Global Entrepreneurship Monitor 2013

India Report

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Institute of Management Technology Ghaziabad

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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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EXECUTIVE SUMMARY

The Global Entrepreneurship Monitor (GEM) is a research program with the aim to obtain internationally comparative data on entrepreneurial activity. GEM generates relevant primary information on entrepreneurship, providing harmonized measures about the attitudes, activities, and characteristics of individuals who participate in various phases of entrepreneurship. GEM also analyzes aspirations that these entrepreneurs hold for their businesses, along with other key features of their ventures. In 2013, more than 197,000 individuals have been surveyed and approximately 3,800 national experts on entrepreneurship have been interviewed in the study that covers 70 economies. This collectively represents regions of the world that cover a broad range of economic development criteria and indicators. 3,000 individuals have been sampled across India in 2013, weighted according to age groups, gender, and urban−rural classifications to represent the national population. This summary gives an overview of the main GEM indicators for India in 2013 and makes a comparison with internationally comparable countries. This synopsis provides a gist to the parts of this national report where more information can be found.

Key Findings 2013

Entrepreneurial Attitude

- Entrepreneurship in India is a less desirable career choice when compared to BRIC and factor-driven economies.
- Recognition of entrepreneurship in terms of high status and media attention is not far below the figures of BRIC countries.
- While comparing across regions, Western India comes across more favorable toward entrepreneurship. While South and North India fare closer to average, Eastern India shows a conservative attitude toward entrepreneurship.
- Individuals in factor-driven economies tend to report more positive attitudes on entrepreneurial measures such as perceived opportunities to start a business and perceived skills to start a business, in comparison to those in efficiency-driven and innovation-driven economies. However, Indian data is closer to the efficiency-driven mark.
- There is a substantial gap between perceived capabilities (56%) and perceived opportunities (41%). It may mean either capable people are not able to identify prospective business opportunities or opportunities have been drying up due to prolonged slow growth in the last 8 to 10 quarters.
- Comparing the perceptions among male and female respondents, fear of failure, which prevents individuals from starting a business, is similar (39% for males and 37% for females). While female respondents have lower scores on perceived capabilities (43%) and perceived opportunities (32%), the gap between perceived capabilities and perceived opportunities is 11% for females compared to 11% for males.

Entrepreneurial Activity

- Total Early-stage Entrepreneurial Activity (TEA) includes individuals in the process of starting a business and those running new businesses less than three and a half years old. As a percentage of the adult population, these rates tend to be highest for the factor-driven economies, and decline with increasing levels of GDP per capita. This trend follows from the reasoning that higher levels of GDP yield better job opportunities. At the very highest GDP levels, however, some economies deviate from this trend as a result of innovation break through resulting with higher TEA levels.
- Total Early-stage Entrepreneurial Activity (TEA) is 9.9% for India.
- Indian TEA rate is lower than the average of efficiency-driven nations. In fact, India has the lowest TEA rate after Algeria, among all factor-driven economies (21%).
- The rate of business discontinuance is anticipated to be the highest in the factor-driven economies. However, India's entrepreneurial exit rate is the second lowest among all GEM countries, which is indeed a positive factor.

- Lack of profitability (33%) and limitations in accessing finance (27%) are the main reasons for entrepreneurial exits. The data indicates the need for greater entrepreneurial skills enhancement, financial management training, and easing of funding options for new ventures.
- While India has TEA rates lower than that of efficiency-driven economies as well, the Indian early-stage entrepreneurs also have the highest proportion of necessity-driven motives.
- India ranks among the bottom three countries in terms of ratio of opportunity entrepreneurship to necessity entrepreneurship (twice below the average ratio of 3). Opportunity-driven entrepreneurship should be stimulated through policy interventions.
- TEA for males (13.2%) far exceeds that of females (6.4%) and places India among the bottom three on gender gap just ahead of Iran and Libya. North India and East India have very high gender gaps, while South India is more equitable in terms of female participation in TEA.
- The distribution of age groups within the TEA is in line with global trends, where the highest prevalence rate is found in the 25–34 cohorts. The high TEA rates among the young age groups of 18–34, indicates a positive sign for a country like India, which is undergoing a demographic transition, with an increase in the share of the working age youth population.
- There is no strong evidence of a positive correlation between level of educational attainment and entrepreneurship in India. Respondents with the lowest level of education demonstrate the greatest activity among the early-stage and established entrepreneurs (14% and 12%, respectively)
- Regional disparities are exhibited within the Indian sub-continent—the state of Assam has the highest TEA rates followed by Tamil Nadu and Gujarat
- States like Assam, Delhi, and Odisha have the highest ratio of early-stage entrepreneurs relative to their population sizes, whereas Uttar Pradesh and Maharashtra exhibit the lowest concentration.

Entrepreneurial Aspirations

- Growth expectations and aspirations of early-stage entrepreneurs represent a key dimension of entrepreneurial impact and may be linked to key indicators of economic performance such as job growth.
- Compared to its development level peers, India exhibits below-average job growth expectations, innovativeness, and internationalization.
- Indian early-stage entrepreneurs are more pessimistic about expected job growth compared to entrepreneurs in similar economies worldwide.
- More than 55% early-stage entrepreneurs do not expect to hire any employees in the next five years. A

mere 0.1% early-stage entrepreneurs expect to create jobs for more than 20 people. In contrast, the EU and North American economies, despite their relative low TEA rates, have more than 10% of the entrepreneurs projecting growth of 20 or more employees.

- India ranks much below the Sub-Saharan countries in terms of innovative orientation. Where the Sub-Saharan economies exhibit a level of 40% for new products and markets, Indian level of innovation varies in the range of 10–20%.
- As expected, the Indian economy with a large population base and large internal market shows a very low rate of internationalization.

Entrepreneurial Framework Conditions

- Interviews with national experts revealed insights on factors impacting the environment for entrepreneurship. GEM calls these factors Entrepreneurial Framework Conditions (EFCs).
- Examples of EFCs include financial support, general government support, specific regulations, market openness, R&D transfer, entrepreneurship education, and cultural norms and values related to entrepreneurship.
- Government policy and programs, education and training, and R&D transfer are regarded as the main constraining factors for entrepreneurship.
- Recommendations were directed toward liberalization of government policies, capacity building through education and training, restructuring of incentives, and tax structures to promote opportunity-driven entrepreneurship, and increased investment in R&D transfer to propel growth through innovation.

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The 2013 GEM India Report is a collaborative effort between three partner institutions, Institute of Management Technology (IMT), Ghaziabad; Indian School of Business (ISB), Hyderabad; and Entrepreneurship Development Institute India (EDI), Ahmedabad. The authors wish to express their gratitude to every team member, without the kind support and contribution of whom this project would not have been possible.

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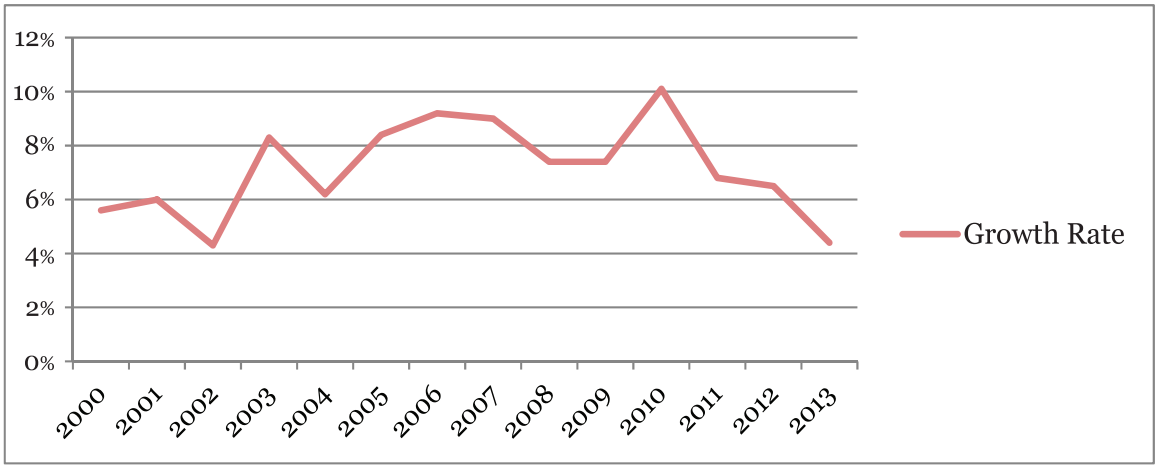
1. INTRODUCTION

1.1. The Indian Economy

India has undergone a paradigm shift owing to its competitive stand in the world. The Indian economy has been on a robust growth trajectory and boasts of a stable annual growth rate, rising foreign exchange reserves and booming capital markets among others. However, the first decade of the twenty-first century has been a mixed bag for the Indian economy. Since the year 2000, the Indian economy has grown almost four times in terms of GDP. It has risen from $500 billion in 2000 to $1,841 billion in 2012. The GDP growth rate has been impressive as the average growth rate has been 7.1% during the period 2000–2013. There have been only two instances where annual growth rate has fallen below 5% (2002 and 2013). On the contrary, there are three instances of annual growth rate topping up more than 9% (2006, 2007, and 2010).

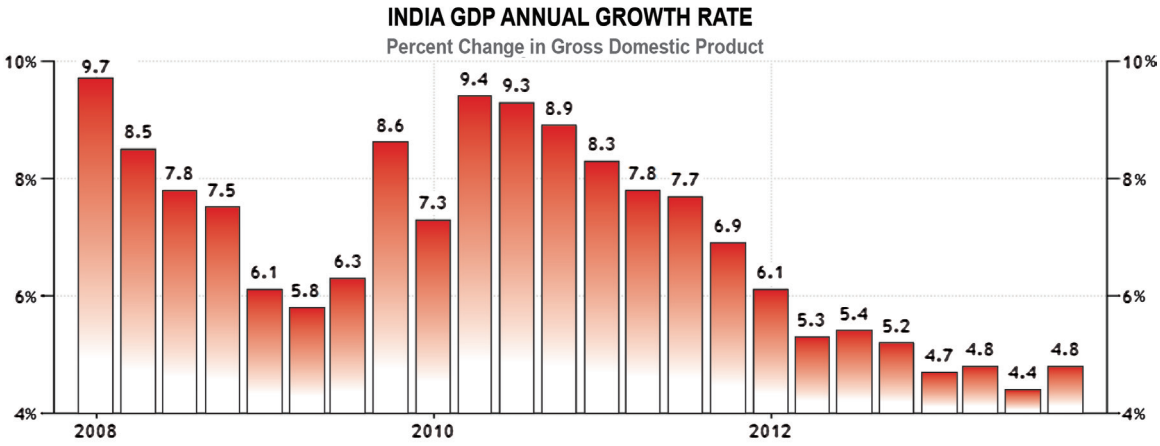
Figure 1: Annual GDP Growth Rate—India[1]



However, the growth figures mask the fundamental issues faced by the Indian economy, as shown in Figure 1. Even though the Indian economy has been arguably hailed as the most exciting economy to watch out for among the BRIC countries, it has failed to live up to its top billing. After touching a historic peak and ideal growth rate of close to 10% in 2010, the economy has been in a downward spiral. The economy has performed way below its potential as is evident by Figure 2.

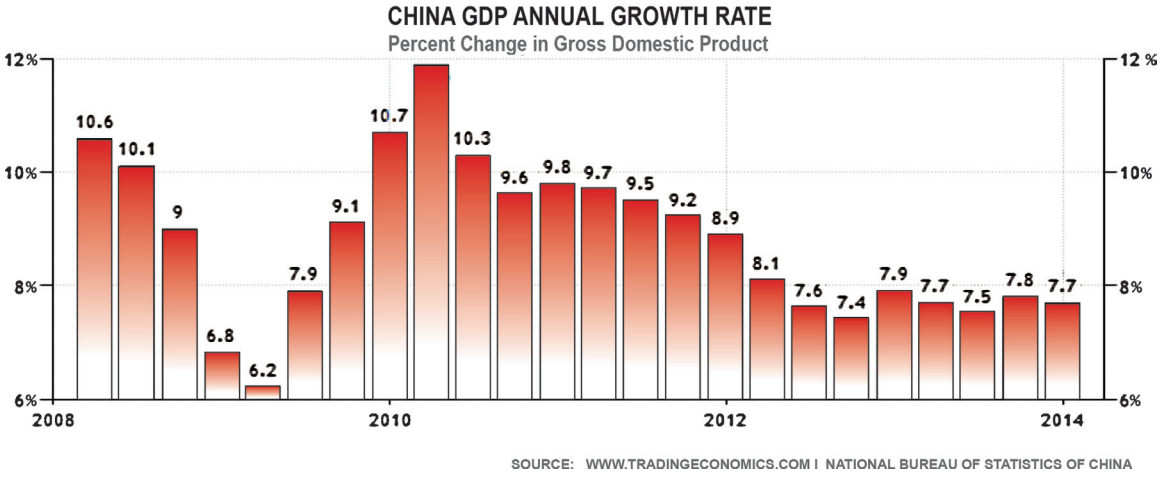
[1] https://www.google.co.in/publicdata/directory

Figure 2: Quarterly GDP Growth Rate (2008–2013)[2]



The growth of other emerging economies has also been stunted by global economic slowdown, but the fall has been very steep for India. The Chinese economy also experienced slowdown, but the drop has relatively been smaller compared to India as can be seen in Figure 3.

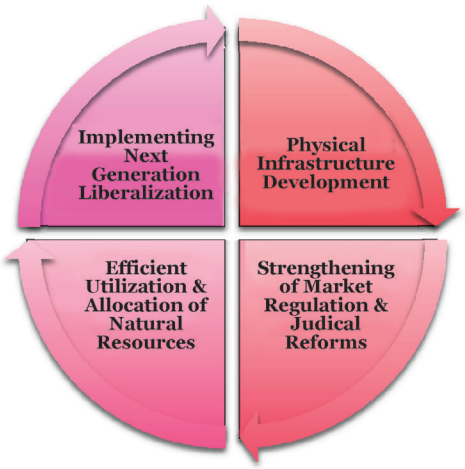
Figure 3: Quarterly GDP Growth Rate for China (2008–2013)



The last three years have brought structural problems of India to the fore. Burgeoning middle class, rising real estate prices, and opening up of key economic sectors helped

[2] http://www.tradingeconomics.com/india/gdp-growth-annual

achieving stupendous growth rate during 2003–2010. However, Indian policymakers also missed the opportunity to bring about structural reforms in the following areas:



All the above factors have had wide ranging implications on "Ease of Doing Business in India". It is not surprising that India ranks at 134 out of 189 countries in "Doing Business Annual Ranking" carried out by The World Bank[3]. Such a low ranking can spell doom for an economy, which hopes to rise fast on the basis of "service sector" growth. Beyond a certain level, difficulty in starting and doing business can seriously hurt entrepreneurship growth. This can also nullify the demographic dividend enjoyed by India due to the average younger age of its population.

Summarizing from the above, it may be said that the time is running out for India to initiate the painful structural reforms. However, if these reforms are accomplished, they have the potential to provide unequivocal supremacy to Indian economy for the next two to three decades.

