established business ownership as well as business discontinuance, which can supply society with experienced entrepreneurs who may go on to start another business or to use their expertise and resources to benefit entrepreneurs in some way (through financing, advising, or other forms of support).

## The Phases and Profile of Entrepreneurship

### *Profile*

GEM emphasizes that it is not enough to study only the numbers of entrepreneurs and to compare numbers with other economies. The profile of entrepreneurs—the characteristics of individuals who participate in this activity—differs considerably across economies.

This report reviews three profile factors: inclusiveness, industry, and impact. Their importance is based on several assumptions. First,

societies are more likely to realize the full potential of their entrepreneurial human resources when entrepreneurship is inclusive—that is, available to all people, including women and people of various ages. Second, entrepreneurs will differ in terms of the sector in which they start businesses (consumer, extractive, manufacturing, business services); the mix of businesses in an economy may have particular implications. Finally, entrepreneurs impact their societies through their innovations, their international reach, and their growth ambitions.



# Entrepreneurial Activity: Phases

This section examines the rate of individual participation in various phases of entrepreneurship across the 54 economies. We discuss potential entrepreneurs, individuals with the intent to start businesses, people starting and running new businesses (early-stage entrepreneurs), those running established businesses, and the discontinuation of businesses.

GEM groups the participating economies into three levels: factor-driven, efficiency-driven, and innovation-driven. These are based on the World Economic Forum's (WEF) Global Competitiveness Report<sup>3</sup>, which identifies three phases of economic development based on GDP per capita and the share of exports comprising primary goods.

## POTENTIAL ENTREPRENEURS

Entrepreneurship starts out with potential entrepreneurs: those who may or may not actually venture into this activity, but who have the beliefs and abilities to do so. Measures include believing that one has the capabilities to start a business, seeing opportunities in one's area and feeling undeterred by fear of failure when seeing opportunities.

Table 1 shows that, compared to the other two development levels, the factor-driven economies display higher average perceptions about entrepreneurial opportunities in their area, as well as higher perceived capabilities to start a business. This may seem counterintuitive until one considers

that individuals in different stages of economic development are likely to have different kinds of businesses in mind. As the section on sectors shows, for instance, factor-driven economies are dominated by consumer-oriented businesses, while innovation-driven economies have a higher proportion of business services compared to the other development levels.

Perhaps more relevant is the variation exhibited within the three phases of economic development. For instance, Bangladesh displays positive perceptions of opportunities to start a business but low perceived capabilities and high fear of failure. It would seem that, although people see lots of opportunities for starting businesses in Bangladesh, few believe they are capable of entrepreneurship and many are deterred by the possibility of failure. On the contrary, Venezuela displays slightly more modest opportunity perceptions, but has relatively high perceived capabilities and low fear of failure.

Several European countries that were affected by the recent economic crisis display some of the lowest opportunity perceptions across the entire sample. These include Greece, Hungary, Portugal and Spain. Several Asian economies—Japan, the Republic of Korea and Singapore—also report low rates of perceived opportunities and capabilities. In addition, Thailand, the Republic of Korea and Japan, as well as the United Arab Emirates, report high fear of failure levels. The inhabitants of the United States, on the other hand, show a rather modest perception of opportunities, yet they also display very strong confidence in their abilities and low fear of failure.

**Table 1: Entrepreneurial Perceptions, Intentions and Societal Attitudes in 54 Economies, 2011**

	Perceived Opportunities	Perceived Capabilities	Fear of Failure*	Entrepreneurial Intentions **	Entrepreneurship as a Good Career Choice	High Status to Successful Entrepreneurs	Media Attention for Entrepreneurship
<b>Factor-Driven Economies</b>							
Algeria	54.3	59.6	43.1	41.8	80.3	81.8	51.5
Bangladesh	64.4	23.6	72.0	24.6	73.0	100.0	49.3
Guatemala	55.1	71.0	24.6	26.4	85.5	67.8	62.0
Iran	32.0	46.4	32.7	29.9	61.1	72.7	58.4
Jamaica	49.1	78.6	29.0	19.5	81.0	82.5	76.2
Pakistan	39.7	42.6	35.3	22.6	73.7	72.7	47.7
Venezuela	48.4	66.9	24.1	20.2	83.1	77.3	63.3
<i>average (unweighted)</i>	49.0	55.5	37.3	26.4	76.8	79.2	58.3
<b>Efficiency-Driven Economies</b>							
Argentina	56.0	63.8	27.9	29.9	75.8	69.4	65.6
Barbados	43.9	66.9	18.8	11.4	59.9	64.0	50.4



## Entrepreneurial Activity: Phases

	Perceived Opportunities	Perceived Capabilities	Fear of Failure*	Entrepreneurial Intentions **	Entrepreneurship as a Good Career Choice	High Status to Successful Entrepreneurs	Media Attention for Entrepreneurship
Bosnia and Herzegovina	20.5	48.9	30.5	17.2	82.2	71.0	42.7
Brazil	43.1	52.8	31.4	28.2	86.3	86.3	82.0
Chile	56.6	62.1	27.0	46.0	72.9	69.1	64.7
China	48.8	43.9	35.6	42.8	73.1	73.4	75.9
Colombia	73.1	61.3	29.4	55.8	89.4	78.7	67.4
Croatia	18.3	49.0	34.3	17.9	65.3	46.9	40.9
Hungary	14.2	40.0	34.9	19.5	53.7	78.2	33.8
Latvia	23.6	46.5	41.0	24.8			
Lithuania	23.2	35.4	39.9	16.8			
Malaysia	36.5	31.1	30.0	8.7	51.5	51.3	73.5
Mexico	43.5	60.6	26.6	24.2	56.6	57.9	47.6
Panama	46.1	63.7	14.0	20.9			
Peru	70.3	72.8	41.0	37.5	84.8	81.7	78.1
Poland	33.1	52.0	42.9	22.7	72.9	64.4	58.0
Romania	36.1	41.6	36.1	24.7	67.9	69.4	56.7
Russia	27.1	33.2	43.4	3.6	64.5	65.3	55.3
Slovakia	23.1	52.9	31.8	17.8	54.6	64.4	55.1
South Africa	40.7	42.8	24.5	14.3	72.7	72.1	73.5
Thailand	40.1	42.7	55.1	26.5	77.0	79.1	84.0
Trinidad & Tobago	62.1	81.2	16.7	35.2	83.6	81.8	61.4
Turkey	32.4	42.1	22.5	8.5			
Uruguay	53.6	61.1	34.4	38.2	58.0	58.7	32.5
<i>average (unweighted)</i>	40.3	52.0	32.1	24.7	70.1	69.2	60.0
<b>Innovation-Driven Economies</b>							
Australia	47.8	47.4	43.2	12.3	54.0	67.7	69.5
Belgium	43.0	44.0	40.7	10.9	63.6	54.8	47.2
Czech Republic	23.9	39.2	34.6	13.9		48.7	
Denmark	46.6	35.0	40.5	6.7			
Finland	60.8	37.3	32.0	7.1	45.5	83.0	67.4
France	34.9	38.4	37.1	17.7	65.8	67.9	46.9
Germany	35.2	37.1	42.0	5.5	55.0	78.3	49.7
Greece	10.9	49.7	37.8	10.5	61.0	69.1	32.5
Ireland	25.6	45.5	33.2	5.8	45.9	82.7	56.4
Japan	6.3	13.7	42.2	3.8	26.0	54.7	57.0
Republic of Korea	11.2	26.7	45.1	15.7	61.1	67.2	62.2
Netherlands	47.8	41.9	35.1	8.5	83.4	67.2	62.2
Norway	67.1	33.2	40.5	8.7	52.9	80.4	60.2
Portugal	16.7	46.7	39.6	12.2			
Singapore	21.4	24.1	39.2	11.7	53.6	62.9	76.5
Slovenia	18.4	50.8	31.1	9.2	53.7	69.7	45.1

	Perceived Opportunities	Perceived Capabilities	Fear of Failure*	Entrepreneurial Intentions **	Entrepreneurship as a Good Career Choice	High Status to Successful Entrepreneurs	Media Attention for Entrepreneurship
Spain	14.4	50.9	38.9	8.0	65.2	66.5	44.6
Sweden	71.5	40.3	34.6	9.8	51.8	70.8	62.3
Switzerland	47.4	42.4	30.6	9.5			
Taiwan	38.9	28.6	39.6	28.2	69.0	62.7	85.8
United Arab Emirates	43.7	62.1	50.8	2.4	71.1	73.2	62.8
United Kingdom	33.3	42.5	36.1	8.9	51.9	81.0	47.3
United States	36.2	55.7	31.2	10.9			
<i>average (unweighted)</i>	34.9	40.6	38.1	10.3	57.3	68.9	57.5

\* fear of failure assessed among those seeing opportunities

\*\* intentions assessed in non-entrepreneur (non-TEA) population

Source: GEM 2011 Adult Population Survey

Society-wide perceptions can have a broad influence on entrepreneurship in an economy. These broader attitudes can also affect entrepreneurs who rely on an array of stakeholders, such as investors, customers, suppliers and their families. We explore three societal attitudes: perceptions about entrepreneurship as a career choice, the status of entrepreneurs and the media attention they receive. Table 1 displays these results.

For the most part, the percentage of respondents who believe that entrepreneurship is a good career choice declines with economic development level. In addition, the factor-driven economies display higher perceptions about the status of entrepreneurs than the other two economic development levels. Perceptions about media attention for entrepreneurship, however, are somewhat similar across the three economic development levels.

The efficiency-driven economies show some distinctive patterns. Brazil has very high perceptions about both the status and media attention of entrepreneurs, while the opposite is the case in Croatia. On the other hand, results for media attention vary considerably in the innovation-driven group; Taiwan shows the highest level (85.8%) and Greece the lowest level (32.5%) across the entire sample.