1.2. Importance of Entrepreneurship in Emerging Economies

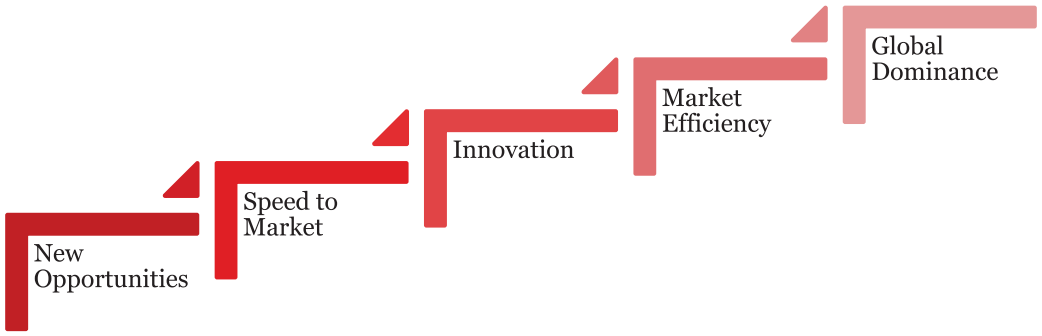
Emerging economies follow high-growth trajectory primarily due to entrepreneurial activity. As the economy opens up, new areas of economic activity spring up. In such an environment, speed to market, innovation, and attaining market efficiency becomes extremely important. Well-established big businesses are normally not associated with the above features.

Entrepreneurial ventures take the lead in grabbing new opportunities. These ventures are agile to fill the gap for products/services. Innovation in product/service offering and business model is also done by entrepreneurs more often. Once sufficient activity builds

[3] http://www.doingbusiness.org/data/exploreeconomies/india/

up in a new business sector, competitors pour in. Normally these competitors are in the form of either entrepreneurial ventures or new ventures within an established organization. These competitors help in attaining market efficiency by providing better offerings at competitive prices (See Fig. 4).

Figure 4: Role of Entrepreneurship in Market Development in Emerging Economies



The above process not only determines the growth of the emerging economies but also predicts the sector-dominance of a specific economy in global markets. The Indian IT industry and Chinese telecommunication equipment manufacturers are such examples.

Further, a large part of the working population in emerging economies is engaged in unorganized sector. Entrepreneurship leads the way to organize this workforce and provide them better working environment and skills development. Modern retail revolution in emerging Asian economies is a good example.

1.3. Impact of Entrepreneurship

Impact of entrepreneurship cannot be gauged only through economic success stories of countries. Entrepreneurship, in many ways, is a pointer to everything that is good or bad, given the policies governing the countries. Entrepreneurship has its impact and influence in the following key areas:

Wealth Creation and Poverty Alleviation

One direct impact of entrepreneurship is creation of wealth and reduction in poverty levels. Though poverty alleviation has been mainly attributed to welfare measures of the state but entrepreneurship holds tremendous potential to address poverty in specific regions. There are empirical studies which show that the wealth and poverty of developing countries is linked to the entrepreneurial nature of their economies. Where it has existed in plenty, entrepreneurship has played an important role in economic growth, innovation, and competitiveness, and over time it may also play an equally important role in poverty alleviation (Landes, 1998).

Distribution of Wealth

Entrepreneurship gives rise to disruptive business models, which prevent excessive concentration of wealth. New ventures—powered mainly by human capital with technical capabilities—attract capital and distribute wealth among the promoters and employees. Innovation and execution skills rather than hereditary lineage become more important in attracting capital. Societies like those in India which placed very high importance on familial connections, have seen a spurt of first-generation entrepreneurs making it big without much resource at their disposal. Indian e-commerce industry is a good example where most of the ventures are started by educated first generation entrepreneurs.

Job Creation and Capacity Building

Entrepreneurship is the key to job creation in developing economies. More importantly, job creation happens in new business sectors, which has multiplier effect on ancillary businesses. Job creation is accompanied by capacity building by organizations. This capacity building through formal education network will otherwise be very expensive and unfeasible for resource-deficit economies. For example, lacs of Internet kiosks across India are equipping people with basic computer skills in an informal manner and at negligible cost. These Internet kiosks are in turn being spawned by fledgling e-commerce firms.

Improving Standard of Living

Entrepreneurs are always in search of opportunities and keep trying to make their solutions workable. For countries like India where market size is big but the capacity to pay is restricted, such solutions have to be affordable. Entrepreneurs play an important role in price discovery. Their business model is constructed around affordability rather than cost of production. Sarvajal is one such venture providing clean drinking water through water–dispensing machines in the Indian hinterland. The cost of water is 15−20 times cheaper than commonly available drinking water. Such initiatives not only help entrepreneurs to tap into a big market segment, but also provide better living standards to the under-served segment of the population.

Balanced Regional Development

Emerging economies are often characterized by imbalanced regional development on account of paucity of resources. In such a scenario, growth in entrepreneurial activity helps in building physical and social infrastructure. Constant search for low-cost locations augments the development of peripheral areas and smaller towns. In the last 10–15 years, a substantial part of a rapid urbanization and growth of tier 2 and 3 cities in India may be attributed to the rise in entrepreneurial activity.

Addressing Gender Inequality

In conservative societies like India, empowering women through education and skill enhancement is a long process. There are successful instances where entrepreneurship has made substantial difference to the lives of uneducated and unskilled women. Self Employed Women's Association (SEWA)—a celebrated social organization—has empowered thousands of women by providing them capital and making them self-employed. SEWA is hailed as a great example in promoting women leadership through entrepreneurship.

1.4. The GEM Project and India

The Global Entrepreneurship Monitor (GEM) project is an annual assessment of the entrepreneurial activity, aspirations, and attitudes of individuals across a wide range of countries. Initiated in 1999 as a partnership between London Business School and Babson College, the first study covered 10 countries; now, GEM has measured entrepreneurship in 104 economies, and has gained widespread recognition as the most authoritative longitudinal study of entrepreneurship in the world. In 2013, more than 197,000 individuals were surveyed and approximately 3,800 country experts on entrepreneurship participated in the study across 70 economies, collectively representing all regions of the world and a broad range of economic development levels. The samples in the GEM study covered an estimated 75% of the world's population and 90% of the world's total GDP.

GEM is the largest ongoing study of entrepreneurial dynamics in the world. GEM focuses on these main objectives:

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

GEM is particularly relevant for India as substantial growth potential of the Indian economy can be tapped by policies for growth of entrepreneurship and entrepreneurial activity. The GEM project provides in-depth analysis—valuable for understanding entrepreneurship in India, addressing issues affecting entrepreneurial activity and policy formulation.

1.5. The GEM Conceptual Model

1.5.1. Stages of Economic Development

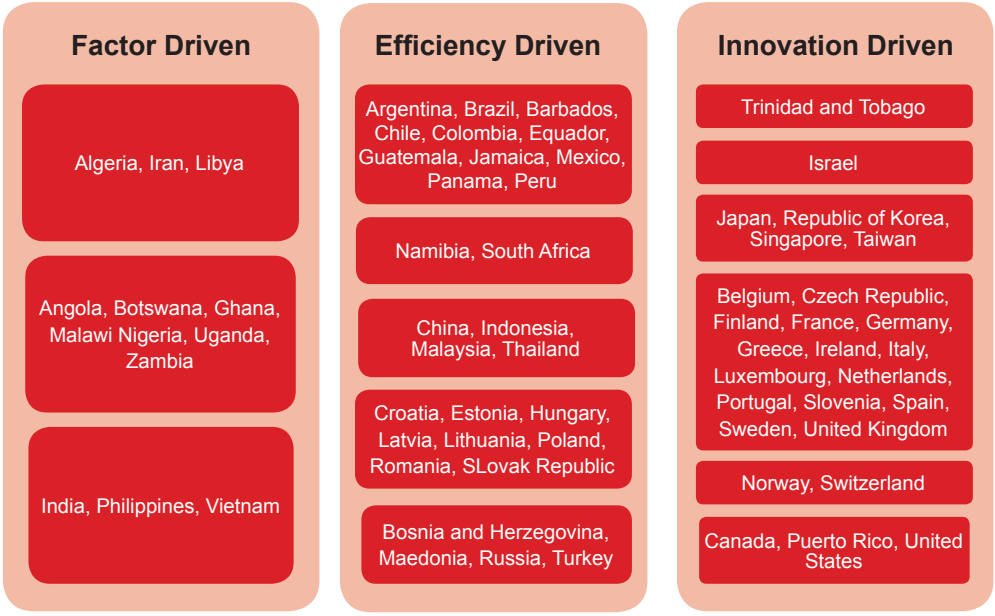
The role of entrepreneurship in the economy and the specific nature of entrepreneurial activity depend on the level of economic development of an economy. Following the

World Economic Forum's (WEF) classification, GEM groups countries into three stages of economic development as follows:

- Factor-driven economies: Economic growth determined by primary factors of production: land and labor (mostly unskilled). Economic activity in these economies is primarily based on the extraction of natural resources; the focus is on building a subsistence and basic level of foundation.
- Efficiency-driven economies: Economic growth is propelled by capital inflow, foreign direct investment, and access to global technologies. This stage of economic development is characterized by industrialization and concentration of basic and capital intensive sectors.
- Innovation-driven economies: Knowledge intensive and service sectors are the growth propellers.

In 2013, there were 13 factor-driven economies, 33 efficiency-driven economies and 27 innovation-driven economies. Figure 5 enlists the GEM economies by level of economic development.

Figure 5: GEM Economies by Economic Development Level



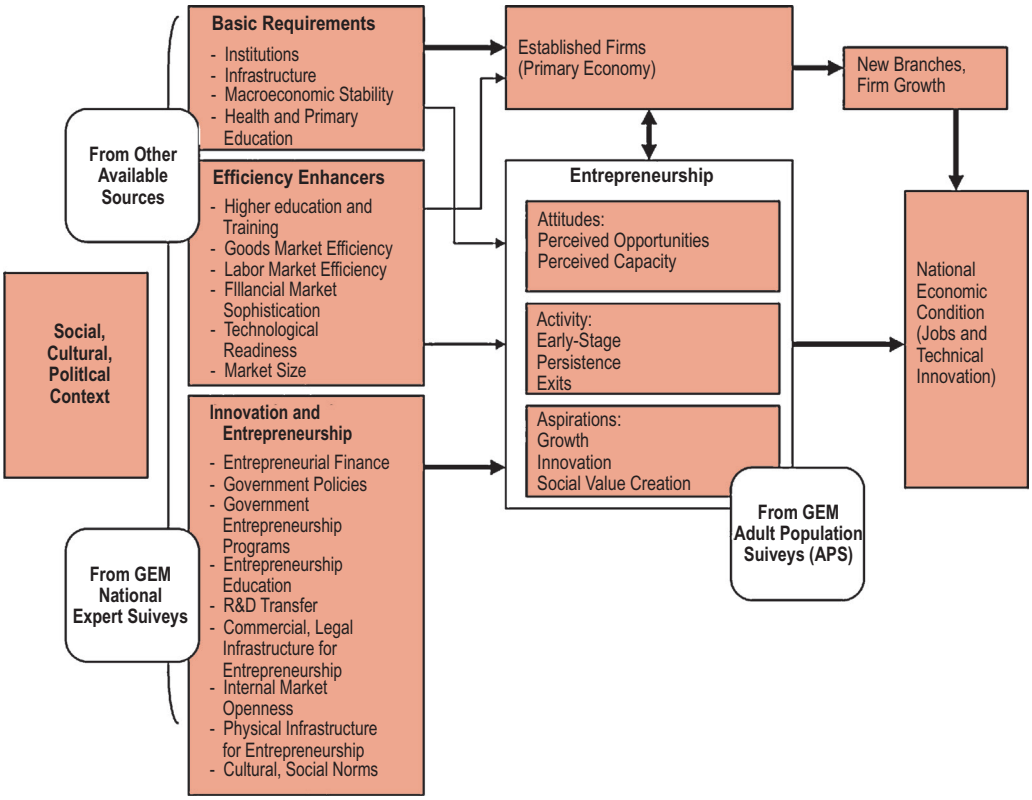
1.5.2. The Model

GEM has 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 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. This ambiguity was deliberate; it reflected the view that all three elements may affect each other rather than being components of a linear process and it was expected that further theoretical and empirical work would open up this black box. Aspiration or ambition is relevant because researchers increasingly realize that all entrepreneurial activities do not equally contribute to development. This revised GEM framework 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 6. 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.

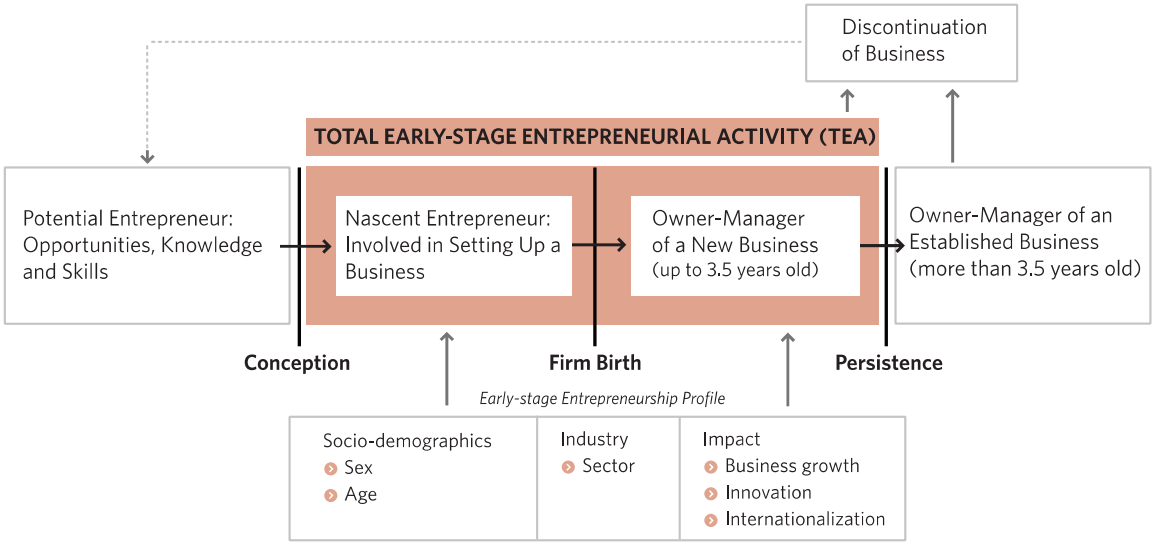
Figure 6: The GEM Conceptual Framework



The Entrepreneurship Process

GEM acknowledges that entrepreneurial activity is best seen as a process rather than a static event. Therefore, data are collected across several phases of entrepreneurship. Figure 7 presents an overview of the entrepreneurial process and the GEM operational definitions. The GEM survey collects data on people in the process of setting up new businesses as well as those who own and manage running businesses. It, therefore, captures information on entrepreneurial attitudes, activity, and aspirations in different phases of entrepreneurship, from general intentions through early-stage entrepreneurial activity to status as established firms. The primary measure of entrepreneurship used by GEM is the Total Early-stage Entrepreneurial Activity (TEA) index, indicated by the shaded area in Figure 7. TEA indicates the prevalence of business start-ups (or nascent entrepreneurs) and new firms in the adult (18 to 64 years of age) population—in other words, it captures the level of dynamic entrepreneurial activity in a country.

Figure 7: The Entrepreneurship Process



1.6. The GEM Methodology

The GEM data are gathered annually using a research design that is harmonized over all participating countries, and are derived from two main sources: Adult Population Survey (APS) and National Experts Survey (NES).

1.6.1. Adult Population Survey (APS)

Each participating economy conducts a 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. The APS is generally conducted by an independent survey vendor, chosen by each economy's GEM team. The vendor submits a proposal for the GEM data collection, which is reviewed by the GEM coordination team on various criteria. The raw data is sent directly to the GEM data team for review, quality check, and uniform statistical calculations before being made available to the participating economies. Data collected as part of the Adult Population Survey (APS) are used to provide indicators of entrepreneurial activity, entrepreneurial attitudes, and entrepreneurial aspirations within an economy. These indicators can then be compared between economies. The APS data collection covers the complete life cycle of the entrepreneurship process as depicted in Figure 7.

1.6.2. National Experts Survey (NES)

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

1. Financing
2. Governmental policies
3. Governmental programs
4. Education and training
5. Research and development transfer
6. Commercial infrastructure
7. Internal market openness
8. Physical infrastructure
9. Cultural and social norms

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

2. ENTREPRENEURIAL ATTITUDES AND PERCEPTIONS

2.1. Attitude toward Entrepreneurship in India

Entrepreneurship is not merely an intrinsic pursuit of the entrepreneurs in isolation of the society to which they belong to. To some extent the success or failure of the entrepreneurs is influenced by the entrepreneurial ecosystem around them. Socio-cultural value system of the society forms a large part of this ecosystem. For these reasons, the positive or negative attitude that the society has toward entrepreneurship can strongly influence the intentions of people to become entrepreneurs and, hence, the overall level of entrepreneurial activity in a particular region. In fact, some of the differences in entrepreneurial activity rates between countries may be explained by differences in attitudes of the population toward entrepreneurship. Hence, it becomes important to understand how the society recognizes entrepreneurship and perceives the occupational status of entrepreneurs. Measuring societal entrepreneurial attitude becomes even more important for a country like India which has traditionally been a cultural nation driven by socio-norms. A favorable attitude toward entrepreneurship, can not only foster a conducive socio-psychological environment for developing entrepreneurship in a country, but also has a positive externality effect on other stakeholders in the ecosystem, like availability of financial resources for start-ups, development of physical and commercial infrastructure, and supportive government policies.

The GEM survey captures the attitude measure of society through the following indicators:

- Whether starting a business is considered a good career choice.
- Individuals' opinions about the level of respect and status that entrepreneurs have.
- Perceived positive media attention given to successful entrepreneurs.

Table 1 shows overall analyses of society-wide attitudes about entrepreneurship in India. It reveals how the entrepreneurial attitudes of Indian adults compare with entrepreneurial attitudes of adults in factor-driven economies and BRIC countries.

Table 1: Entrepreneurial Attitude 2013, Percentage of Adult Population (18–64 years)

	India	BRIC	Factor Driven
Entrepreneurship as a Desirable Career Choice	61	70	77
Entrepreneurship is Given High Status	70	74	80
Media Attention for Entrepreneurship	61	66	70

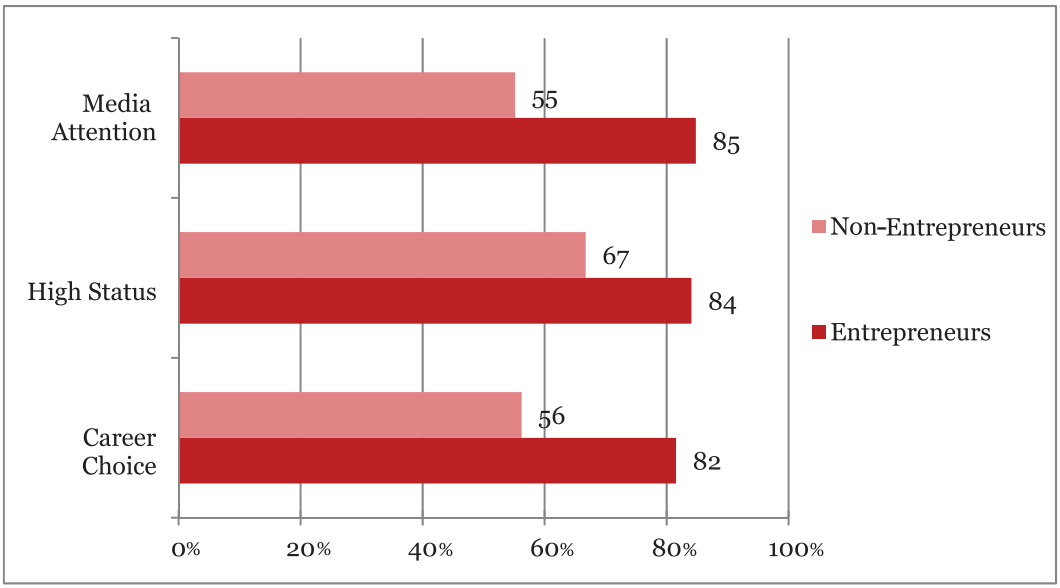
Although Indian adults are more or less positive about the general opinion whether entrepreneurship is an attractive career option and the level of respect and status that

entrepreneurs receive in the country, they are below the averages of their peers in the factor-driven phase as well as the BRIC nations. In 2012, 61% of the Indian adults (18–64 years old) look at entrepreneurship as a desirable career choice and believe that stories about successful entrepreneurs occur frequently in the public media. Around 70% adults think that entrepreneurs have a high level of status and respect.

2.1.1. The Non-Entrepreneurs' Attitude

Table 1 also includes the response of the entrepreneurial as well as the non-entrepreneurial section of the population. It is important to distinguish between the perceptions of the entrepreneurs and non-entrepreneurs, to eliminate bias. The non-entrepreneurial group accounts for almost 80% of the adult population. The distributions of both groups' answers are similar (Fig. 8). While it is evident that the entrepreneurs have a more positive outlook (80% entrepreneurs have positive evaluations), more than 50% of the non-entrepreneurs have positive attitude toward entrepreneurship in society. This confirms that the socio-cultural environment in India indicates a favorable acceptance of entrepreneurship, thus providing a motivating base for undertaking start-up activity by potential entrepreneurs.

Figure 8: Attitude toward Entrepreneurship in India, 2013, Percentage of Entrepreneurs and Non-entrepreneurs

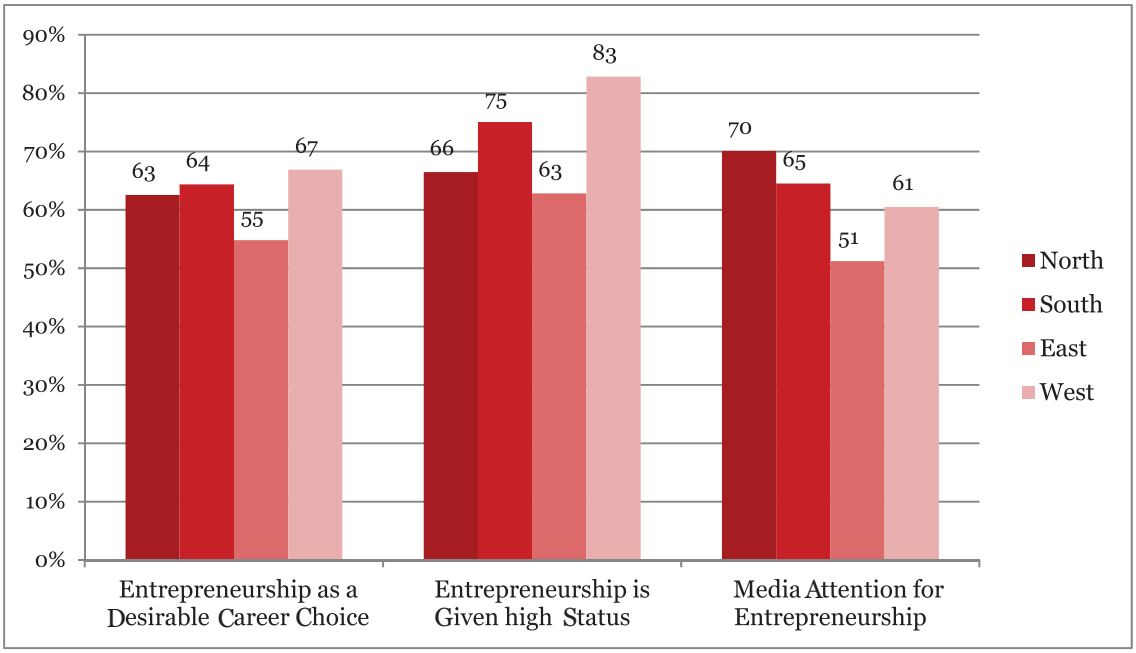


Read as: 82% of entrepreneurs consider entrepreneurship as a desirable career choice, while 56% of non-entrepreneurs consider entrepreneurship as a desirable career choice

2.1.2. Comparing Attitudes across Regions

Culture, regional variations, and ethnic or communal diversities have a significant impact on entrepreneurship. India is a land of diversity affecting all spheres of life: economic, social, and political. Different regions across the landscape also give rise to different ethnic communities and societies. It is, thus, important to see how these societal attitudes vary across different regions in India. The prevalence of attitudes toward entrepreneurship across the four regions—North, South, East, West—is illustrated in Figure 9. We can see that western India has a more positive attitude toward entrepreneurship in general compared to other regions. Almost 83% of adult population in the west agrees with the statement that entrepreneurs are given a high social status. The general attitude in the northern and southern regions is quite similar. However, entrepreneurial attitudes differ significantly in the east. Eastern India exhibits a relatively conservative attitude toward entrepreneurship in society. Almost 55% of the adult population in eastern India considers entrepreneurship as a desirable career option compared to 67% in west, and 64% in north and south. Perceived media attention given to entrepreneurs is the lowest in Eastern India (51%) *vis-à-vis* 70% perception in the northern part. Although these numbers are high in absolute terms, they reveal a significant relative regional disparity in the country, which may suggest reasons for regional disparities in the level of entrepreneurial activity.

Figure 9: Regional Comparison of Attitudes toward Entrepreneurship, 2013; Percentage of Adult population (18–64 years)



2.2. Individual Perceptions

The state of the environment in terms of its favorability toward pursuing entrepreneurial endeavors is important. Attitudes about individual capabilities and fear of failure, on the contrary, can be influenced by environmental factors, but primarily represent self-perceptions. An individual's subjective perception about this environment as well as his/her own self, however, may be even more relevant. After all, entrepreneurship is about people. The entrepreneur is the persona causer. The emphasis on individual perception is not new in the entrepreneurship literature. Many scholars like Arenius, Minniti, Koellinger, Barney, Cooper and Webber have found empirical evidences of individuals' perceptions to be the primary determinants of their entrepreneurial undertakings. Douglas and Shepherd (2005) have defined entrepreneurial capital to include two dimensions: individual's entrepreneurial abilities and attitudes. Entrepreneurial attitudes are those toward independence, risk, flexibility, etc. Entrepreneurial abilities include opportunity recognition, sound judgment, and innovative thinking. Such entrepreneurial capital is measured by individual's belief and perception of self. Subjective perceptions are important, since they often shape economic choices. Within GEM's Adult Population Survey (APS), the measures used to gauge individual perceptions include:

- Perceived Opportunities
- Perceived Capabilities
- Fear of Failure

These perceptions help in gauging an individual's potential and entrepreneurial intentions. Positive attitudes indicate their propensity to engage in entrepreneurial activities.

Opportunity Perception

It has been established in prior research that perceiving opportunity is an important characteristic of entrepreneurial behavior (Shane and Venkataraman, 2000 and Arenius and Declercq, 2004). Klyver et al. (2007) find evidence of this variable to be a strong predictor of entrepreneurship decision. It is essential for an individual to perceive some kind of opportunity, which leads him to start thinking of setting up a business. Within APS, it is measured by the percentage of persons who claim that there are good conditions for starting up a business in their neighborhood within the next six months.

Confidence in Skills

Koellinger et al. (2005); Elam and Terjesen (2007); and Klyver et al. (2007) find evidence that belief in one's start-up skills is the most important predictor of being a nascent entrepreneur. Koellinger (2008) propose that individuals with a higher level of self-confidence are more likely to exploit innovative rather than imitative business opportunities.

Fear of Failure

An important indicator of entrepreneurial intent is the individual's attitude toward risk. In spite of having identified an opportunity and despite positively perceived capabilities, fear of failure may deter the actual undertaking. Within APS, the respondents were asked whether fear of failure would prevent them from starting a business.

Table 2 shows the above mentioned three dimensions of individual perceptions within adult population in India. Almost 41% of Indian adults perceive good start-up opportunities in the next six months in the areas where they live. A higher proportion of people (56%) believe that they possess the requisite skills and capabilities to start a business. Not all capable people are able to identify potential opportunities. Although a high proportion of the population perceives good opportunities, this effect is balanced by a high proportion of Indian adults hesitating to start a business due to fear of failing (38%).

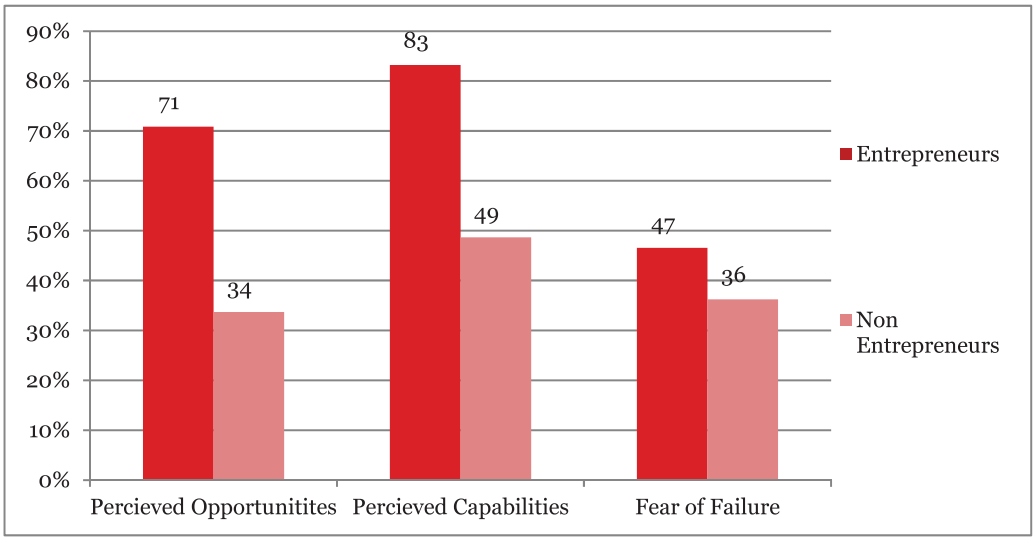
Table 2: Entrepreneurial Perceptions, 2013; Percentage of Adult Population (18–64 years)

	Total Adult Population
Perceived Opportunities	41
Perceived Capabilities	56
Fear of Failure	38

2.2.1. The Non-Entrepreneurs' Perception

The entrepreneurial perceptions may be more relevant for the individuals who are currently not active entrepreneurs (both nascent and established). They indicate their propensity to engage in entrepreneurial activities in the future and, hence, estimate the present value level of potential entrepreneurs for next year. Figure 10 illustrates that individual perceptions about opening a business differ significantly between entrepreneurs and non-entrepreneurs. The perceptions of perceived opportunities among the entrepreneurs are almost twice as high as among the non-entrepreneurs. Regarding perceived capabilities, half of non-entrepreneurs believe to possess sufficient knowledge and experience to undertake entrepreneurial activity. An important revelation is that the entrepreneurs express a greater fear of failure preventing them to start a business compared to non-entrepreneurs (47% *vis-à-vis* 36% for non-entrepreneurs). This may indicate that given already being into entrepreneurship, entrepreneurs have more knowledge of the actual risks involved in business and, hence, fear it more compared to non-entrepreneurs who may only have an apparent idea about the consequences of failing. This may also indicate that since the existing entrepreneurs have already undertaken risks, their balance risk-bearing capacity has decreased because of which subsequent failures would prevent them from entering into new ventures.