## INTENTIONS

Entrepreneurial intentions represent the percentage of individuals who expect to start a business within the next three years. Intent to start a business is an important measure of potential entrepreneurship in a society because it correlates positively with TEA rate.<sup>4</sup>

Table 1 displays intentions for the 54 economies. This measure tends to be highest in factor-driven economies, which also experience higher entrepreneurship rates. In the efficiency-driven, and even more so in the innovation-driven economies, entrepreneurial intentions are lower.

Russia and the United Arab Emirates, countries that place a high emphasis on extractive resources, exhibit the lowest entrepreneurial intention rates. In contrast, expectations to start a business are expressively high in some other emerging economies like China, Chile and Brazil.

## Entrepreneurial Activity: Phases

### TOTAL EARLY-STAGE ENTREPRENEURIAL ACTIVITY

Table 2 shows the percentage of adults in each economy that are engaged in a variety of phases of

entrepreneurship: those in the process of starting businesses (nascent activity), those operating new businesses up to three and a half years old, total entrepreneurial activity (TEA: combined nascent and new), established business ownership and discontinuance. In addition, the table includes information about necessity and opportunity motives.

**Table 2: Entrepreneurial Activity in 54 Economies by Phase of Economic Development, 2011**

	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)
<b>Factor-Driven Economies</b>							
Algeria	5.3	4.0	9.3	3.1	9.5	36.5	46.4
Bangladesh	7.1	7.1	12.8	11.6	2.5	27.3	50.0
Guatemala	11.8	9.1	19.3	2.5	3.8	33.5	33.5
Iran	10.8	3.9	14.5	11.2	6.4	53.0	31.5
Jamaica	9.0	5.0	13.7	5.1	12.7	33.0	39.8
Pakistan	7.5	1.7	9.1	4.1	1.6	46.9	24.7
Venezuela	13.1	2.6	15.4	1.6	3.2	28.5	43.4
<i>average (unweighted)</i>	9.2	4.8	13.4	5.6	5.7	37.0	38.5
<b>Efficiency-Driven Economies</b>							
Argentina	11.8	9.2	20.8	11.8	4.3	33.1	44.7
Barbados	10.8	1.8	12.6	4.2	5.5	5.0	57.9
Bosnia and Herzegovina	5.4	2.8	8.1	5.0	6.7	61.3	21.7
Brazil	4.1	11.0	14.9	12.2	3.8	30.7	45.2
Chile	14.6	9.6	23.7	7.0	6.8	27.4	54.3
China	10.1	14.2	24.0	12.7	5.3	40.6	29.0
Colombia	15.2	6.7	21.4	7.5	6.0	25.1	30.1
Croatia	5.3	2.1	7.3	4.2	3.6	35.3	30.7
Hungary	4.8	1.6	6.3	2.0	2.3	31.0	29.2
Latvia	6.8	5.3	11.9	5.7	3.0	25.9	46.2
Lithuania	6.4	5.0	11.3	6.3	2.9	28.4	47.2
Malaysia	2.5	2.5	4.9	5.2	2.6	10.2	71.8
Mexico	5.7	4.0	9.6	3.0	5.0	19.4	54.5
Panama	12.0	9.1	20.8	6.0	2.1	26.9	40.5
Peru	17.9	5.4	22.9	5.7	5.1	22.4	52.0
Poland	6.0	3.1	9.0	5.0	4.2	47.6	31.5
Romania	5.6	4.5	9.9	4.6	3.9	41.3	34.4
Russia	2.4	2.3	4.6	2.8	1.5	26.9	41.9
Slovakia	9.2	5.3	14.2	9.6	7.0	27.6	33.9
South Africa	5.2	4.0	9.1	2.3	5.6	34.8	39.3
Thailand	8.3	12.2	19.5	30.1	4.5	18.9	66.8
Trinidad & Tobago	13.9	9.3	22.7	6.9	3.9	14.9	43.9
Turkey	6.3	6.0	11.9	8.0	3.9	31.6	44.8

## Entrepreneurial Activity: Phases

	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)
Uruguay	11.0	6.0	16.7	5.9	4.3	11.1	9.8
<i>average (unweighted)</i>	8.4	5.9	14.1	7.2	4.3	28.2	41.7
<b>Innovation-Driven Economies</b>							
Australia	6.0	4.7	10.5	9.1	4.3	15.0	73.1
Belgium	2.7	3.0	5.7	6.8	1.4	10.4	72.4
Czech Republic	5.1	2.7	7.6	5.2	2.7	27.3	56.5
Denmark	3.1	1.6	4.6	4.9	2.3	7.1	64.0
Finland	3.0	3.3	6.3	8.8	2.0	18.3	59.4
France	4.1	1.7	5.7	2.4	2.2	14.8	70.7
Germany	3.4	2.4	5.6	5.6	1.8	18.6	54.9
Greece	4.4	3.7	8.0	15.8	3.0	25.4	36.8
Ireland	4.3	3.1	7.2	8.0	3.4	29.5	36.9
Japan	3.3	2.0	5.2	8.3	0.7	24.9	63.5
Republic of Korea	2.9	5.1	7.8	10.9	3.2	41.5	36.2
Netherlands	4.3	4.1	8.2	8.7	2.0	9.1	62.3
Norway	3.7	3.3	6.9	6.6	2.5	4.3	70.5
Portugal	4.6	3.0	7.5	5.7	2.9	17.8	58.1
Singapore	3.8	2.8	6.6	3.3	2.1	16.2	52.6
Slovenia	1.9	1.7	3.7	4.8	1.5	12.1	51.2
Spain	3.3	2.5	5.8	8.9	2.2	25.9	39.3
Sweden	3.5	2.3	5.8	7.0	3.2	6.1	67.6
Switzerland	3.7	2.9	6.6	10.1	2.9	11.4	61.4
Taiwan	3.6	4.4	7.9	6.3	4.9	17.5	49.8
United Arab Emirates	3.7	2.6	6.2	2.7	4.8	14.4	67.4
United Kingdom	4.7	2.6	7.3	7.2	2.0	17.2	46.3
United States	8.3	4.3	12.3	9.1	4.4	21.2	58.9
<i>average (unweighted)</i>	4.0	3.0	6.9	7.2	2.7	17.6	57.0

Source: GEM 2011 Adult Population Survey

## Entrepreneurial Activity: Phases

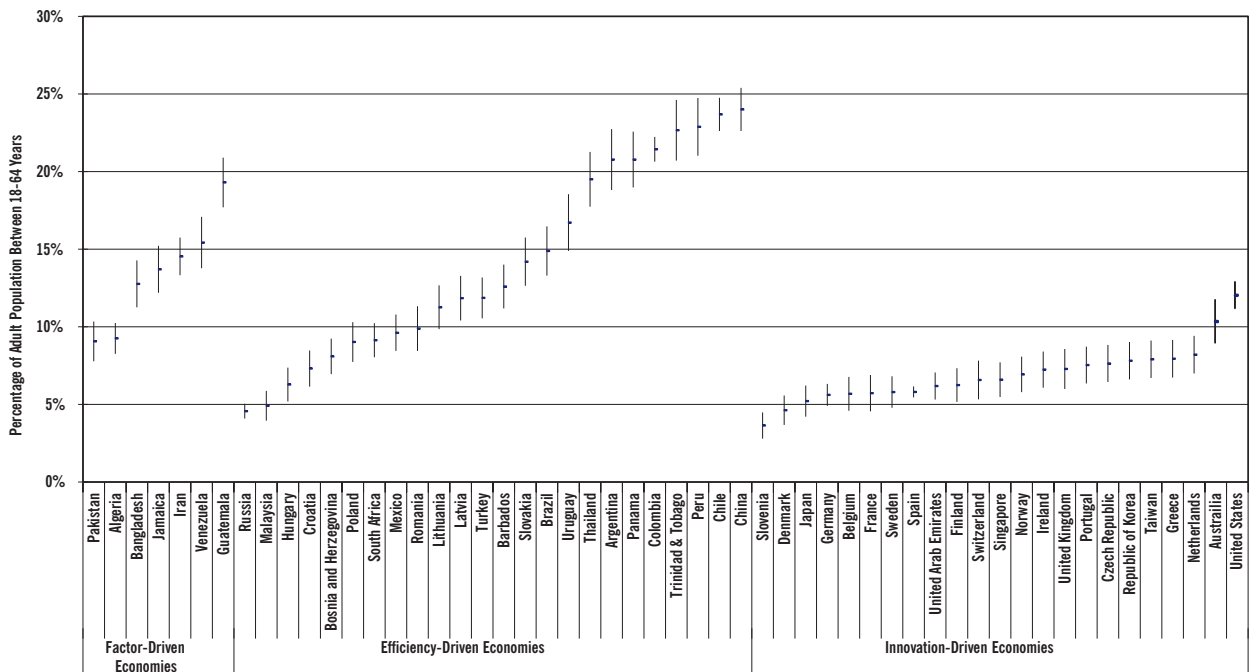
Figure 3 shows TEA rates across all the economies in the sample, ranked within economic development level by increasing levels of TEA. A key finding is the marked increase in TEA rates from 2010 to 2011 in many economies across all development levels. This is particularly notable given the economic distress experienced throughout much of the world in the previous years.

On average, the 16 efficiency-driven economies that participated in GEM in both 2010 and 2011 saw their TEA rate increase by nearly 25%. Argentina, Chile

and China were among those economies whose TEA rate in 2010 was already high and then experienced large increases in 2011.

The 20 innovation-driven economies that participated in both years showed, on average, a nearly 22% increase in 2011. TEA rates in Australia and the United States both increased substantially from above-average TEA rates in 2010. A rise in nascent entrepreneurship (a nearly 36% increase, as opposed to 8% for new business owners) explains most of this increase in TEA in the innovation-driven economies.