Figure 10: Individual Perceptions, 2013, Percentage of Entrepreneurs and Non-entrepreneurs

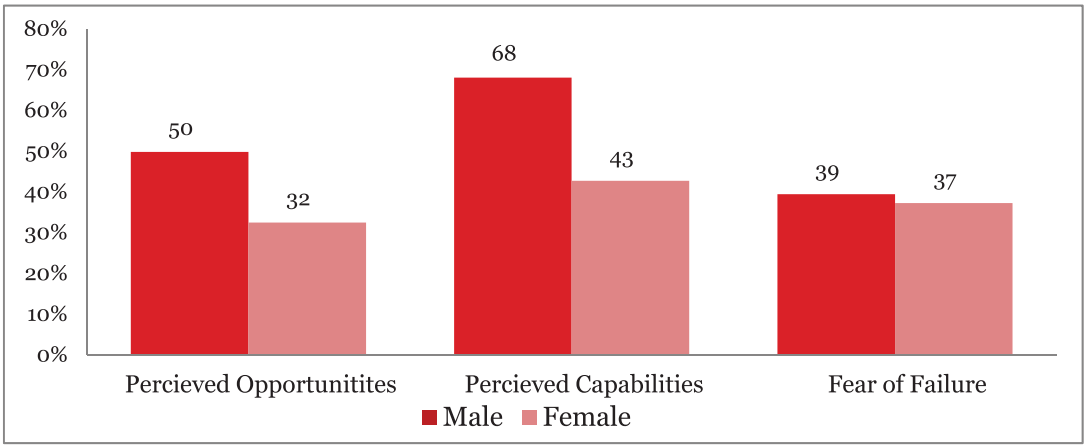


Read as: 47% of entrepreneurs fear failure preventing them from starting a business, and 83% of entrepreneurs perceive to possess the requisite entrepreneurial capabilities

2.2.2. Perception and Gender

Figure 11 provides the gender differences related to self-perceptions. A comparison between genders reveals that women have, on an average, lower perceptions about

Figure 11: Individual Perceptions and Gender, 2013, Percentage of Adult Population (18–64 years)



Read as: 50% of the male population perceives good business opportunities

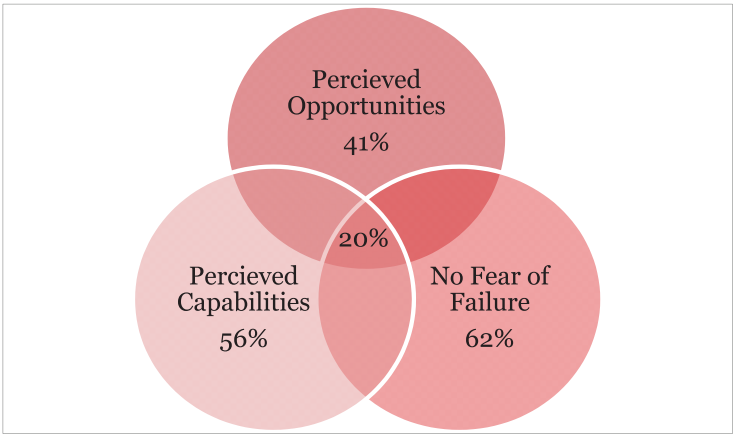
new business opportunities and their own capabilities, as well as trivially lower fear of failure than their male counterparts. Male perceptions about opportunities and capabilities exceed that of females by almost 25%. However, what is interesting is that the male adult population has similar fears as their female counterparts. Fear, though influenced to some extent by external environment, is often an innate attribute; whereas perceiving opportunities and capabilities are more shaped by the individual's exposure to education, work experience, training, etc. This suggests that training programs targeted toward women focusing on awareness and capacity building can have a significant influence on women entrepreneurial capability.

2.3. Entrepreneurial Potential and Intentions

Individuals are considered potential entrepreneurs when they see enough opportunities in their area for setting up a business, when they have the belief they have the capabilities to start a business, and when they are not afraid of business failure.

The size of India's pool of potential entrepreneurs is determined by the overlap of those who have perceived start-up opportunities in their areas, who have the requisite knowledge and experience and who do not have a fear of failure. The overlap of these three dimensions is shown to be 20% as illustrated in Figure 12.

Figure 12: Potential Entrepreneurs, 2013, Percentage of Adult Population (18–64 years)



20% of the sampled Indian population was deemed potential entrepreneurs in 2013. There were significant gender differences for this group. Overall, 14% men were potential entrepreneurs versus 6% for women.

As popularly put by Grilo and Thurik (2008), entrepreneurship is a long process comprising different engagement levels. The decision to start a new firm is assumed to be

planned for some time and, thus, preceded by an intention to do so. Though individuals may have the potential to start a business, they might not have the intention to do so. However, in some cases this intention leads to actual business creation and in some other cases the intention never leads to actual behavior. Hence, entrepreneurial intentions are assumed to predict, although imperfectly, individuals' choice to establish their own firms (Davidsson, 1995). GEM's Adult Population Survey asks individuals whether they intend to start a business within the next three years. Table 3 summarizes the findings, showing that India's rate of entrepreneurial intentions for 2013 is 23%. This is also significantly below the average of 45% for factor-driven economies and above the average of 12% for innovation-driven countries. The Indian entrepreneurial intention rate is, however, close to that of efficiency-driven nations averaging 25%. In fact India has the lowest rate of entrepreneurial intentions among all factor-driven countries followed by Vietnam at 24%. As a percentage of the adult population, entrepreneurial activity rates tend to be highest for the factor-driven economies, and decline with increasing levels of GDP. Therefore, we may propose that the low level of entrepreneurial intentions indicates that India is approaching a transitional phase to enter the second stage of development. Further research exploring the relation between the impact of entrepreneurial activity and GDP might ascertain the above suggestion.

Table 3: Entrepreneurial Intentions, 2013, Percentage of Adult Population (18–64 years)

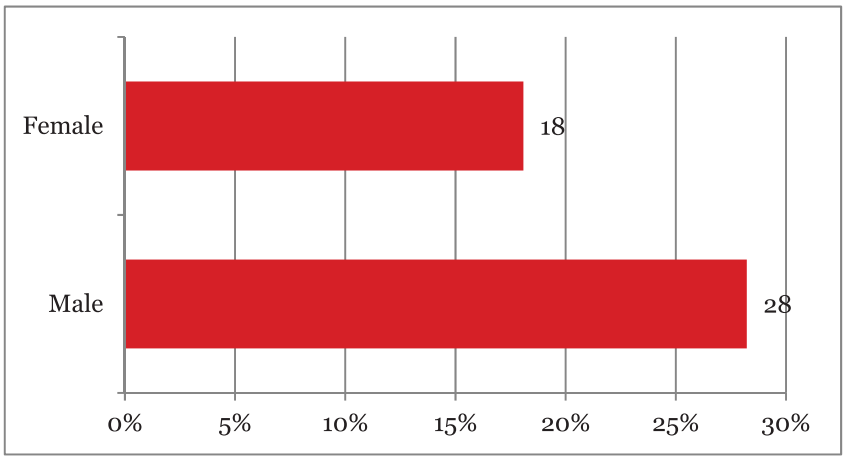
	India	Factor Driven	Efficiency Driven	Innovation Driven
Entrepreneurial Intentions	23	45	25	12

Read as: 23% of Indian adult population intend to start a business within the next three years

2.3.1. Determinants of Entrepreneurial Intentions

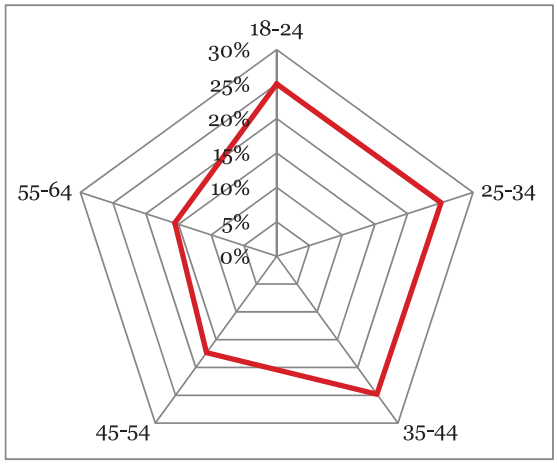
Figure 13 shows that, as with perceived opportunities and capabilities, females are less likely than males to have entrepreneurial intentions. Almost 28% adult males have intentions to start a business compared to 18% for female adults. Relative to their male counterparts, Indian women do not have equal entrepreneurial intentions in spite of representing an equal proportion of the population and labor force. Despite recent economic advances, India's gender balance for entrepreneurship remains among the lowest in the world. The social infrastructure or environment surrounding the women shapes their entrepreneurial ecosystem. Indian women give more emphasis to family ties and relationships. They also have a stronger sense of commitment to their extended family, compared to their male counterpart, which may be one of the reasons for lower entrepreneurial intentions.

Figure 13: Entrepreneurial Intentions by Gender, 2013, Percentage of Adult Population (18–64 years)



Read as: 18% of female adult population intend to start a business within the next three years

Figure 14: Entrepreneurial Intentions by Age, 2013, Percentage of Adult Population (18–64 years)

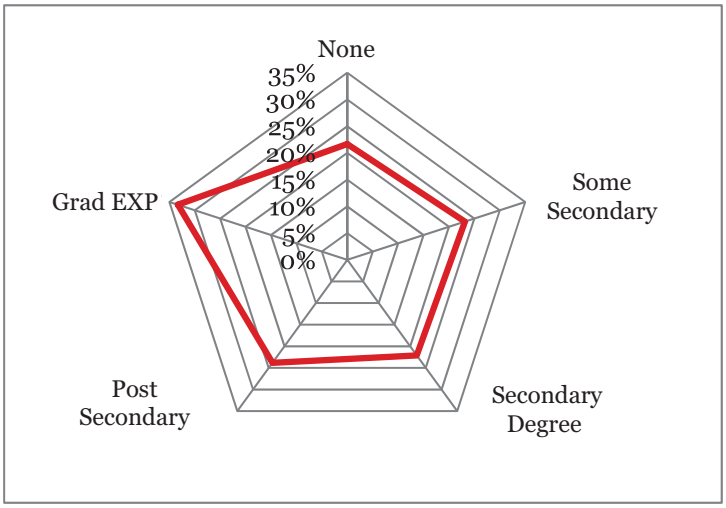


Read as: 25% of individuals belonging to the age group 18–24 years have entrepreneurial intentions

The prevalence of entrepreneurial intentions across age and education subgroups is illustrated in Figures 14 and 15, respectively. For each subgroup, the percentage of individuals intending to start a business in the next three years is shown. It is seen that the

incidence of entrepreneurial intent is least prevalent among the oldest individuals (45–54 and 55–64 years). Also, there seems to be no priori preference toward lower age groups, intent is uniformly distributed among other age groups, 25% for each cohort. Furthermore, entrepreneurial intentions seem to be largest among the highest educated individuals. 33% of adults with graduate experience demonstrate intention to start a business in the next three years.

Figure 15: Entrepreneurial Intentions by Education, 2013, Percentage of Adult Population (18–64 years)



Read as: 22% of individuals having no education have entrepreneurial intentions

Entrepreneurial intention is a necessary but not a sufficient condition to assess the level of entrepreneurship activity. Even if an individual exhibits entrepreneurial intentions, it is by no means certain that he or she will actually end up becoming an entrepreneur. It is to be noted that entrepreneurship involves an opportunity cost, usually measured in terms of the salary of the next best employment available to the individual. Thus, undertaking an entrepreneurial activity encompasses a pre-start-up cost–benefit analysis. The objective of an individual is to maximize the expected returns subject to monetary constraints (start-up capital, debt funding, etc.) as well as risk-taking appetite. Even if the expected returns from entrepreneurship are considerably higher than the next best alternative, the perceived risks involved may be too high for certain individuals to actually venture out.

3. ENTREPRENEURIAL ACTIVITY IN INDIA

3.1. Overview

This section focuses mainly on Total Early-stage Entrepreneurial Activity (TEA), the central pivot of the GEM. TEA consists of the percentage of individuals aged between 18 and 64 years who are in a process of either starting a new business or have recently started one. Thus, TEA has two components: Nascent entrepreneurs—individuals who are taking steps to start a business and New entrepreneurs—owner-managers of businesses less than three and a half years in existence (Baby Business). While focusing on the above dynamic measure of entrepreneurship, we also devote some attention to established entrepreneurs, that is individuals who have been owner-managers of a business for more than three and a half years. The report also analyzes survival rates of firms and rates of discontinued business or exiting entrepreneurs to judge the entrepreneurial flow in the country.

GEM data helps explain variations in different countries' entrepreneurship rate relative to the level of institutional development, demographic profile, especially age structure of the population, entrepreneurial culture, and general level of development. Having presented an overview of entrepreneurial participation in India, we then move to sketch the entrepreneurial profile, illustrate socio-demographic characteristics and dimensions (including age, gender, income level, employment situation, household size, and education) to determine how they affect entrepreneurial behavior and how they evaluate the participation of different subgroups of the society in entrepreneurship.

To estimate entrepreneurial activity in GEM countries, the project uses the following indicators:

Potential Entrepreneurs	Intentional Entrepreneurs	Nascent Entrepreneurs	New Entrepreneurs	Established Entrepreneurs	Exiting Entrepreneurs
Per cent of population aged 18–64 that has not yet opened a business, but positively evaluates their own abilities and economic opportunities.	Per cent of population aged 18–64 planning to open a business in the next three years.	Per cent of population aged 18–64 that are involved in starting a business, either as owners or co-owners. The company exists more than three months, although wages or other forms of remuneration have not yet been paid.	Per cent of population aged 18–64 that presently owns and manages new businesses. The company paid salaries and emuneration to the owner for more than three but less than three and a half years.	Per cent of population aged 18–64 who are currently owner- managers of established businesses. The company has been paying wages and monetary ompensation to the proprietor for more than three and a half years.	Per cent of population aged 18–64 who in the last 12 months have sold or closed businesses or who in any other way ceased being owner- managers.

3.2. Entrepreneurial Activity in GEM Countries

For decades now, a growing body of research has suggested the important contribution of entrepreneurship in economic growth and development (Shramm, 2004; Baumol et al., 2007; Gries and Naude, 2008; and Naude, 2008). Following the World Economic Forum's (WEF) classification, GEM groups the countries into, Factor-driven economies, Efficiency-driven economies and Innovation-driven economies. The factor-driven phase is dominated by economic growth determined by primary factors of production: land and labor (mostly unskilled). The focus is on building a subsistence and basic level of foundation. In the 'Efficiency-driven' phase, economic growth is propelled by capital inflow, foreign direct investment and access to global technologies. This stage of economic development is characterized by industrialization and concentration of basic and capital-intensive sectors. Finally, in the 'innovation-driven' stage, economic growth is a result of transition from being a technology importer to technology creators. Knowledge-intensive and service sectors are the growth propellers in the innovation-driven economies.

GEM analyzes the contribution of entrepreneurship to an economy according to its stage of development. Wennekers et al. (2005), Blau (1987); Acs et al. (1994); and Carree et al. (2002) provide evidence of a U-shaped association between economic development and national levels of early stage entrepreneurship. For the factor-driven countries, the main challenge is to optimally utilize the factors of production-land, labor and capital. Government and other market institutions are quite weak and unstable to accommodate an optimal factor allocation and utilization. Hence, entrepreneurship usually in the form of self-employment comes to the rescue leading to high levels of entrepreneurial activity. After a threshold level of GDP is reached, priorities move to improving capital-intensive sectors such as infrastructure and heavy and basic industry to be internationally competitive and interactive. A fall in entrepreneurial activity is what follows, where those engaged in self-employment find higher wage paying jobs in other firms. The opportunity cost to entrepreneurship increases with an increased GDP and economic development. Finally, once institutions have stabilized and a critical mass of income has been achieved, entrepreneurship increases with increased income levels. The positive correlation between entrepreneurship and economic growth is quite self-explanatory as entrepreneurs create new businesses and new businesses in turn create jobs, intensify competition, introduce important innovations and may even increase productivity through technological change. This increase in productivity as well as innovation may expedite research and learning resulting in knowledge spill-over. Innovation takes place in small-scattered pockets having a high multiplier effect on growth.

Table 4 presents data on entrepreneurial activity for 70 GEM countries in 2013. The countries are grouped by stage of economic development, and basic characteristics of general entrepreneurial activity in each country are presented. In case of India, it is currently recognized as a factor-driven economy.

Table 4: Entrepreneurial Activity in GEM Countries, 2013

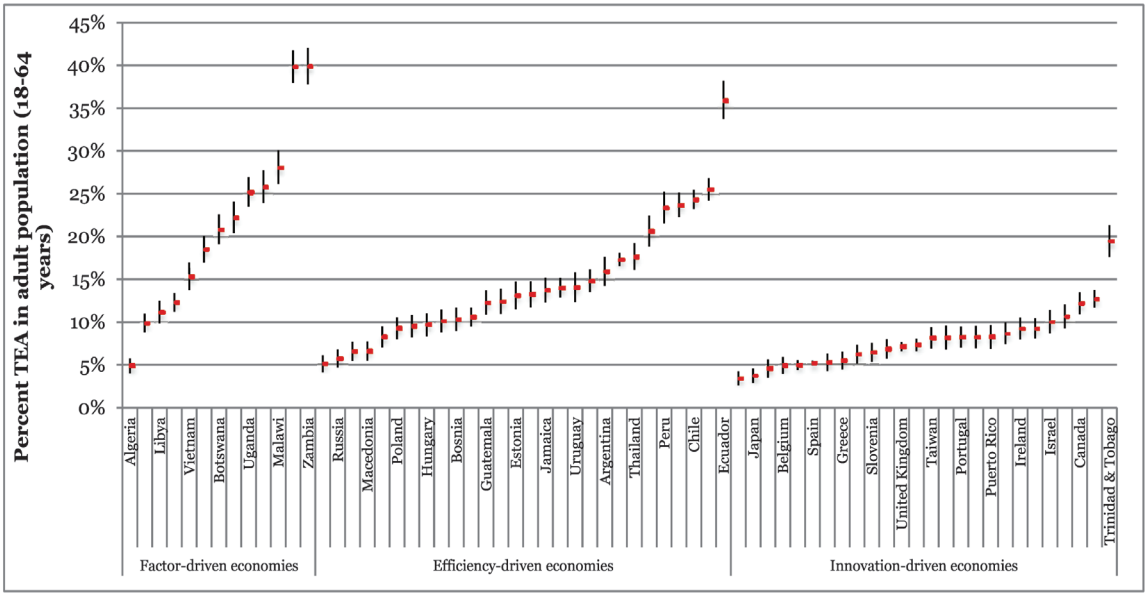
	Country Name	Nascent Entrepreneurship Rate%	New Business Ownership Rate%	TEA 2013%	Established Business Ownership Rate	Discontinuation of Business
Factor-driven Economies	Algeria	2.2	2.6	4.9	5.4	3.3
	Angola	8.0	14.7	22.2	8.5	24.1
	Botswana	11.0	10.2	20.9	3.4	17.7
	Ghana	8.5	17.7	25.8	25.9	8.3
	India	5.1	4.9	9.9	10.7	1.5
	Iran	6.4	6.1	12.3	10.6	5.7
	Libya	6.6	4.7	11.2	3.4	8.1
	Malawi	10.1	18.8	28.1	12.0	30.2
	Nigeria	20.0	20.7	39.9	17.5	7.9
	Philippines	12.0	6.7	18.5	6.6	12.3
	Uganda	5.6	20.0	25.2	36.1	20.1
	Vietnam	4.0	11.5	15.4	16.4	4.2
	Zambia	22.6	18.0	39.9	16.6	19.8
Efficiency-driven Economies	Argentina	10.5	5.6	15.9	9.6	5.5
	Bosnia	5.8	4.6	10.3	4.5	6.2
	Brazil	5.1	12.6	17.3	15.4	4.7
	Chile	15.4	9.6	24.3	8.5	7.6
	China	5.2	8.9	14.0	11.0	2.7
	Colombia	13.6	10.3	23.7	5.9	5.4
	Croatia	6.3	2.0	8.3	3.3	4.5
	Ecuador	25.3	13.6	35.9	18.0	8.3
	Estonia	8.8	4.5	13.1	5.0	2.1
	Guatemala	7.6	4.9	12.3	5.1	3.0
	Hungary	6.0	3.7	9.7	7.2	2.9
	Indonesia	5.7	20.4	25.5	21.2	2.4
	Jamaica	8.0	6.0	13.8	6.3	7.4
	Latvia	8.1	5.3	13.3	8.8	3.5
	Lithuania	6.1	6.4	12.4	8.3	3.5
	Macedonia	3.4	3.5	6.6	7.3	3.3
	Malaysia	1.5	5.2	6.6	6.0	1.5
	Mexico	11.9	3.3	14.8	4.2	6.6

Table 4 continues

Table 4 continues

	Panama	15.4	5.2	20.6	3.5	3.4
	Peru	17.8	5.9	23.4	5.4	4.2
	Poland	5.1	4.3	9.3	6.5	4.0
	Romania	6.2	4.2	10.1	5.3	4.3
	Russia	3.0	2.8	5.8	3.4	1.6
	Slovakia	6.1	3.6	9.5	5.4	5.5
	South Africa	6.6	4.0	10.6	2.9	4.9
	Suriname	3.9	1.3	5.1	1.7	0.8
	Thailand	7.9	10.4	17.7	28.0	3.5
	Uruguay	8.5	5.7	14.1	4.9	3.4
Innovation-driven Economies	Belgium	3.1	1.9	4.9	5.9	1.9
	Canada	7.8	4.7	12.2	8.4	4.4
	Czech Republic	4.9	2.7	7.3	5.3	3.4
	Finland	2.7	2.7	5.3	6.6	2.0
	France	2.7	1.8	4.6	4.1	1.9
	Germany	3.1	2.0	4.9	5.1	1.5
	Greece	3.3	2.3	5.5	12.6	5.0
	Ireland	5.5	3.8	9.3	7.5	2.5
	Israel	5.3	4.8	10.0	5.9	4.8
	Italy	2.4	1.1	3.4	3.7	1.9
	Japan	2.2	1.5	3.7	5.7	1.5
	Korea	2.7	4.2	6.8	9.0	2.5
	Luxembourg	6.0	2.8	8.7	2.4	2.8
	Netherlands	4.7	4.8	9.3	8.7	2.1
	Norway	2.9	3.4	6.3	6.2	1.6
	Portugal	4.2	4.2	8.3	7.7	2.8
	Puerto Rico	6.6	1.8	8.3	2.0	1.8
	Singapore	6.4	4.4	10.7	4.2	3.3
	Slovenia	3.6	2.9	6.4	5.7	2.6
	Spain	3.1	2.2	5.2	8.4	1.9
	Sweden	5.9	2.5	8.3	6.0	2.4
	Switzerland	4.5	3.7	8.2	10.0	2.3
	Taiwan	3.3	5.0	8.2	8.3	5.0
	Trinidad & Tobago	11.4	8.5	19.5	11.4	4.1
	United Kingdom	3.6	3.6	7.1	6.6	1.9
	USA	9.2	3.7	12.7	7.5	3.8

Figure 16: Early-stage Entrepreneurial Activity, by Phase of Economic Development, 2013, Showing 95% Confidence Interval



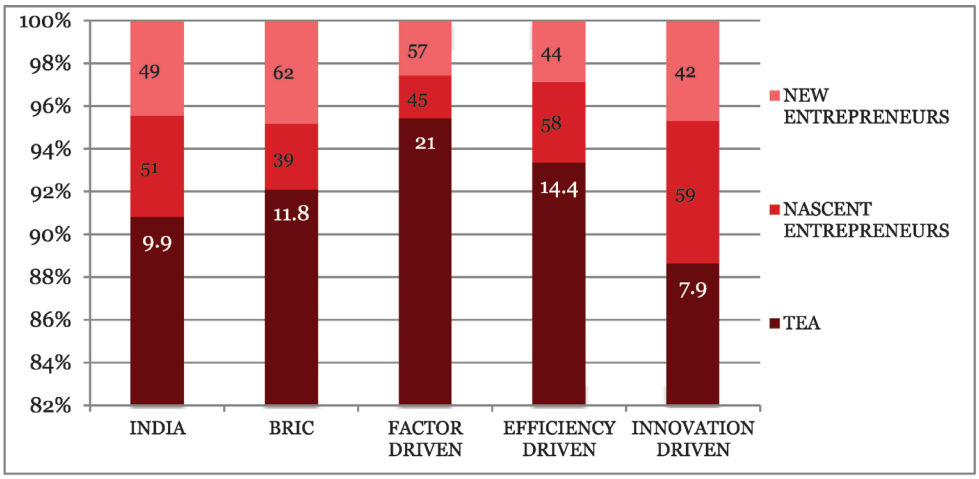
3.3. Total Early-stage Entrepreneurial Activity

Total Early-stage Entrepreneurial Activity captures nascent entrepreneurs and new entrepreneurs. Nascent entrepreneurs are those adults between 18 and 64 years of age who are trying to start a new business which they will fully or partially own. The individual should have taken steps toward this start-up activity; for example, developing a business plan, having accessed financial credit or hired employees.

New entrepreneurs are adults between 18 and 64 years of age who currently own and manage a business for less than three and a half years. Note that an individual could be an owner-manager of a new business and simultaneously be involved in start-up activities for the launch of a new business. Such an individual will be counted as one active person in the calculation of the TEA rates.

Since India has a low GDP per capita, high levels of entrepreneurial activity would be predicted. In India, 4.8% of the adult population are new firm entrepreneurs and a further 5.1% are nascent entrepreneurs who are actively trying to start a business. Combining these rates means that 9.9% of the adult population are engaged in some aspect of early-stage entrepreneurial activity (TEA) (Fig. 17), which means that approximately 1 out of every 10 adults in India are expected to be early-stage entrepreneurs.

Figure 17: Total Early-stage Entrepreneurial Activity (TEA), Nascent Entrepreneurs, New Entrepreneurs, 2013



Read as: 10% of Indian adult population is engaged in early-stage entrepreneurial activity in India; 51% of these early stage entrepreneurs in India are nascent entrepreneurs; and 49% are new entrepreneurs

Table 5: Total Early-stage Entrepreneurial Activity (TEA), Nascent Entrepreneurs, New Entrepreneurs, Percentage of Adult Population, 2013

	India	BRIC	Factor Driven	Efficiency Driven	Innovation Driven
TEA	9.9	11.8	21.1	14.4	7.9
Nascent Entrepreneurs	5.1	4.6	9.4	8.4	4.7
New Entrepreneurs	4.8	7.3	12.0	6.4	3.3

Table 5 shows that the values for three measures of entrepreneurial activity decrease as the next stage of economic development is reached. Furthermore, we see that the Indian TEA rate is considerably higher than the average of the innovation-driven economies; however, it is lower than average of efficiency-driven nations. In fact, India has the lowest TEA rate after Algeria, among all factor-driven economies.

3.4. Established Business

A very high TEA value without a sustainable strategy of identifying new scalable sources of competitive advantage is of little value. The most persistent phase of the entrepreneurial process is the success or continued existence of the new venture. It is

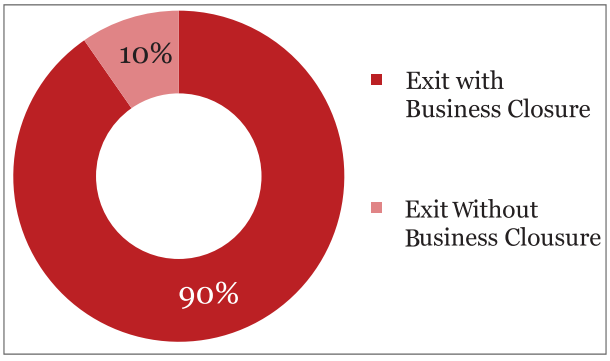
this phase that usually represents stable job generation and value creation. According to the GEM methodology, the rate of established entrepreneurs refers to those who have owned and managed an enterprise for more than 42 months and who have paid wages or salaries for over 42 months as well. Not all newly created firms survive the initial critical years. To be competitive in the global marketplace, businesses need to be improving their products and services and revising business practices. They need to innovate rapidly, cost-effectively, and sustainably.

India's established business rate is 10.7%. The ratio of established business ownership rate to TEA rate may indicate firm survival rates. A ratio closer to 1 is usually desirable, which is also the case for India (1.08).

3.5. Discontinued Business

Entrepreneurship is a continuous and dynamic process with constant inflow and outflow of active firms. As much as new venture creation is important for economic growth and development, business closure also holds value. In some sense, it may be regarded as some form of disruptive regeneration where it helps in unlocking valuable resources and redeploy them in more optimal allocations. Discontinuing a business, therefore, does not necessarily have a negative consequence for an entrepreneur—it may indicate sale of the business, an effect of unfavorable market forces, start of a new venture or some other personal reasons. However, at the same time discontinued business may not always signify disruptive regeneration, and in some cases may indicate a more critical/adverse situation. The reason for business discontinuity and closure needs to be assessed. GEM measures entrepreneurial exits as the fraction of the adult population that has exited entrepreneurship in the past 12 months.