**Figure 3: Total Early-Stage Entrepreneurial Activity (TEA) in 54 Economies, by Phase of Economic Development, 2011**



Source: GEM 2011 Adult Population Survey

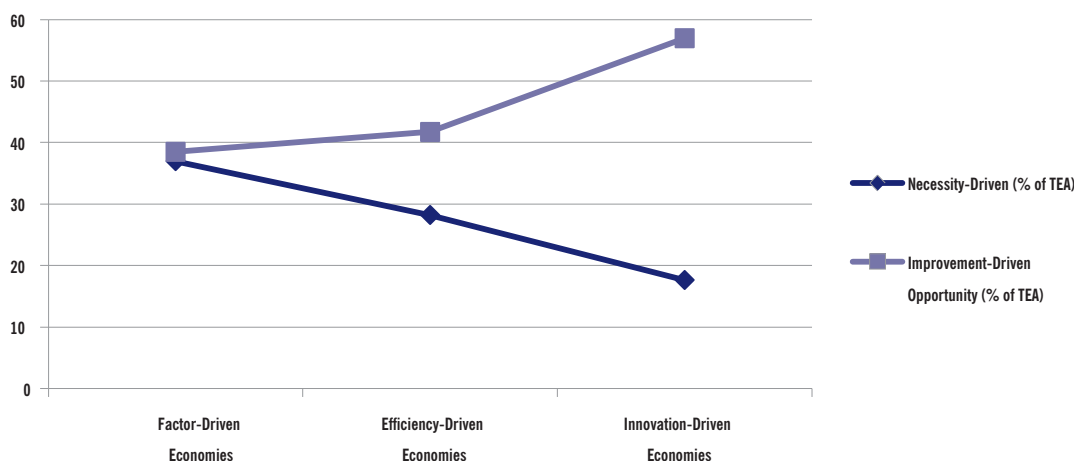
## NECESSITY- AND OPPORTUNITY-DRIVEN MOTIVES

Entrepreneurs have particular motives for entering entrepreneurship. They may be pushed into starting businesses out of necessity because they have no other work options and need a source of income. On the other hand, they may be pulled into starting businesses because they recognize opportunities and

choose to pursue them. GEM also explores the concept of “improvement-driven opportunity” motives, where people with opportunity motives also seek to improve their incomes or independence in their work.

As Figure 4 shows, entrepreneurs in factor-driven economies tend to be equally driven by necessity and improvement-driven opportunity (IDO) motives. With greater economic development levels, necessity gradually decreases as a motivator, while IDO motives increase.

**Figure 4: Percentage of Early-Stage Entrepreneurs (TEA) Motivated by Necessity and by Improvement-Driven Opportunity at Three Levels of Economic Development, 2011**



Source: GEM 2011 Adult Population Survey

## ESTABLISHED BUSINESS OWNERSHIP

Early-stage entrepreneurs provide dynamism in an economy through the introduction of novel ideas and the creation of new value for their societies. Established business owners play an essential role as well by, for example, offering employment and stability in their societies. The level of established business ownership can thus provide some indication of the sustainability of entrepreneurship in a society.

TEA rates are highest in the factor-driven economies, decreasing with greater levels of development. Established business ownership rates, however, show a slight increase from the factor-driven to innovation-driven stage. The factor-driven economies have significantly more early-stage entrepreneurs than established business owners—more than two and a half times as many. TEA rates drop steeply with increasing economic development level, particularly as necessity-driven entrepreneurship declines. On average, they are slightly below the level of established business ownership in the innovation-driven stage.



## Entrepreneurial Activity: Phases

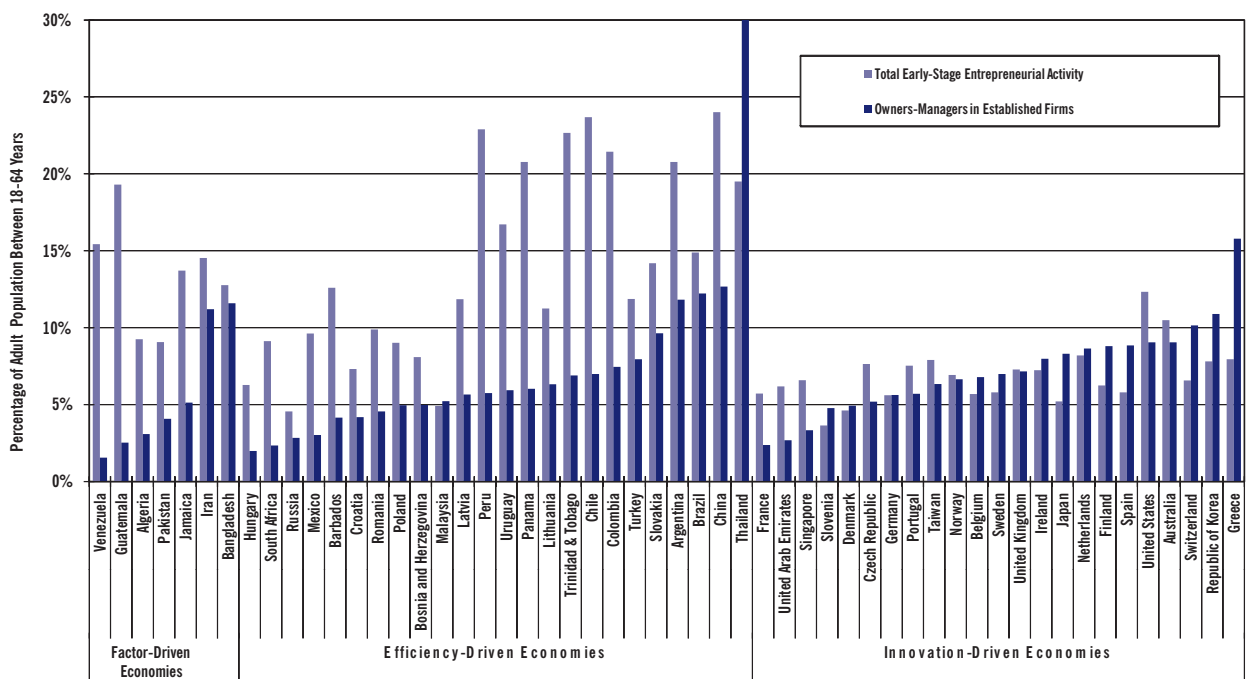
Figure 5 shows a comparison of established business ownership and TEA rates across the sample. The economies are ranked by rate of established business ownership within each economic development level. This figure clearly illustrates the generally low established business ownership rate relative to TEA in the factor-driven group.

A similar, although less drastic, pattern emerges in the efficiency-driven group. With the exception of two economies, all show higher TEA rates relative to established business ownership. China and many Latin American economies (Peru, Panama, Trinidad and Tobago, and Chile) exhibit among the greatest

discrepancies between a high TEA rate and low relative business ownership. Thailand, on the other hand, reports a high TEA rate, but an even higher established business rate—the highest in the entire sample.

In the innovation-driven group, Greece stands out for its very high level of established business ownership as well as its above average TEA rate. The United States and Australia also report high levels of entrepreneurs in both phases. On the other hand, several countries (Sweden, Japan, Finland, Spain and Switzerland in particular) exhibit lower than average TEA rates but comparatively high rates of established business ownership.

**Figure 5: Comparison of Established Business Ownership and TEA Rates for 54 Economies, Organized by Established Business Ownership Rate Within Economic Development Levels, 2011**



Source: GEM 2011 Adult Population Survey

## DISCONTINUANCE

Business discontinuance tends to decline as economic development level increases. This is expected, given the higher proportion of entrepreneurs at the earlier development stages. In other words, if more people start businesses, more discontinuations are likely, particularly given the risks associated with startup activity.

There are some differences in the reasons for discontinuance among the development groups. The group averages show that lack of profitability and problems obtaining financing account for over half the discontinuances in the factor-driven and efficiency-driven economies. These reasons, particularly “trouble obtaining finance,” are less frequently noted in the innovation-economies, whereas entrepreneurs in those economies exhibit a higher likelihood of exit due to retirement, sale or another opportunity.<sup>5</sup>

# Entrepreneurship Profile

The value of examining an economy's entrepreneurship profile is based on the assumption that a simple count of entrepreneurs does not paint a full picture of entrepreneurship and its contribution to society. This section presents three entrepreneurship profile categories: (1) inclusiveness—more specifically, the distribution of entrepreneurship by sex and age; (2) industry—the participation of entrepreneurs in key sectors; and (3) impact—the entrepreneurs' growth aspirations, international market reach and the degree of innovation in their products and services.

## INCLUSIVENESS

Inclusiveness accounts for the equality of entrepreneurship across a society. It is a measure of equity; in other words, if two people have equal potential for entrepreneurship, this activity should not be more available to one than the other simply because of sex, age or other characteristics, such as ethnicity.

Factors such as culture and differential education levels may constrain, or at least influence, the ability for all groups to participate equally in entrepreneurship. On the other hand, entrepreneurship may be an outlet and an income source for groups that are excluded from certain jobs. We next review the frequency of participation of women relative to men, as well as the distribution of entrepreneurs by age in the 54 economies.

## WOMEN'S PARTICIPATION IN ENTREPRENEURSHIP

Figure 6 reveals the rates of female and male participation in entrepreneurship across the sample. In just 8 of the 54 economies surveyed, the rates of female early-stage entrepreneurship are comparable to those of their male equivalents. These eight—Panama, Venezuela, Jamaica, Guatemala, Brazil, Thailand, Switzerland and Singapore—come from various global regions and represent every phase of economic development. In the rest of the sample, entrepreneurship rates are lower among women than men.

In the factor-driven economies, there is a marked split between high levels of women entrepreneurs in four Latin American/Caribbean economies (Panama, Venezuela, Jamaica and Guatemala) and low participation rates in Iran, Bangladesh and Pakistan. In Pakistan, only one tenth of entrepreneurs are women.

Among the efficiency-driven economies, Thailand and Brazil have high women participation rates. Conversely, the lowest relative rates of women's involvement in entrepreneurship can be found in the Eastern European economies, most prominently in Poland and Slovakia, where fewer than 30% of entrepreneurs are women.

In the innovation-driven economies, it is notable that Asia and Western Europe have economies with both the lowest and highest relative levels of women's participation relative to men. Singapore and Switzerland exhibit comparatively high levels, while France and the Republic of Korea report low involvement (about one fourth of the entrepreneurs are women).