Figure 18: Structure of Entrepreneurial Exits, 2013, Percentage of Adult Population (18–64 years)



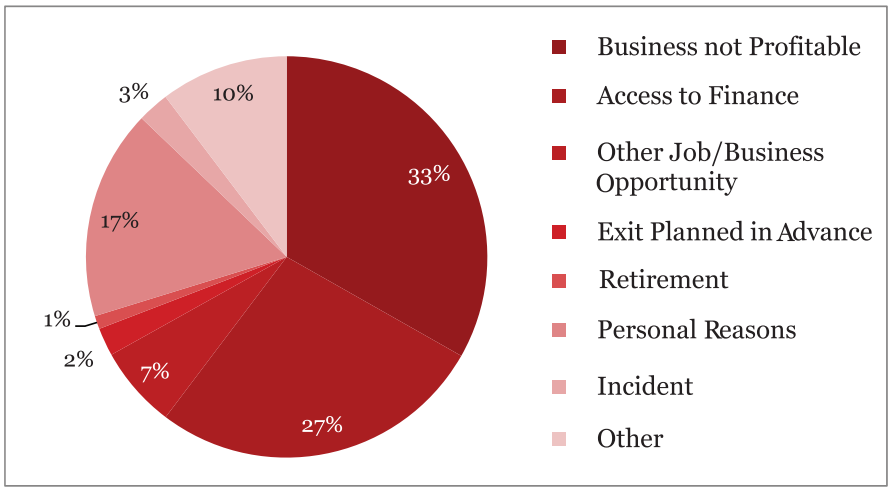
Read as: In case of 90% of entrepreneurs that exited the activity, the business was closed down altogether

In total, 1.5% Indian adult population discontinued their entrepreneurial stints in 2013. India's entrepreneurial exit rate is the second lowest among all GEM countries, which is indeed a positive factor. Figure 18 distinguishes between businesses that continued their activities after the individuals exited the entrepreneurship process, and businesses that did not continue their activities. 90% of entrepreneurial exits correspond with firm exit, i.e. 1.2% of the adult entrepreneurs faced a firm exit with business closure and a very small proportion, 0.13%, experienced exit without closing of the business activity.

3.5.1. Reasons for Entrepreneurial Exits

There are several reasons, why individuals decide to quit their entrepreneurial leads. In the APS survey, respondents are asked to select the most important reason for quitting their business. Figure 19 illustrates an overview of these reasons and the corresponding percentages. It shows that 33% of exits were due to lack of profitability, followed by 27% due to limitations in access to finance accounting. Further, 70% of entrepreneurs discontinued businesses due to some personal reasons. As many businesses are not profitable in the first few years of operations, this high figure could indicate either a lack of access to the necessary financial capital needed to survive till breakeven is achieved, or a situation where the entrepreneur is stuck in a debt trap, Early-stage start-ups, which have not reached breakeven, are forced to take on more debt to service the earlier debt. Perhaps a deeper analysis of the reasons for discontinuation may indicate the need for further entrepreneurial skill training and workshops enhancing financial planning, product marketing and other day-to-day management aspects of running a small business. The survey also indicates access to finance as a major obstacle to entrepreneurship in India. We would discuss this aspect in detail in the National Expert Survey section of this report.

Figure 19: Reasons for Business Discontinuation, 2013, Percentage of Exits

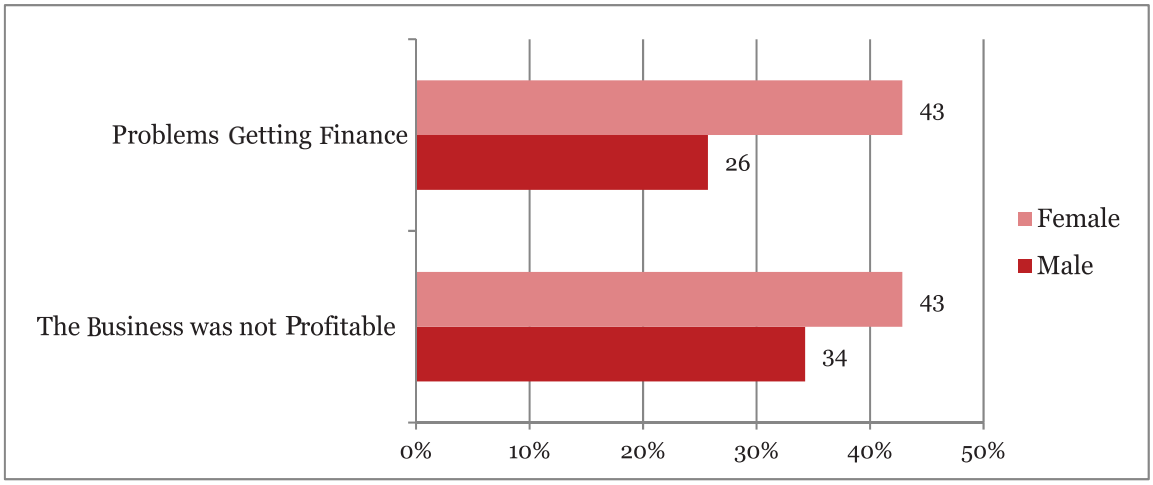


We need to note, however, that the main reasons for quitting a business may vary across different years. For instance, the year 2013 witnessed a slow growth in most of the emerging countries including India being more vulnerable to global shocks. The $1.8-trillion Indian economy suffered its worst slowdown in over a decade with growth below 5% for four straight quarters. Overall, the industrial sector remained under stress, hit by stubborn inflation, high interest rates, high input costs and rising wage pressures, because of domestic as well as external factors. Thus, business shut downs due to lack of profitability come as no surprise in this turbulent year. A longitudinal analysis would provide more robust results.

3.5.2. Discontinuation and Gender

Given the gender disparity, it is interesting to know how reasons for entrepreneurial exits vary between men and women. Figure 20 illustrates these differences for two most important reasons for such exits, namely, lack of profitability and lack of finances. It is evident that female headed businesses face greater barriers from these obstacles. Almost 43% of female entrepreneurs discontinue their businesses due to both business not being profitable and due to credit constraints, compared to 34% and 26% male entrepreneurs in the respective categories. This points to the need for greater focus on entrepreneurial training toward targeted sections of the society.

Figure 20: Gender Differences in Reasons for Business Discontinuation, 2013, Percentage of Entrepreneurs

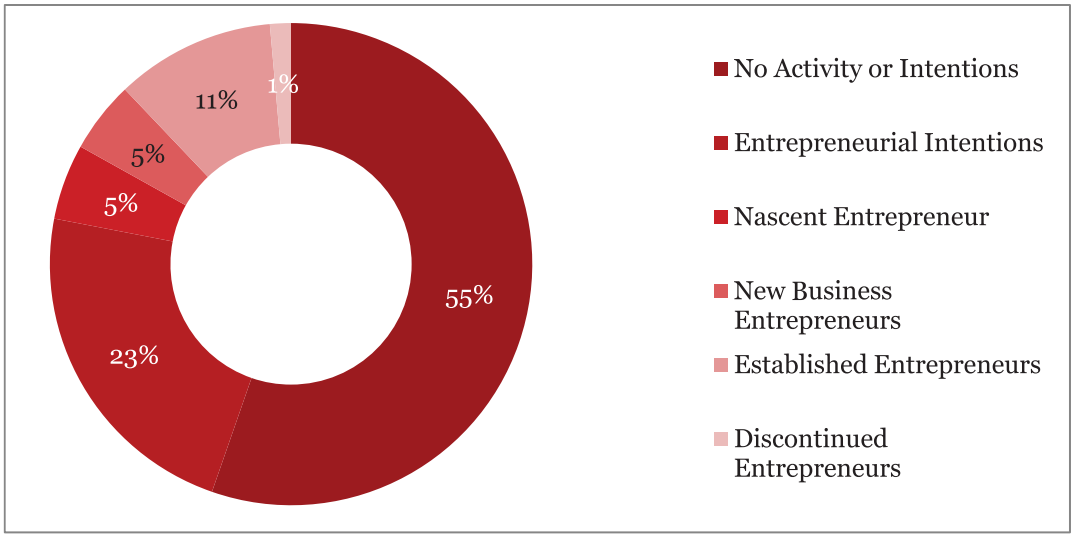


Read as: 43% of female entrepreneurs discontinue their businesses due to business not being profitable

Summary of Entrepreneurial Activity

Figure 21 summarizes the proportion of Indian population involved in different stages of entrepreneurial activities. More than 50% of the population does not participate in entrepreneurship and nor has any intentions to do so. Of the remaining, 23% Indian adults plan to start a business in the next three years but are not currently an entrepreneur. Almost 20% are engaged as early-stage and established entrepreneurs, while a very small proportion have discontinued the engagement process.

Figure 21: Stages of Entrepreneurial Activity, 2013, Percentage of Adult Population (18–64 years)



3.6. Motive for Indian Entrepreneurs

GEM recognizes that different entrepreneurs may have different reasons or motivations for starting a business. Individuals who are involved in early-stage entrepreneurial activity are asked about their underlying motives of starting a business. As such it distinguishes between two forces acting upon the TEA: the push factor and the pull factor. The push factor refers to a situation where the individual has 'no better choices for work' or alternative means of survival, because of which he is pushed into or rather compelled to become an entrepreneur. GEM classifies these entrepreneurs as necessity driven. On the other hand, the pull factor reflects voluntary entry and efforts to take advantage of a business opportunity whereby the individual is pulled into entrepreneurship to exploit opportunities and gain profits. Such start-ups are referred to as opportunity-driven entrepreneurship.

However, in the real world, motives and recognition of motives is not as black and white as stated above. We need to appreciate the shades of grey. Respondents often have mixed motives which fall somewhere in between. As such, the APS survey allows for some flexibility, recognizing that a respondent may also be driven by a combination of opportunity and necessity reasons. Some may be motivated by a desire for greater independence, improve current income, or maintain income. For the purpose of uniform classification, the former two motives are categorized as subgroups of opportunity driven, whereas the latter is closer to the necessity-driven type. As much as the TEA measure is the key important indicator of GEM, the distinction between Opportunity–Necessity types is of equal importance. While the former is a quantitative measure, the latter captures the qualitative aspect to some extent. Research establishes that economic contribution of opportunity-motivated firms is higher than that of necessity-driven ones (Kelley et al., 2010).

Table 6 distinguishes between opportunity-driven and necessity-driven entrepreneurship in India. Almost 58% of early-stage entrepreneurs were motivated to start a venture by some business opportunity, i.e. roughly 6% of the total adult population were opportunity-driven entrepreneurs. Correspondingly, about 40% of early-stage entrepreneurs were forced into entrepreneurship due to lack of other alternatives, and 4% of the total adult population were necessity-driven entrepreneurs.

Table 6: Opportunity and Necessity-driven Rates, 2013, Percentage of Adult Population (18–64 years)

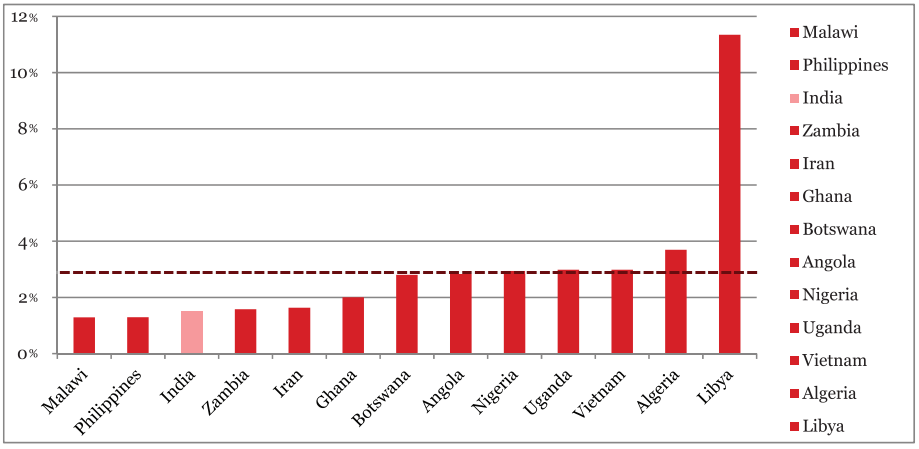
Opportunity Motive	5.7
Necessity Motive	3.8
Other Motive	0.3
TEA	9.9

Read as: 5.7% of Indian adults are entrepreneurs driven by some business opportunity

3.6.1. International Comparison

An international comparison of the ratio of opportunity to necessity-driven entrepreneurship is illustrated in Figure 22. As it can be seen India ranks among the bottom three countries, two times below the average ratio of 3, at 1.5. This implies that opportunity entrepreneurs in India are 1.5 times that of necessity-driven entrepreneurs. Libya comes as an outlier with more than 90% of early-stage entrepreneurs being opportunity driven. Libya houses 11 times more opportunity-driven entrepreneurs than necessity-driven ones. Policies in India need to be focused toward adopting measures to stimulate opportunity entrepreneurship.

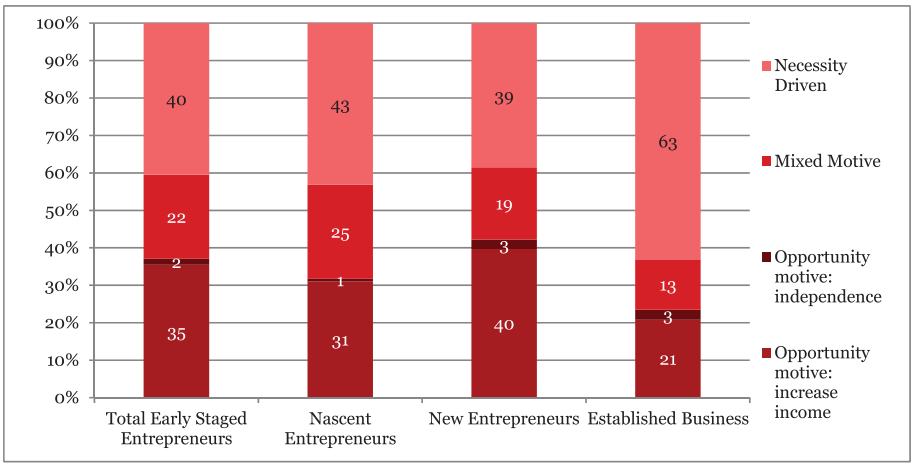
Figure 22: Opportunity TEA Divided by Necessity TEA for Factor-driven Economies, 2013



3.6.2. Motivation Structure

Apart from the broad categorization of opportunity and necessity-driven entrepreneurship, the motivation structure of Indian entrepreneurs is shown in detail in Figure 23. Interestingly majority of Indian entrepreneurs are motivated by the objective to increase income rather than maintaining the same level of income. However, surprisingly, Indian entrepreneurs are not motivated by a desire for independence. Economic considerations are the only guiding light.

Figure 23: Motivation Structure for Early-stage and Established Entrepreneurs, 2013



Read as: 40% of Indian early-stage entrepreneurs were not motivated by any business opportunity, but driven toward entrepreneurship out of necessity

3.7. Socio-demographic Characteristics

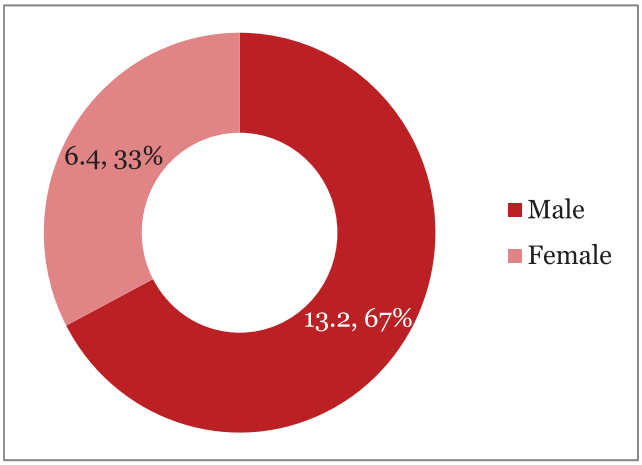
Social and economic characteristics, such as age, gender, and education, have a significant influence on the desire to start an entrepreneurial venture.