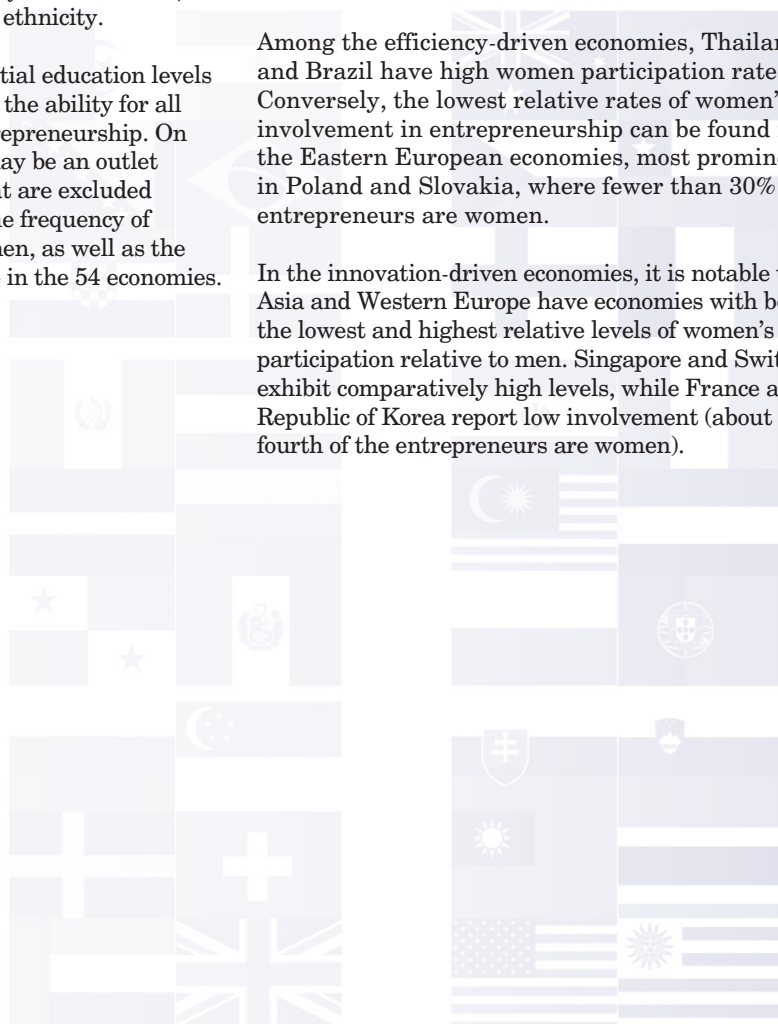
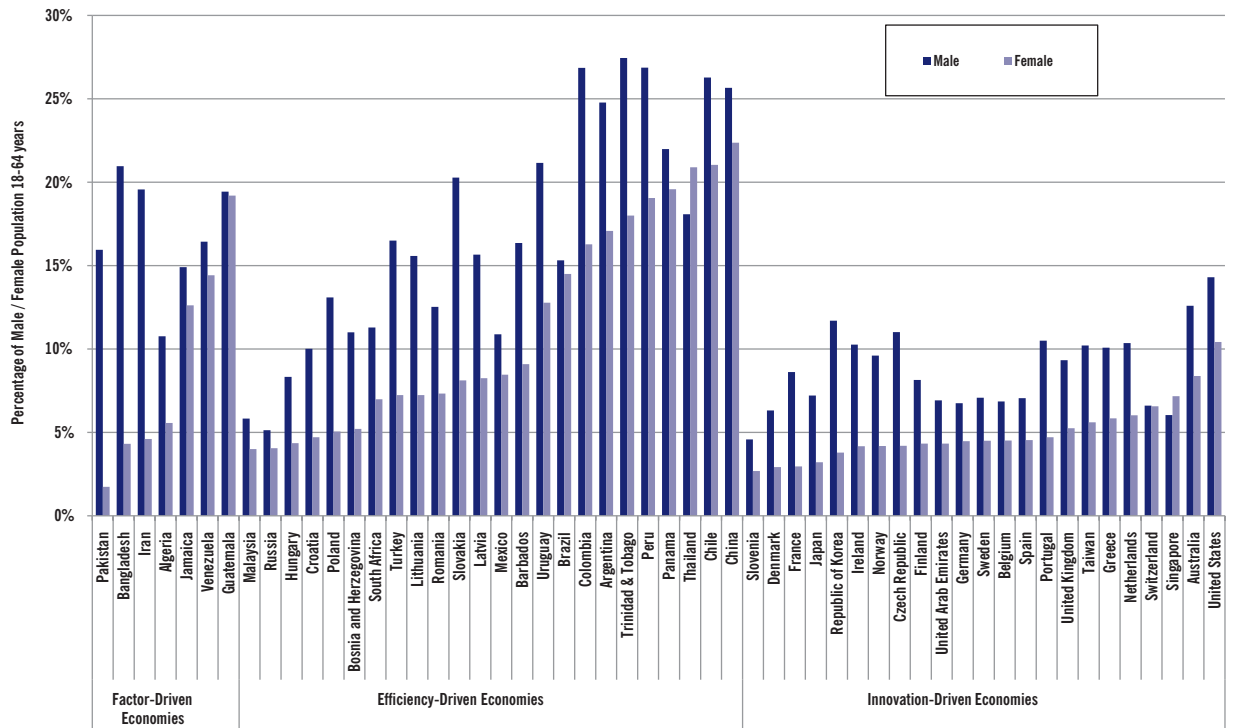


Figure 6: Comparison of Female and Male Early-Stage Entrepreneurship (TEA) Rates in 54 Economies, Organized by Female TEA Rate With Economic Development Levels, 2011



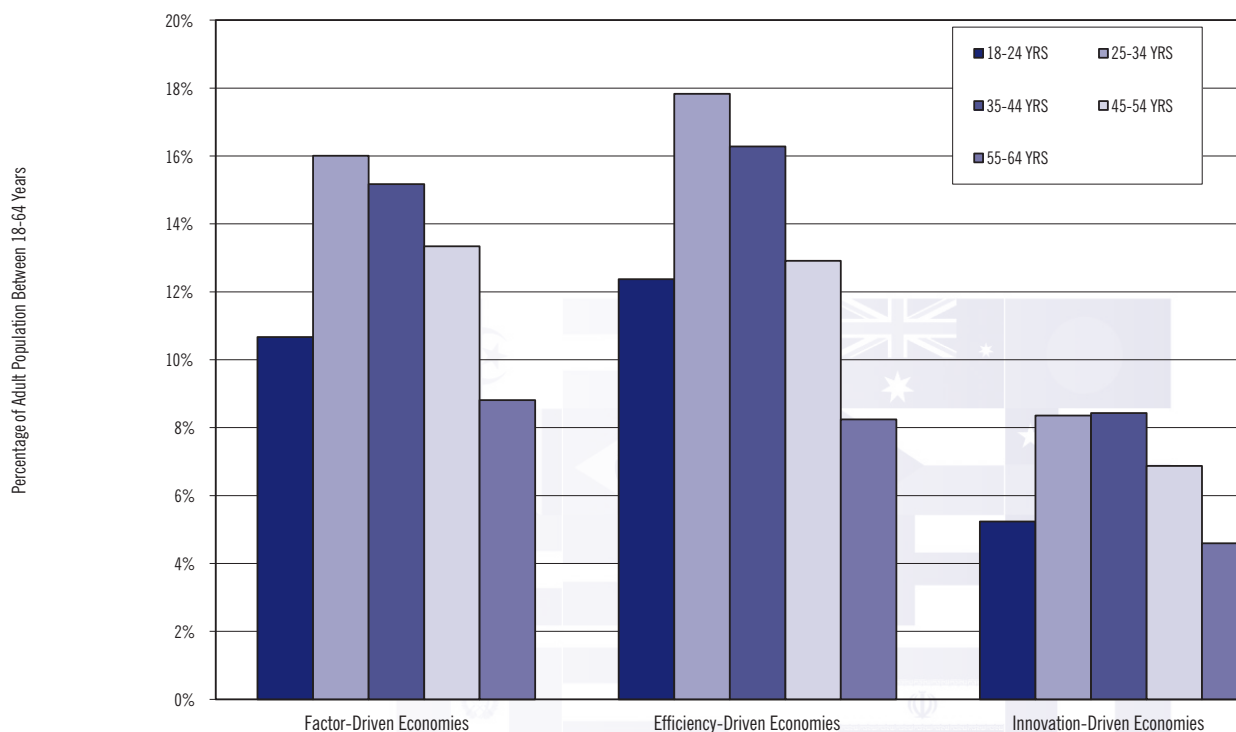
Source: GEM 2011 Adult Population Survey

## Age Distribution of Early-Stage Entrepreneurship

As Figure 7 shows, early-stage entrepreneurs tend to be young to mid-career, from 25 to 44 years old. The two age categories represented in this range, the 25–34 year olds and the 35–44 year olds, are equally represented in the factor- and innovation-driven economies. The 45–54 year old group is the next most prevalent at both development levels.

The efficiency-driven development group shows some unique differences. There are slightly more entrepreneurs in the younger, 25–34 year old, category. In addition, there are almost equal numbers of the youngest, 18–24 year old, and the older, 45–54 year old, groups. These two observations illustrate the tendency toward younger entrepreneurs in the efficiency-driven economies.

Figure 7: Age Distribution of Early-Stage Entrepreneurs (TEA) at Three Economic Development Levels, 2011



Source: GEM 2011 Adult Population Survey

In the factor-driven economies, Guatemala and Venezuela tend to have slightly older entrepreneurs, while Bangladesh and Jamaica favor younger ages. Most of the efficiency-driven economies show a steep increase in entrepreneurship in the 25–34 age group, accounting for the noticeable dominance of this age category here. But even younger entrepreneurs (18–24 year olds) are more frequent in Lithuania, Bosnia and

Herzegovina, and Panama, where this age range is most predominant and its numbers decrease with age. This same pattern can be seen in the innovation-driven group in the Czech Republic and Germany. In contrast, Switzerland and Japan have the highest proportion of older entrepreneurs in the 44–54 age range.

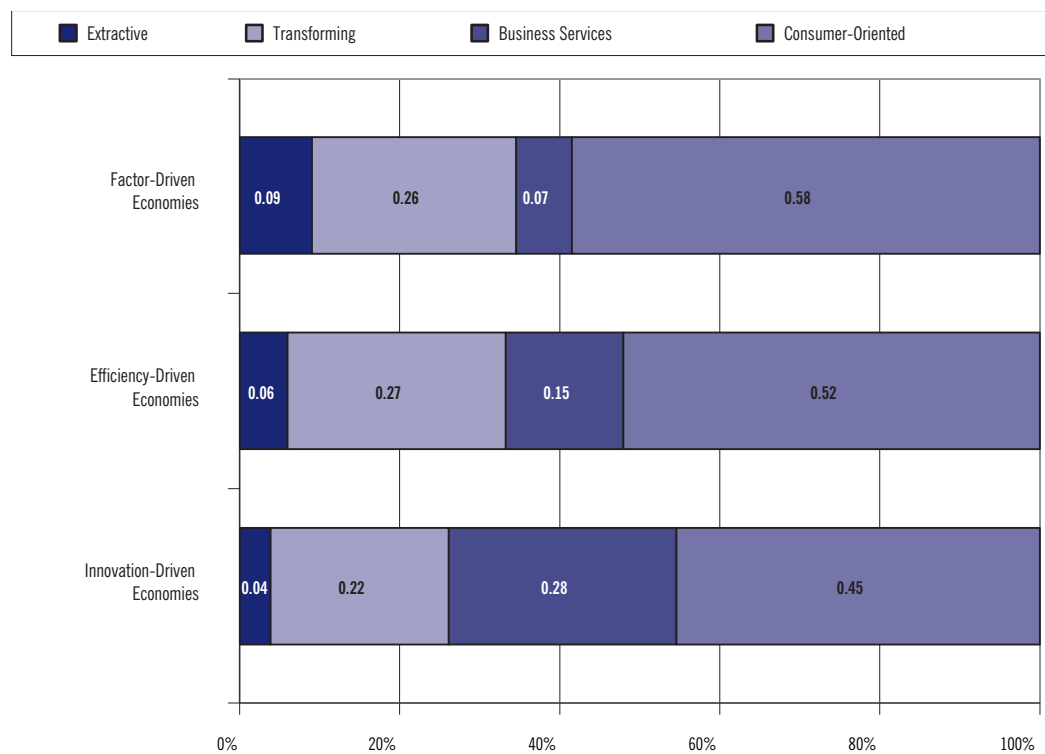
## Age Distribution of Early-Stage Entrepreneurship

### INDUSTRY SECTOR

Figure 8 shows industry sector participation of early-stage entrepreneurs at the three development levels. This figure clearly demonstrates the dominance of consumer-oriented businesses (mostly retail) at the factor-driven and efficiency-driven stages.

Just as important, there is a high level of business services in the innovation-driven economies, particularly when compared with the factor-driven development level. Business services tend to compete more on knowledge and technology. On the other hand, extractive or transforming business participation is less frequent in the innovation-driven economies compared with the other two development levels.

**Figure 8: Sector Distribution of Total Early-Stage Entrepreneurial Activity (TEA) by Phase of Economic Development, 2011**



Source: GEM 2011 Adult Population Survey

### IMPACT

These factors consider the effect entrepreneurs have on their economies' growth, innovation and internationalization. Growth ambitions refer to

entrepreneurship's job-creation potential. Innovation benefits society through new and improved products and services. Internationalization measures the proportion of entrepreneurs who sell beyond their national borders, accessing new markets and enhancing their international competitiveness.

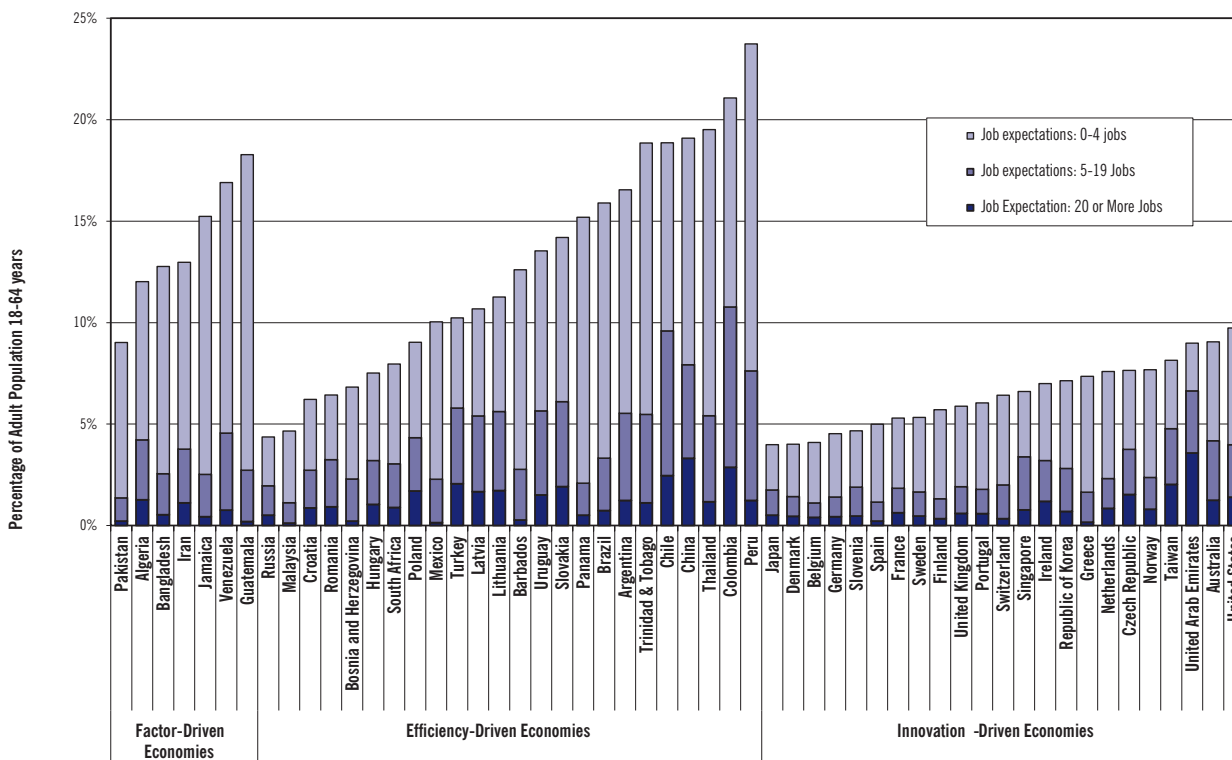
**Growth**

Growth projections measure the number of additional people entrepreneurs expect to employ in five years. We recognize that anticipated growth levels will not be the same as realized growth; the latter is likely to be lower than predicted. However, several reputable research studies have reported associations between projected and actual growth.<sup>6</sup>

In Figure 9, we show growth expectations for 54 economies at three levels: 0–4 (low growth expectations), 5–19 (medium growth expectations) and

20 or more employees (high growth expectations). As this figure shows, the factor-driven economies contain many entrepreneurs, but mostly in the low growth category. Consider the example of Guatemala (factor-driven stage) and Peru (efficiency-driven stage). Both countries show about the same percentage of entrepreneurs with 0–4 employee growth expectations, yet Peru has, on top of that, a substantial number of entrepreneurs at the other two growth levels. Chile is also notable in the efficiency-driven group for its high level of moderate growth expectations and China stands out for its large proportion of entrepreneurs with high growth ambitions.

**Figure 9: Growth Expectations in 53 Economies,<sup>7</sup> Organized by Phase of Economic Development, 2009–2011**



Source: GEM 2009–2011 Adult Population Survey



## Age Distribution of Early-Stage Entrepreneurship

While the innovation-driven economies consistently report fewer entrepreneurs, the high proportion of growth ambitions evident in Figure 9 reveals that these fewer numbers of entrepreneurs nonetheless contribute highly to employment growth in their economies. The UAE has more high growth expectation entrepreneurs than either of the other two categories. Additionally, Taiwan and Singapore show nearly as many entrepreneurs with moderate growth expectations as with low growth ambitions. Moreover, Taiwan has a large number of high growth entrepreneurs.