3.7.1. Gender

Most studies find that men have a higher probability of engaging in entrepreneurship than women—Blanchflower et al. (2001); Reynolds et al. (2002); Arenius and DeClercq (2005); Minniti et al. (2005); Davidsson (2006); Klyver et al. (2007); Grilo and Thurik (2008); and Kalpper and Paker (2010). Higher male TEA is a universal characterization of almost all GEM countries. However, the gap between male and female TEA is what varies across nations depending as well as reflecting social culture and norms.

The entrepreneurial activities of Indian men and women differ to a great extent. The male−female ratio is more or less balanced in the sample. Data show that 13% of men and 6.5% of women are involved in early-stage entrepreneurship—the ratio of men to women is 67% to 33% (Fig. 24). The likelihood that an individual engages in early-stage entrepreneurial activity is influenced by their gender. Indian men are twice more likely to be involved in early-stage entrepreneurship compared to Indian women. This gap widens more in case of established business owners, where more than 70% owners are men and 30% are women, i.e. 15% men are established business owners compared to only 6% women.

Figure 24: TEA by Gender, 2013

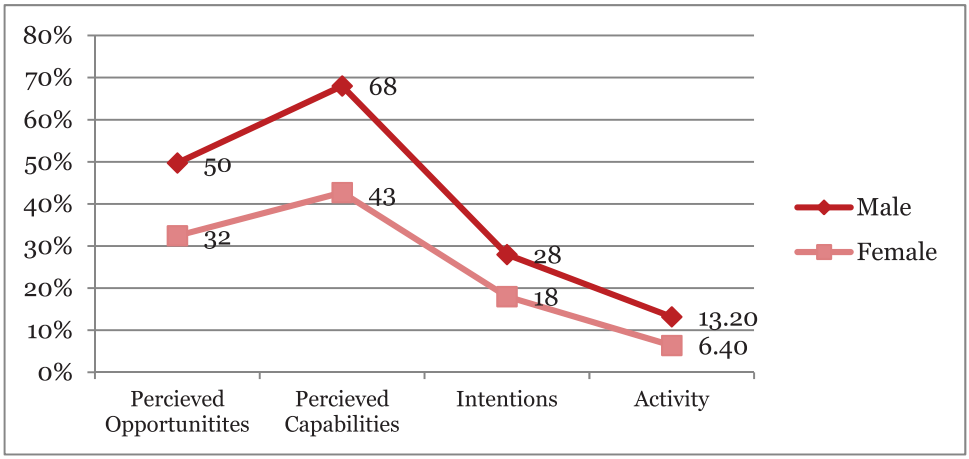


Read as: 67% of early-stage entrepreneurs are male

Read as: 13% of Indian men are early-stage entrepreneurs

Figure 25 summarizes the participation in different stages of entrepreneurship process by the two gender groups. Although, as discussed already, there is a significant gap between male and female involvement at every stage, however the gap declines through the different stages. An analysis of the motivation structure for men and women does not reveal significant differences, which may have accounted for the declining gap. A further exploration reveals that a higher proportion of women are included in a nascent entrepreneurship compared to a baby business or new entrepreneurs. Almost 59% of women early-stage entrepreneurs are nascent and 41% have established baby (new) businesses. It is not necessary that nascent women entrepreneurs will always convert to new entrepreneurs, which may generate an upward bias in female TEA rates. The decrease in gap between intention phase and activity phase may also indicate that women entrepreneurial activities are not well-planned in advanced compared to men and often the result of ad-hoc decisions.

Figure 25: Stages of Entrepreneurial Activity by Gender, 2013, Percentage of Adult Population (18–64 years)

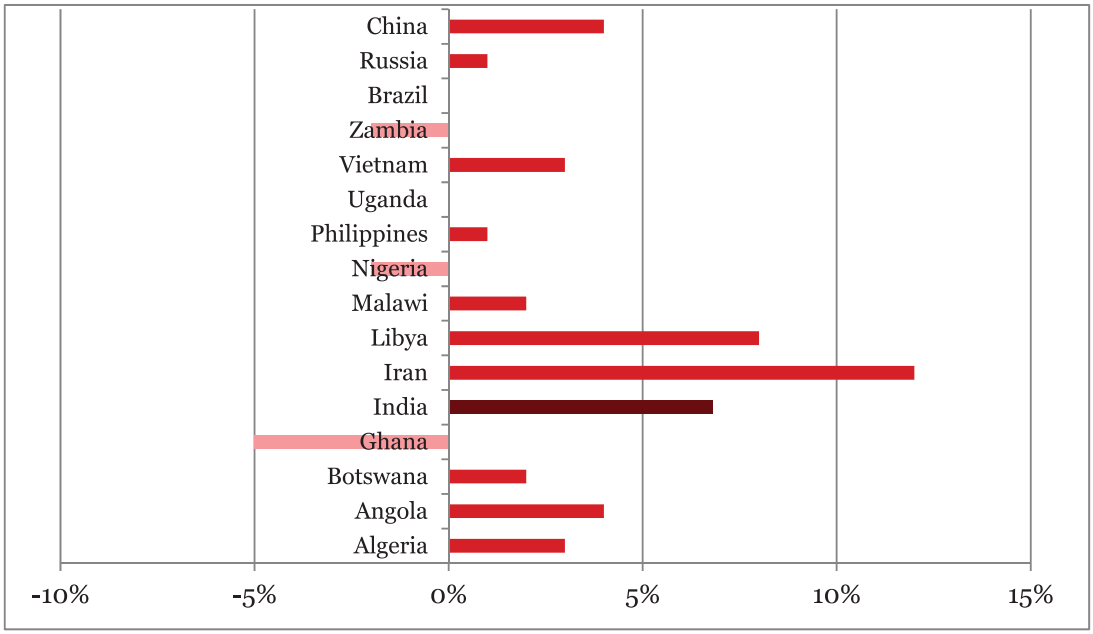


International Comparison

Figure 26 presents a cross-country comparison of entrepreneurship variation by gender for all factor-driven economies, of which India is a part. The results indicate the value by which Male TEA exceeds Female TEA rates in each country. The positive values represent a higher rate for men, whereas the negative value reflects a higher rate for women. Notable cases are Ghana, Nigeria, and Zambia, which exhibit more participation of women than men do. On the contrary, India ranks third among factor-driven economies for exhibiting the highest gender gap within entrepreneurship, where Male TEA exceeds female TEA by 7%, following Iran at 12% and Libya at 8%. We also make a comparison with the

BRIC counterparts. Prominent case is that of Brazil, which has equal participation by both genders, similar to the findings in Uganda. Although China has a similar population base like that of India, it has a smaller entrepreneurial gender gap (4%) compared to India (7%).

Figure 26: Cross Country Comparison of Entrepreneurship by Gender, 2013

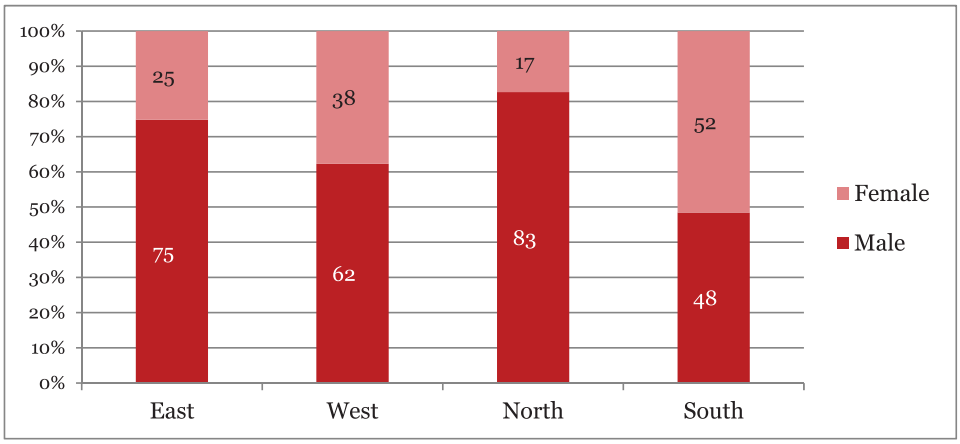


Regional Comparison

On the one hand, where women's involvement in early-stage entrepreneurship varies across the globe due to cultural differences, which paves way for an international comparison, cultural diversities vary tremendously within the Indian sub-continent too, to an extent making regional comparisons within the country, essential. These diversities determine the male−female entrepreneurship ratio to a large extent. It, thus, becomes important to compare TEA by gender across the four regions of India.

The lowest relative rates of involvement in entrepreneurship by women can be found in North India, as shown in Figure 27, where only 17% of the early-stage entrepreneurs are women. We see a similar gender disparity in Eastern India as well, with one-fourth entrepreneurs being women. The difference in participation rates between men and women appears to be striking in South India, suggesting greater female participation (52%). This range spans the cultural diversity within the country, where the northern regions do not encourage the role of women as entrepreneurs, and the southern most states, provide a more conducive environment for female entrepreneurs.

Figure 27: Regional Comparison of Entrepreneurship by Gender, 2013, Percentage of Early-stage Entrepreneurs

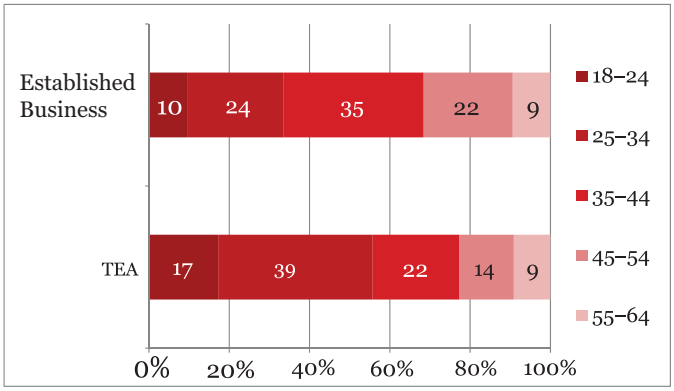


Read as: 25% of early-stage entrepreneurs in eastern India are female

3.7.2. Age

The influence of age on entrepreneurial activity tends to be very similar throughout GEM countries. Concerning the age composition, Figure 28 reveals that the probability of being an early-stage entrepreneur is the highest among the individuals between 25 and 34 years old. For established entrepreneurs, the 35–44 and 45–54 cohorts predominate. The distribution of age groups within the TEA is in line with global trends, where the highest prevalence rate is found in 25–34 and 35–44 cohorts. The high TEA rates among the young age groups of 18–44, indicates a positive sign for a country like India, which is undergoing a demographic transition, with an increase in the share of the working age youth population.

Figure 28: TEA and Established Business Ownership by Age, 2013



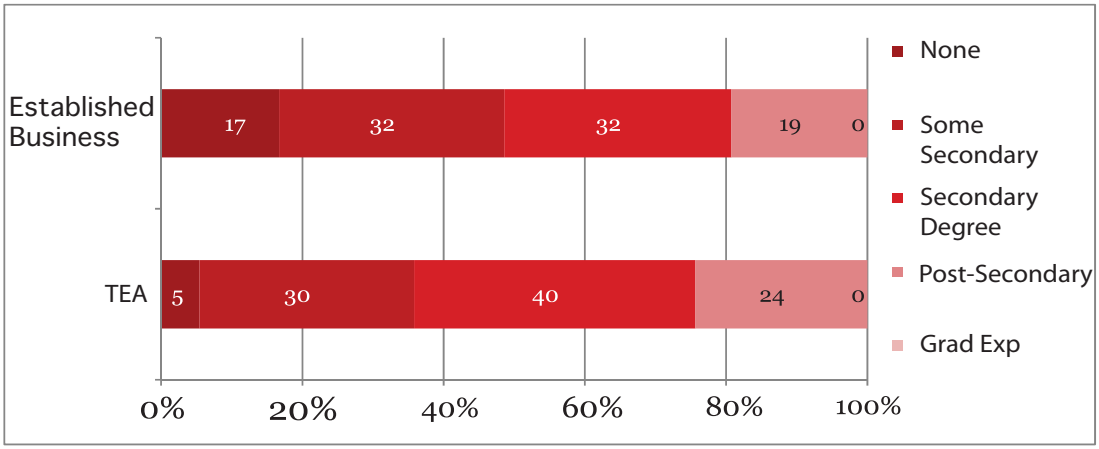
Read as: 17% of early-stage entrepreneurs are 18–24 years old

3.7.3. Education

The empirical findings for the relationship between individual's educational level and the likelihood to start-ups have been inconclusive. Some researchers have argued that higher educated people are more likely to identify opportunities for entrepreneurship, whereas others argued that educational attainments involve opportunity costs in terms of finding better employment opportunities, thereby reducing the motivations to look for start-up opportunities.

GEM methodology classifies educational level into four groups: 'some secondary degree', 'secondary degree', 'post-secondary degree', and 'graduate experience' (this last category includes those who are MAs, PhDs, and MBAs).

Figure 29: Distribution of Education among TEA and Established Business Ownership, 2013



Read as: 30% of early-stage entrepreneurs possess some secondary education

For majority of the entrepreneurs, respondents with 'Secondary degree' predominate as seen in Figure 29. 40% of early stage entrepreneurs had secondary degree level of education. It is to be noted that none of the entrepreneurs have attained graduate or post-graduate level of education. This is indeed one of the most important findings. In fact respondents with lowest level of education demonstrate the greatest activity among the early-stage and established entrepreneurs (14% and 12%, respectively). Unlike most developed countries, there is no strong evidence of a positive correlation between level of educational attainment and entrepreneurship in India.

Educational attainment involves opportunity costs in terms of finding better employment opportunities, thereby reducing the motivation to look for start-up opportunities. There

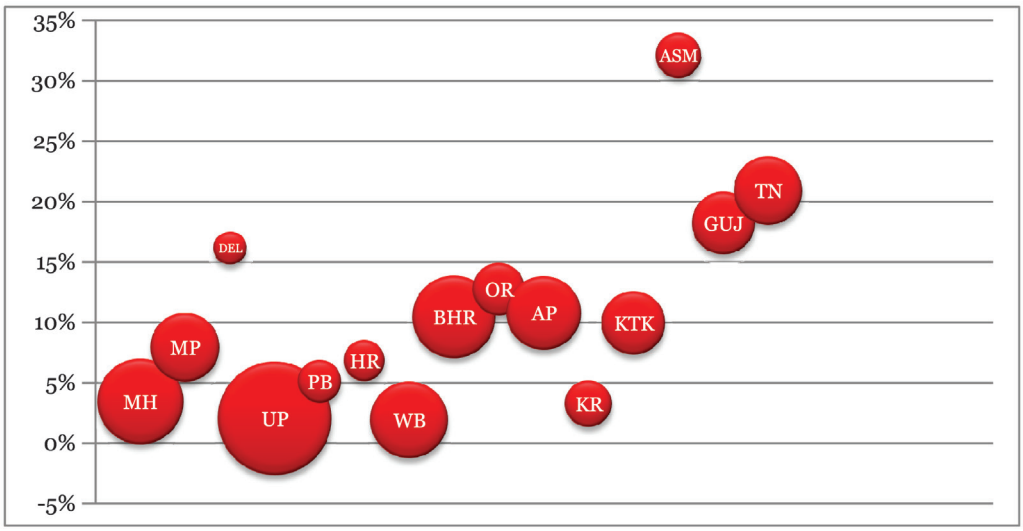
are positive returns to education for wage earners. One explanation for the association between low levels of education and start up likelihood could be necessity driven—those who are forced to be self-employed because of no other alternative. Although the ratio of opportunity entrepreneurship to necessity is greater than 1, yet necessity-driven TEA is extremely high for India. Almost 40% of Indian early-stage entrepreneurs are necessity driven. Also, within the Indian framework, the zero impact of education may be attributed to the tradition of family owned, managed, and succeeded business, prevalent in India. Business families can generate the sort of cognitive and non-cognitive abilities that are required to discover and exploit entrepreneurial opportunities (Bruin and Ferrante).