### Innovation

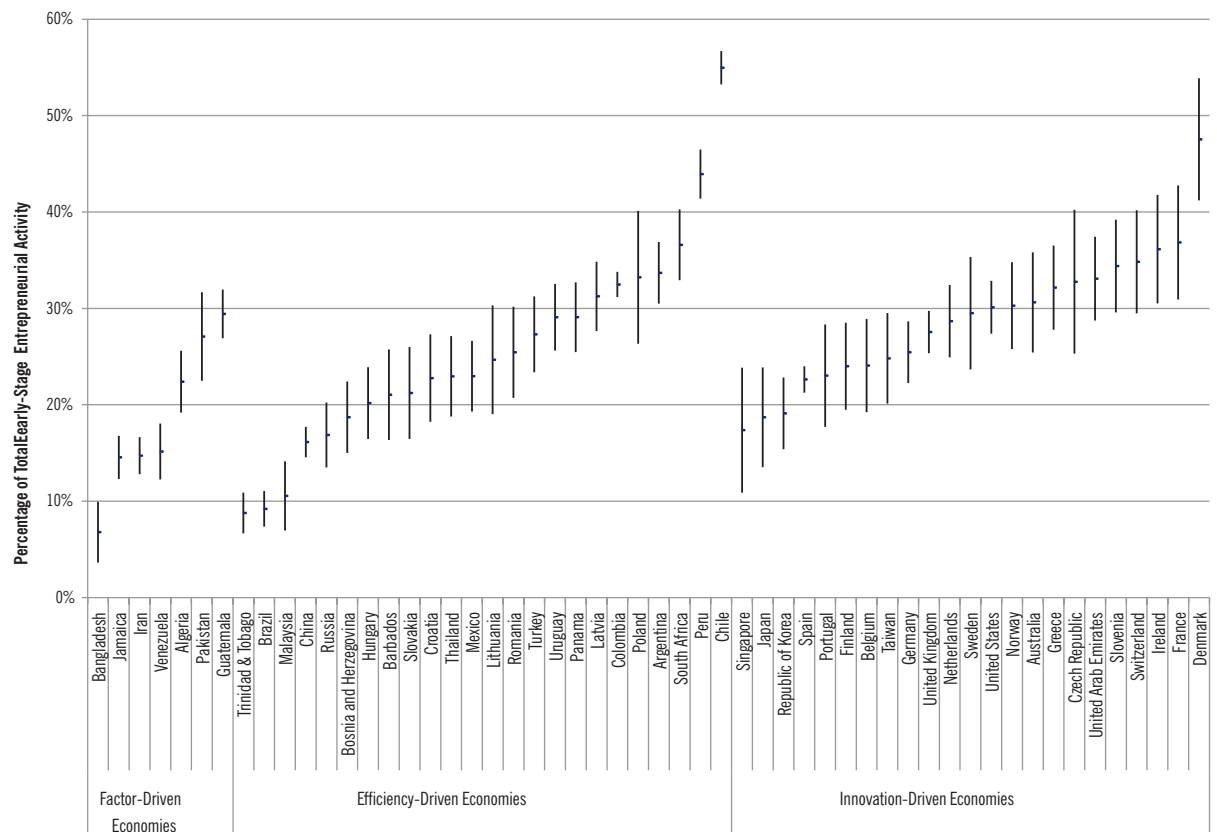
GEM evaluates innovation from the perspective of the market and industry. This measure represents the extent an entrepreneur's product or service is new to some or all customers and where few or no other businesses offer the same product. It must be kept in mind, however, that innovativeness is not perceived the same way in all economies. What may seem new to customers in one economy may already be familiar to customers in another. In addition, some economies will have competition for their product purely because

of their greater competitive intensity. Innovativeness is therefore context-dependent.

Figure 10 shows the percentage of entrepreneurs reporting innovative products. Innovativeness increases on average as economic development rises. Among the factor-driven economies, the highest levels exist in Guatemala, which also reports a high TEA rate. In the efficiency-driven group, high innovation rates exist among those with both high (Chile, Peru) and low (South Africa, Poland) TEA rates.

Denmark shows the highest percentage of entrepreneurs with innovative products and services. This country also has low TEA rates. This suggests that although there are fewer entrepreneurs in Denmark, the higher proportion of innovativeness is an important quality dimension. Many of the innovation-driven economies with the highest TEA rates show moderate proportions of innovativeness, indicating that there may be a trade-off between quantity and quality dimensions in their entrepreneurial activities.

**Figure 10: Percentage of Total Early-Stage Entrepreneurs (TEA) With Innovative Products in 54 Economies, 2011**



Source: GEM 2009–2011 Adult Population Survey

## Internationalization

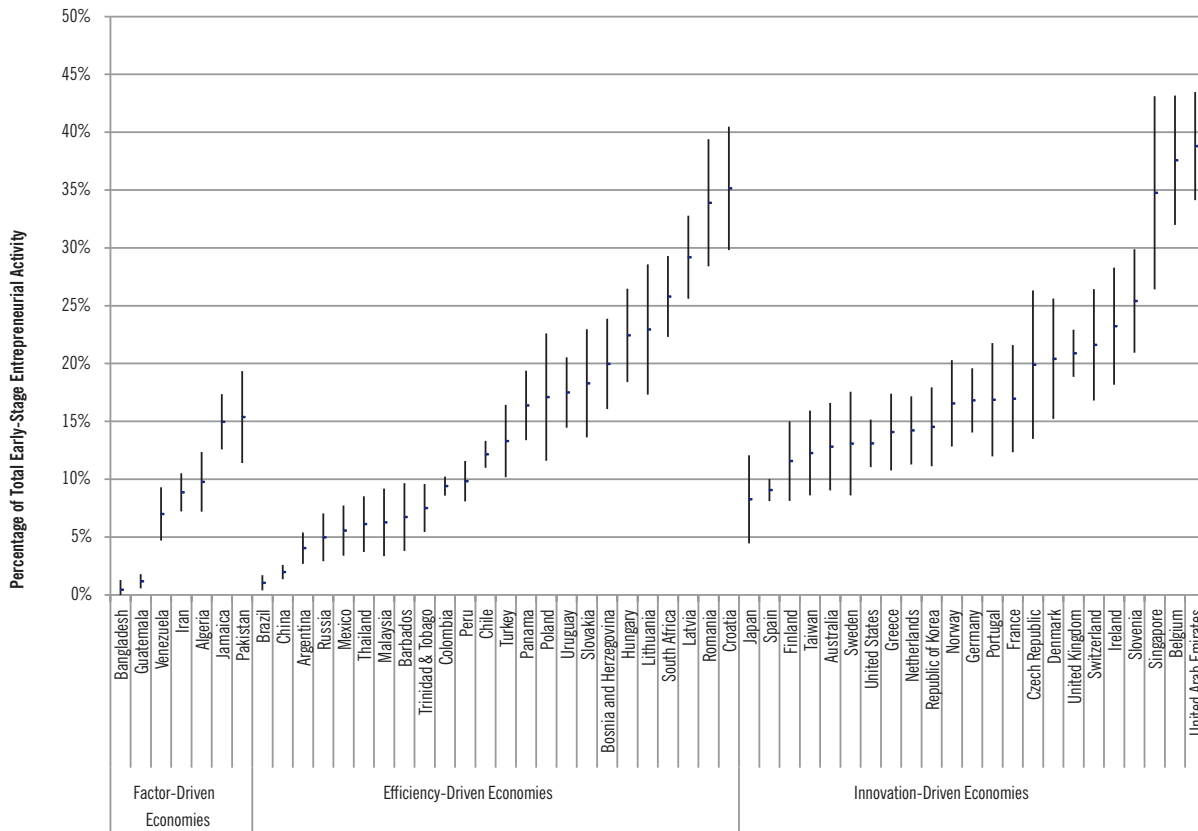
This measure assesses the extent to which entrepreneurs sell to customers outside their economies. Figure 11 shows the proportion of entrepreneurs with at least 25% foreign customers. Internationalization is lowest in the factor-driven economies, increasing with economic development level. There is very little international trade in Bangladesh, for example, and only slightly more in Guatemala.

Two key observations stand out regarding both ends of the internationalization spectrum. At the low end is a group of efficiency-driven countries with large populations and large land mass that show very low

rates of internationalization: Brazil, China, Argentina and Russia. In the innovation-driven group, the United States has a high TEA rate but lower than average internationalization rates, although still much higher than the four efficiency-driven economies mentioned. Entrepreneurs in the United States have a large and diverse market with relatively high disposable income, but also high competitive intensity.

At the high end are Romania and Croatia in the efficiency-driven group, where entrepreneurs sell outside their national borders to one third of their customer base on average. Singapore, Belgium and UAE in the innovation-driven group also report high internationalization.

**Figure 11: Percentage of Early-Stage Entrepreneurs (TEA) With More Than 25% International Customers in 54 Economies, 2011**



Source: GEM 2009–2011 Adult Population Survey

# Institutional Context (Entrepreneurship Framework Conditions)

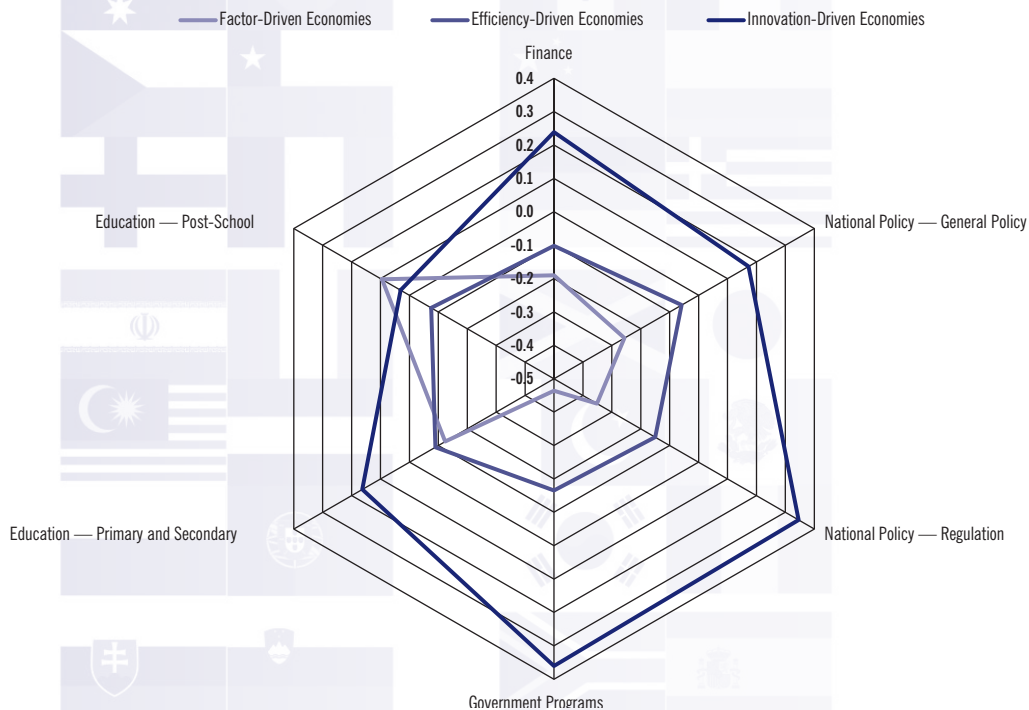
Figure 1, at the beginning of this report, outlines nine entrepreneurship framework conditions (EFCs). Each year, the national teams survey experts in their economies on the current state of these conditions, rating each condition on a Likert scale of 1 (lowest) to 5 (highest).

Figure 12 shows spider graphs of these conditions. It should be noted that three of the conditions (education, national policy and internal markets) each contain two subconditions, and these are broken out in Figure 12. Education includes primary/secondary school and post-school training. National policy contains both general policy and regulatory policy. Internal markets refer to both dynamics (the level of change in markets from year to year) and openness (the extent to which new firms are free to enter existing markets).

In general, experts in the innovation-driven economies rated the EFCs more highly. This trend is consistent with Figure 1; foundational factors (basic requirements and efficiency enhancers) are more developed in the innovation-driven economies and EFCs begin to have higher priority.

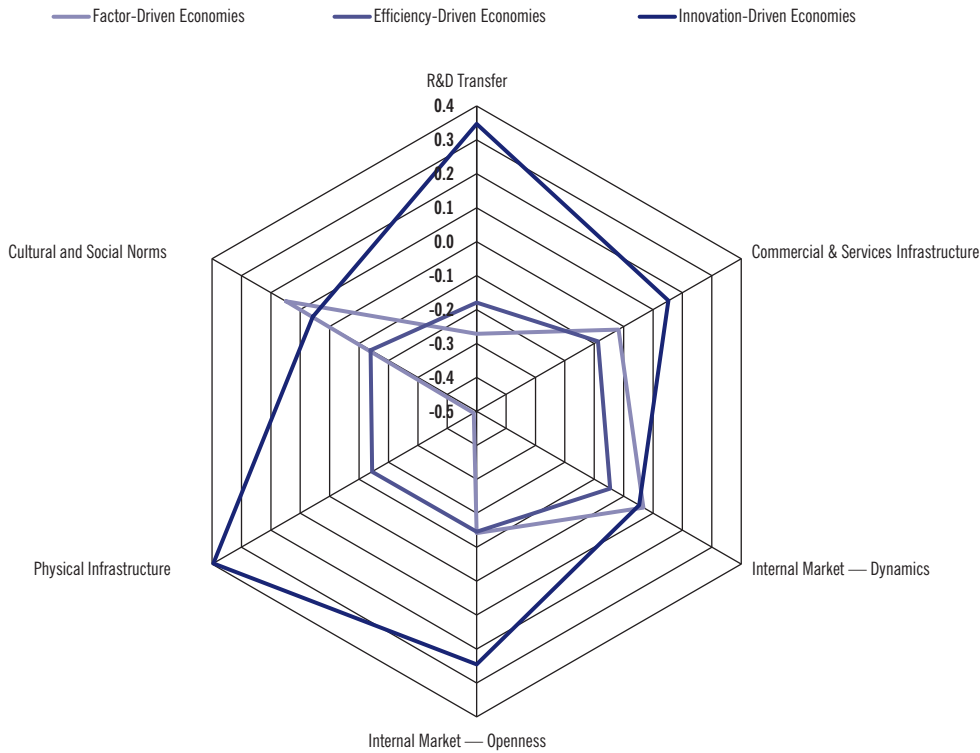
Three entrepreneurship framework conditions stand out for their high ratings in the factor-driven economies: (1) post-school entrepreneurship education; (2) internal market dynamics; and (3) cultural and social norms for entrepreneurship. The latter is consistent with the GEM adult population survey's report that individual and societal beliefs tend to be highest in the factor-driven economies.

**Figure 12: Expert Ratings on Entrepreneurship Framework Conditions in 48 Economies, Organized by Stage of Development, 2011**



Source: GEM 2011 National Expert Survey (NES)

## Institutional Context (Entrepreneurship Framework Conditions)



Source: GEM 2011 National Expert Survey (NES)

In examining the most distinct differences in conditions, government programs receive very high ratings in the innovation-driven economies, but they receive very low ratings in the factor-driven stage. Physical infrastructure, which refers to access to physical resources (communication, utilities, transportation, land or space) at a price that does not

discriminate against small and medium enterprises, displays a similar discrepancy between these groups. Other areas that show a lower but still notable difference, with high levels in the innovation-driven economies and low levels in the factor-driven group, include R&D transfer, finance and national policy.

# Special Topic: Entrepreneurial Employee Activity

The GEM consortium selected entrepreneurial employee activity (EEA) as a special topic for 2011.<sup>8</sup> The focus is on people who play a leading role in creating and developing new business activities for the organizations they work for. These entrepreneurial initiatives include both activities initiated by the organizations' top levels and those that emerge from the bottom.

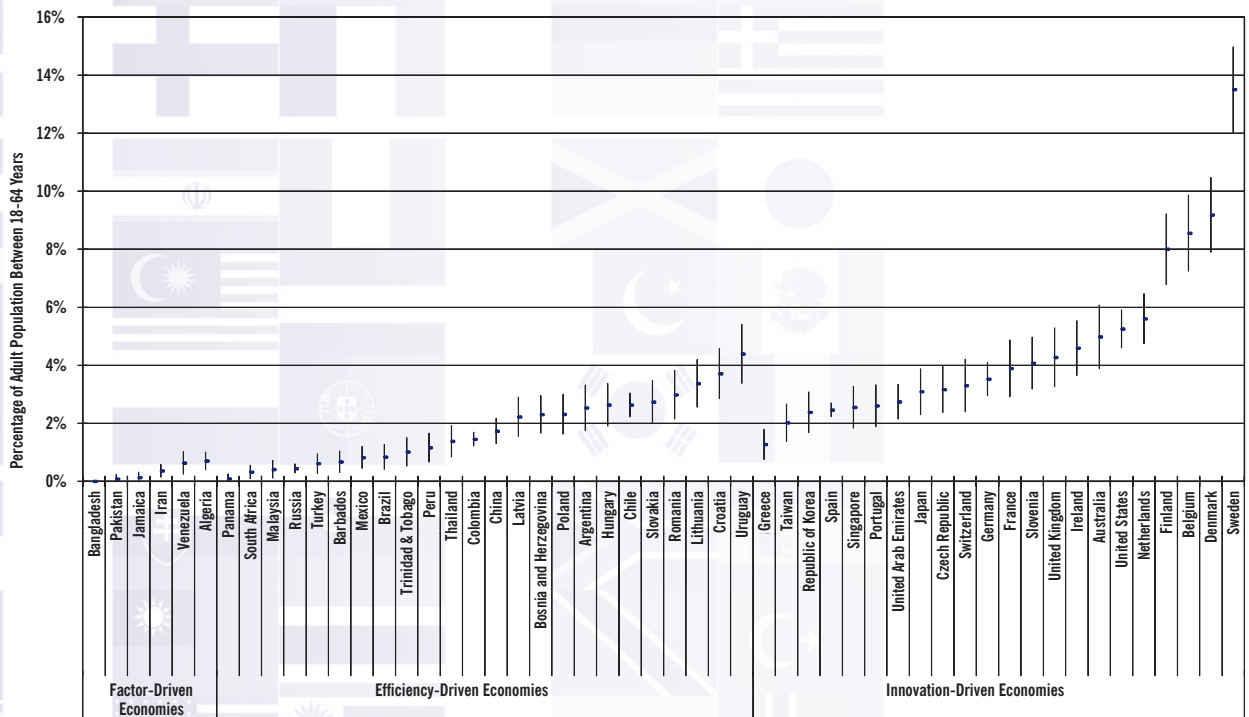
GEM defined this form of entrepreneurship broadly; it includes employees that develop or launch new goods or services or set up new business units that constitute a new establishment or subsidiary for their main employer. Despite this broad definition, EEA is not a very widespread phenomenon. On average, only about 3% of the adult population is currently involved in this activity, but its prevalence differs markedly across countries, from slightly more than zero to almost 14%.

As Figure 13 shows, EEA is most prevalent in the innovation-driven economies. This observation contrasts with the pattern for early-stage entrepreneurial activity (see Figure 4). The higher

rate in the innovation-driven economies is partly caused by the fact that a higher percentage of the adult population is employed in organizations; with more people working for organizations, an economy is likely to have more entrepreneurial employees on an absolute basis. However, when the rate of EEA is examined only in the employee population, there are still higher percentages of entrepreneurs among employees in the innovation-driven economies, than in the other two development levels.

It is interesting to note that the innovation-driven economies with the highest levels of EEA are among those with the lowest TEA rates: Denmark, Belgium and Sweden. This is further indication that entrepreneurship in organizations replaces, to some extent, independent entrepreneurship as an alternative means for pursuing entrepreneurial opportunities. At the same time, the three innovation-driven economies with the highest TEA rates—the United States, Australia and the Netherlands—also have high EEA, indicating that entrepreneurial activity may thrive in both forms.

Figure 13: Entrepreneurial Employee Activity (EEA) in 52 Economies, 2011



Source: GEM 2011 Adult Population Survey

The age distribution of entrepreneurial employees follows an inverted U-shape; the highest prevalence rates are in the 25 to 44 year-old age groups. This pattern is similar to that of early-stage entrepreneurs. EEA is also more prevalent among men than among women, and it is particularly prevalent among more highly educated employees.

Compared with other employees, people who are involved in EEA are significantly more likely to perceive entrepreneurial opportunities and believe that they have the ability to start a business. In fact, these perceptions are remarkably similar to those of early-stage entrepreneurs. Entrepreneurial employees are also far more likely than other

employees to be actively involved in setting up a new independent business that they will own and manage. Entrepreneurial employee activity and early-stage entrepreneurship thus appear capable of operating as complements at the individual level.

Finally, the analysis shows that employees who are involved in EEA have substantially higher job growth expectations for their new business activity than independent nascent and new entrepreneurs. In addition, about 70% of the entrepreneurial employees introduce goods or services that are new to at least some of the organization's customers. In this respect, EEA appears to be more innovative than early-stage entrepreneurial activity.



# Conclusions and Implications

In order to understand the nature of entrepreneurship in an economy, it is important to recognize its broader meaning, its multidimensional qualities and its interaction with the environment. This report emphasizes that entrepreneurship encompasses multiple phases and that individuals participating in this activity exhibit a variety of profiles.

## CONCLUSIONS AND IMPLICATIONS: ENTREPRENEURSHIP PHASES

In recognizing that entrepreneurship exists in multiple phases, policy makers, practitioners and academics may thus turn their attention to the unique needs of people at particular points in this process. Initiatives may address how to identify, develop or motivate potential entrepreneurs and generate society-wide attitudes to support these people. Programs may focus on the specific needs of people in the process of starting a business as opposed to those who are running new or established businesses. There may be key considerations regarding an entrepreneur's ability to close a business when it is no longer viable; programs may enable such people to use their experience and resources to venture out again or to assist other entrepreneurs.

One interesting finding related to the different phases is the high—then steeply dropping—TEA level that occurs as one moves from low to high economic development levels, even as established business ownership remains relatively stable. This finding suggests that, in the early development stage economies, many individuals start businesses but fewer sustain them. Conversely, developed economies display an equivalent number of established business owners with relatively few starting up.

An examination of the reasons for discontinuation may shed additional light on the above finding. People who discontinue businesses in the factor- and efficiency-driven economies most often cited negative reasons (lack of profitability and trouble obtaining finance). Alternatively, people in innovation-driven economies were more likely than those in the other two development levels to have positive explanations for leaving their businesses (retirement, sale or another opportunity).

While no one institutional model fits all economies, the findings regarding the relative rates of established business ownership and the reasons for discontinuation suggest that the institutional environment affects the sustainability of businesses. This is particularly apparent in light

of the much higher ratings the innovation-driven economies show on most of the entrepreneurship framework conditions, including the availability of entrepreneurial finance.

## CONCLUSIONS AND IMPLICATIONS: ENTREPRENEURIAL PROFILE

GEM's detailed account of the entrepreneurship profile illustrates the diversity of entrepreneurial activity within and across economies. For example, this report showed considerable variation in early-stage entrepreneurship participation rates for women compared to men. All three economic development levels and many geographic locales exhibited both high and low participation rates among women relative to men. The reasons for these wide swings are likely complex and context specific.

The quadrupling of participation in business services from the factor- to innovation-driven stage, in contrast to the greater prevalence of consumer-oriented businesses in the factor- and efficiency-driven economies, is an important profile characteristic with perhaps some key implications about the institutional environment for entrepreneurship. For example, R&D transfer is rated much more highly in the innovation-driven economies. This quality may be important for participation in sectors that rely on knowledge and innovation. In addition, this sector profile is consistent with the higher prevalence of innovation in the innovation-driven economies.

The impact characteristics highlight the value of looking beyond a simple count of entrepreneurs, placing an emphasis on the contribution they make in their societies. For instance, while there are fewer entrepreneurs in the innovation-driven economies, those that do exist are more likely to affect their societies through growth, innovation and internationalization.

With regard to internationalization, entrepreneurs and policy makers will need to consider their global competitiveness profile, particularly as they anticipate or confront international competitors in their home regions. Globalization is affecting most every economy, whether populous or not, emerging or developed. International trade can contribute to more efficient migration of entrepreneurs' knowledge and global competitiveness.

### CONCLUSIONS AND IMPLICATIONS: ENTREPRENEURIAL EMPLOYEE ACTIVITY

Our special topic reveals that employees can exercise their entrepreneurial ambitions within an organizational environment. This conclusion illustrates a key message for policy makers and corporate leaders: organizations can better serve their stakeholders' needs (owners, employees and the community) through the initiatives of their entrepreneurial employees. That capability can therefore generate an enormous hidden asset, but it requires an entrepreneurial corporate culture and other managerial considerations.

### CONCLUSIONS AND IMPLICATIONS: ENTREPRENEURSHIP FRAMEWORK CONDITIONS

It is not feasible for this global report to offer specific policy recommendations that can be applied broadly across multiple economies. However, each participating GEM team publishes a national report that covers specific economy-level considerations.<sup>9</sup> Nonetheless, this report offers some lessons that can provide policy makers, practitioners and academics with insights for each development level. It should be noted, though, that policy recommendations will differ within a developmental level because each economy is shaped by its own political, economic, social and other conditions.

For factor-driven economies, policy should center on improving macroeconomic stability, health and basic education, and public infrastructure. Without these fundamentals, policies focused specifically on enhancing a society's entrepreneurial capacity are less viable. Innovation-driven economies, on the other hand, already have well-functioning basic requirements. Even though they need to maintain these fundamental conditions, they can additionally look toward policies that facilitate entrepreneurship while appreciating local, deeply-rooted customs.

Regardless of development level, however, GEM has shown that stringent labor regulations and an onerous regulatory system negatively affect the number of

high-impact entrepreneurs.<sup>10</sup> This is an important point for all government policy makers to note because these entrepreneurs contribute greatly to job creation.

Although access to finance is considered a key impediment to entrepreneurial development, perhaps initiatives need to link this concern with the development of business skills. Factor-driven economies may focus on providing business skills, financial literacy and education. The efficiency-driven economies can turn their attention toward specialized and targeted entrepreneurial education as well as toward increasing access to finance for people with the necessary business skills. In innovation-driven (and to some extent efficiency-driven) economies, entrepreneurship can benefit from access to equity capital as well as transparent banking procedures.

Policy recommendations that improve the flexibility of labor, communications and market openness while eliminating bureaucracy and red-tape will contribute to a more entrepreneurially-focused business environment. Cultures that reward hard work and creativity, rather than political connections, will also encourage entrepreneurial development, although doing so is perhaps a difficult lever to pull in the short term. Governments ensuring that political interests do not supersede economic concerns are also more likely to create conditions in which entrepreneurs can grow and prosper.

By achieving and sustaining economic development, societies can help solve some of the biggest problems of mankind, such as poverty and development imbalances around the world. GEM maintains that economic development requires entrepreneurial activity and a supportive environment. In this sense, institutions and society contribute toward this activity and entrepreneurship should therefore be understood in the wider sense of having the capacity to act at both individual and broader levels. To create such energy for making positive changes, societies must consider that entrepreneurship is not a heroic act of a few individuals, but the accomplishments of many people who pursue their ambitions in a supportive cultural and institutional environment.

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Slavica Singer is a professor of strategy and entrepreneurship and the head of entrepreneurial studies at the J.J. Strossmayer University in Osijek, Croatia. She holds a PhD in Economics from the University of Zagreb, Croatia. She is a board member of the Global Entrepreneurship Research Association, and has led the GEM Croatia research team since 2002. Prof. Singer was awarded the UNESCO Chair in Entrepreneurship in 2008 for her contributions to the development of university-based entrepreneurship education with a crossdisciplinary approach, and the promotion of entrepreneurship education internationally. She also received an honorary doctorate from the Turku School of Economics, the University of Turku in Finland in 2010. Prof. Singer is a member of Croatian Competitiveness Council and Club of Rome, and Country (Croatia) Vice President of the European Council of Small Business.

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## GERA AND GEM

The Global Entrepreneurship Research Association (GERA) is, for constitutional and regulatory purposes, the umbrella organization that hosts the GEM project. GERA is an association formed of Babson College, London Business School and representatives of the Association of GEM national teams.

The GEM program is a major initiative aimed at describing and analyzing entrepreneurial processes within a wide range of countries. The program has three main objectives:

- To measure differences in the level of entrepreneurial activity between countries
- To uncover factors leading to appropriate levels of entrepreneurship
- To suggest policies that may enhance the national level of entrepreneurial activity.

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To download copies of the GEM Global Report(s), GEM National Team Reports and to access select data sets, please visit the GEM Website at [www.gemconsortium.org](http://www.gemconsortium.org).

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## Endnotes

<sup>1</sup> GEM is a consortium of national teams from each participating economy. These teams oversee an annual survey of at least 2,000 adults in their economies.

<sup>2</sup> Schwab, Klaus, ed., *The Global Competitiveness Report 2011–2012* (Geneva: World Economic Forum, 2011).

<sup>3</sup> According to the WEF classification, the factor-driven phase is dominated by subsistence agriculture and extraction businesses, and it relies heavily on labor and natural resources. The efficiency-driven phase is accompanied by industrialization and an increased reliance on economies of scale; capital-intensive large organizations are more dominant. In the innovation-driven phase, businesses are increasingly knowledge intensive and have an expanding service sector.

<sup>4</sup> See 2011 GEM Global Extended Report at [www.gemconsortium.org](http://www.gemconsortium.org).

<sup>5</sup> For more detail on reasons for discontinuation, see 2011 GEM Global Extended Report at [www.gemconsortium.org](http://www.gemconsortium.org).

<sup>6</sup> For example: Baum, R., Locke, E., and Smith, K. (2001) “Multidimensional Model of Venture Growth,” *The Academy of Management Journal*, 44(2): 292–303; Wiklund, J. and Shepherd, D. (2003) “Aspiring for and Achieving Growth: The Moderating Role of Resources and Opportunities,” *Journal of Management Studies*. 40(8):1919–1941.

<sup>7</sup> Given the typically low prevalence of entrepreneurs with growth expectations, this analysis was conducted with aggregate data from a three-year period (2009–2011); it included 53 economies with sufficient data to conduct this analysis.

<sup>8</sup> For a detailed account of this special topic, see the 2011 GEM Global Extended Report at [www.gemconsortium.org](http://www.gemconsortium.org).

<sup>9</sup> National reports for participating GEM economies are available at [www.gemconsortium.org](http://www.gemconsortium.org).

<sup>10</sup> See, for example, Bosma, N.S. and J. Levie (2010) *Global Entrepreneurship Monitor 2009, Executive Report*, Babson Park, MA, USA: Babson College, Santiago, Chile: Universidad del Desarrollo, Reykjavik, Iceland: Háskólinn Reykjavik University, London, UK: Global Entrepreneurship Research Association.

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