3.7.4. Regional Distribution

The geographic locations of individuals influence the likelihood to engage in entrepreneurial activities. Varied regions are endowed with diverse natural resources, giving rise to regional clustering of industries and, hence, regional disparities. The federal government with a unitary system in India and corresponding regional allocation of such industries and resources gives rise to different state/regional policies. These policies relate to government, banking, manpower, infrastructure, etc. The nature of institutional settings, state laws and taxation policies, regional incentive schemes, presence of infrastructure, etc. affect conditions for economic activity, including the possibility of undertaking entrepreneurial activity. A striking feature for the Indian economy is that different regions and states across the country are characterized by not only the diverse endowment of natural resources but also the concentration of different ethnic communities, which differ in terms of culture and social norms. Thus, we definitely do witness regional disparities in terms of entrepreneurship in India.

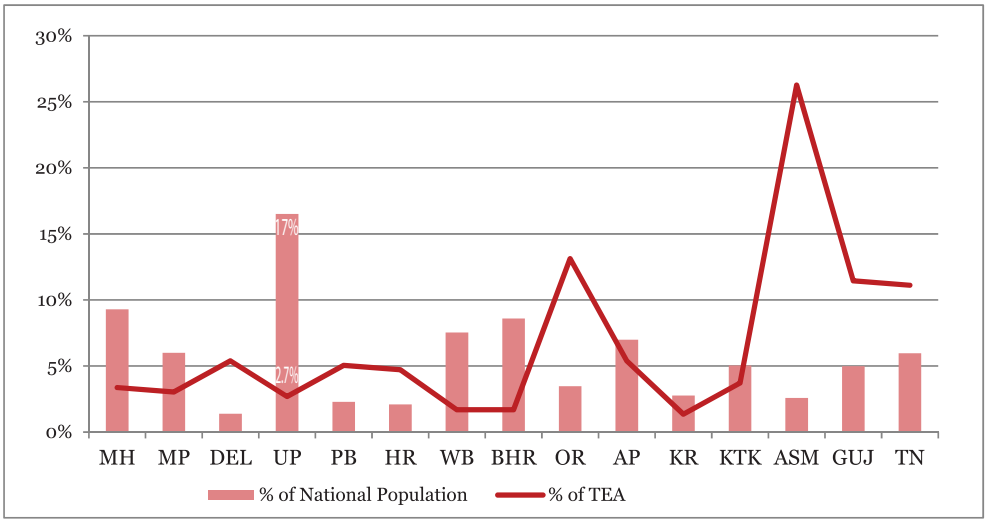
The entrepreneurial participation rates by different states are illustrated in Figure 30. The Total Early-stage Entrepreneurial Activity (TEA) is highest in Assam—32% of Assamese (adult population) are involved in early-stage entrepreneurship. Similarly, Gujarat and Tamil Nadu rank high on the entrepreneurial activity scoreboard, 18% and 21%, respectively. Figure 31 explains the contribution of states to national population as well as entrepreneurship. Uttar Pradesh and Maharashtra are the two largest states in India in terms of population size, 17% and 9% of national population live in UP and Maharashtra, respectively. However, only 3% of India's early-stage entrepreneurs are found in UP and Maharashtra. We see a similar situation for West Bengal and Bihar (2% of TEA *vis-à-vis* 9% of nation's population). Apart from Assam, Gujarat, and Tamil Nadu, Delhi and Orissa seem to have promising prospects toward entrepreneurship. Almost 5% of entrepreneurs come from Delhi, which accounts for only 1% of national population; 12% of Indian entrepreneurs belong to the Orissa cohort, while the state contributes only 3% toward the nation's population.

Figure 30: State-wise Distribution of TEA, 2013, Percentage of Adult Population (18–64 year)



**Bubble size equals size of state population*
Read as: 2% of adult population in Uttar Pradesh (UP) are involved in early-stage entrepreneurial activity

Figure 31: TEA by State, 2013, Percentage of TEA



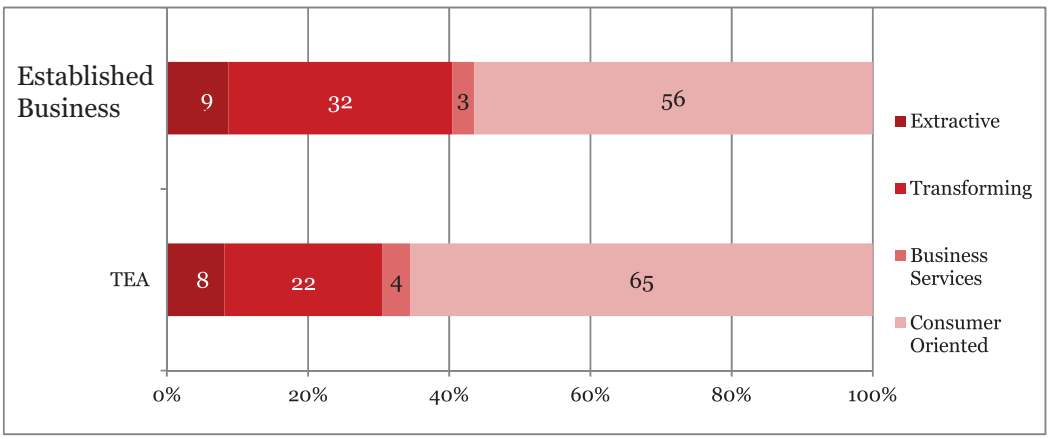
Read as: 17% of India's population is found residing in Uttar Pradesh (UP), and 2.7% of India's early-stage entrepreneurs is found in Uttar Pradesh (UP)

The above analysis suggests that more state-centric policies need to be adopted to promote entrepreneurship at regional levels. A 'one policy for all' approach would prove to be unsuitable in the Indian context.

3.7.5. Sector Decomposition

To analyze economic sectors in which entrepreneurs are engaged, GEM categorizes the sectors as consumer industries (health, retail, restaurants, etc.), business services (finance, insurance, real estate, etc.), manufacturing and construction, and extraction (farming, forestry, fishing, and mining). The figure illustrates the sector distribution of early-stage entrepreneurship and established businesses in India. The sector distribution of entrepreneurship in India is comparable with the rates in factor-driven countries. The majority of Indian entrepreneurs (65.5% of early-stage and 56.5% of established entrepreneurs) work in the consumer-oriented sector (Fig. 32). The proportion of entrepreneurs in the business services sector is an important benchmark indicator of economic development. This sector is usually characterized as being knowledge intensive. The proportion of the business service sector for innovation-driven countries is approximately 30%. By that benchmark, India is far behind at just 4%. An expansion in the business service sector contribution among Indian entrepreneurs is a mark of economic development. This is further supported by the distinction between the technology levels of the sector in which entrepreneurs operate. Practically all (99.5%) of early-stage entrepreneurs and established business owners (99%) indicated that they operate in the nil or low-tech sector (Fig. 33). As argued earlier, the business service sector is the one, which strongly correlates with the high-tech

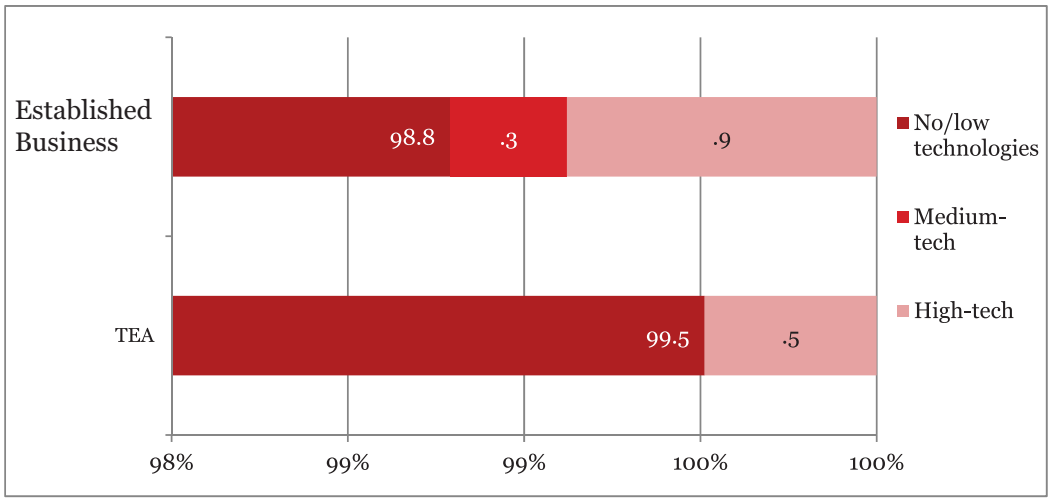
Figure 32: Sector Distribution, TEA, and Established Business, 2013



Read as: 65% of Indian early-stage entrepreneurs are engaged in activity in the consumer-oriented sector

space, which constitutes only 4% of the entrepreneurs. Hence, we see an extremely low value for operation in the high-tech sector (0.5% of early-stage entrepreneurship). It is also to be noted that high tech sectors are riskier ventures requiring higher seed investments. The risk-averse nature of Indian entrepreneurs may deter high entrants in this space.

Figure 33: Technology Sector, by TEA and Established Business, 2013



Read as: 99.5% of early-stage entrepreneurs are engaged in entrepreneurial activities related to the low technology sector

CASE STUDY # 1

E-commerce entrepreneurship has arrived big time in India with home-grown companies like Flipkart and Snapdeal competing with global giant like Amazon. Surprisingly some of the bigger names in Indian e-commerce industry hail from the same community known for its adeptness at trade and commerce.

The E-commerce Entrepreneurship in India—Redefining the Value Chain*

Even a decade ago, the name "Bansal" would have brought in images of coaching classes in Kota, Rajasthan, but today, it is the common factor binding the who's who of India's fledgling e-commerce sector. Five young men who answer to that name have emerged as trailblazers of Indian e-commerce, taking on global biggies like Amazon and eBay for top honors in the country's exploding market for online retail.

Online marketplaces Flipkart and Snapdeal, apparel retailer Myntra, and eyewear retailer LensKart have Bansals at the helm. Such is their clout that they account for nearly 80% of the total online retail pie of about $2 billion. However, their adeptness at trade and commerce is not a state secret. As a sub-sect of the Aggarwal community, the Bansals are known for running a tight ship when it comes to business and entrepreneurship. The five Bansals with their four companies—Flipkart, Myntra, Snapdeal, and LensKart—set up shop within the last seven years and have redefined the retail value chain within urban India.

However, they have to contend with the might of $75-billion Amazon, which entered India in 2013 and is investing heavily. Heading the fightback is Sachin Bansal, 32, and Binny Bansal, 31—founders of Bangalore-based Flipkart—who met each other while studying at IIT-Delhi. Today, their company generates about Rs. 6.1 billion in sales, half the industry total. Flipkart is also the biggest challenge for Amazon, where ironically both the Bansals honed their skills, before setting up on their own in 2007. Coming second is Snapdeal, whose founder Rohit Bansal, 31, graduated ahead of Sachin and Binny from IIT Delhi.

Mukesh Bansal, 38, who moved to India from Silicon Valley, started Myntra in 2007. His venture is targeting sales of Rs. 1.5 billion next fiscal from apparel sales, the largest in its category.

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*Source: http://articles.economictimes.indiatimes.com/2014-03-11/news/48118093_1_binny-bansal-sachin-bansal-flipkart

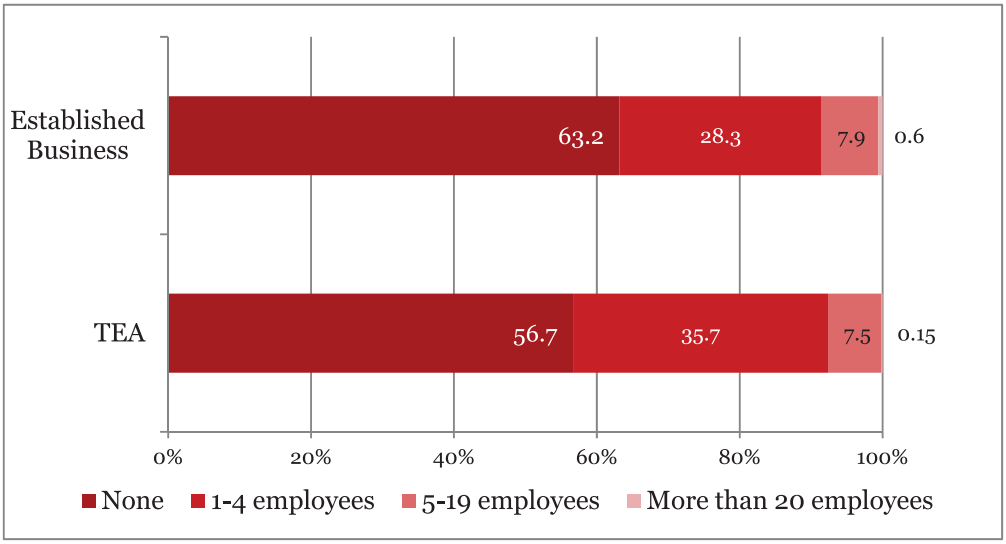
4. ENTREPRENEURIAL ASPIRATIONS

Economists are primarily concerned about value creation and contribution to economic development and growth and, therefore, measure entrepreneurship by its output and the specific functions it realizes. To begin with, entrepreneurial attitudes and perception captured the predictive aspect of entrepreneurship. Entrepreneurial activity, considering the number of enterprises established in various patterns, reflects the quantitative factor. Entrepreneurial aspirations enhance the entrepreneurship circle to give a comprehensive picture by answering the questions related to the quality of enterprises and the entrepreneur's level of ambition, which can serve as a good predictor of ensuing growth. A very high TEA value, without any growth potential will have little impact on economic growth and development. These aspirations are important because they contain information about the quality of a business. GEM assesses the level of entrepreneurial aspirations by capturing the following dimensions of growth: employment creation, product and process innovation, market concentration, and internationalization.

4.1. Employment Creation

The most important feature of entrepreneurial activity in an economy is its ability to create jobs. To estimate the growth aspirations, the most common proxy variable used is the company's expectation to hire new employees in the next five years. "Rapidly

Figure 34: Expected Job Growth (Persons) in Five Years



Read as: 57% of early-stage entrepreneurs expect to hire no employees in the next five years

growing companies" expect to create more than 20 jobs in the five years after creation of the business. Entrepreneurs with medium growth aspirations are those who expect to employ 5 to 19 employees in the next five years; finally, slow growth companies are those which expect to employ 0 to 4 employees. For already existing firms, an additional criterion is the increase in the number of jobs over 50%.

Figure 34 reveals that Indian entrepreneurs have low job growth orientations. More than 55% of total early-stage entrepreneurs do not intend to increase employment prospects. Of those expecting to generate employment opportunities, majority are slow growth companies, looking to hire 1–4 employees. The data confirms that no Indian entrepreneur expects to expand rapidly in terms of employment creation (more than 20 employees). The data also suggests that contrary to expectation, established businesses do not aspire to generate much employment creation opportunities.

4.2. Product and Process Innovation

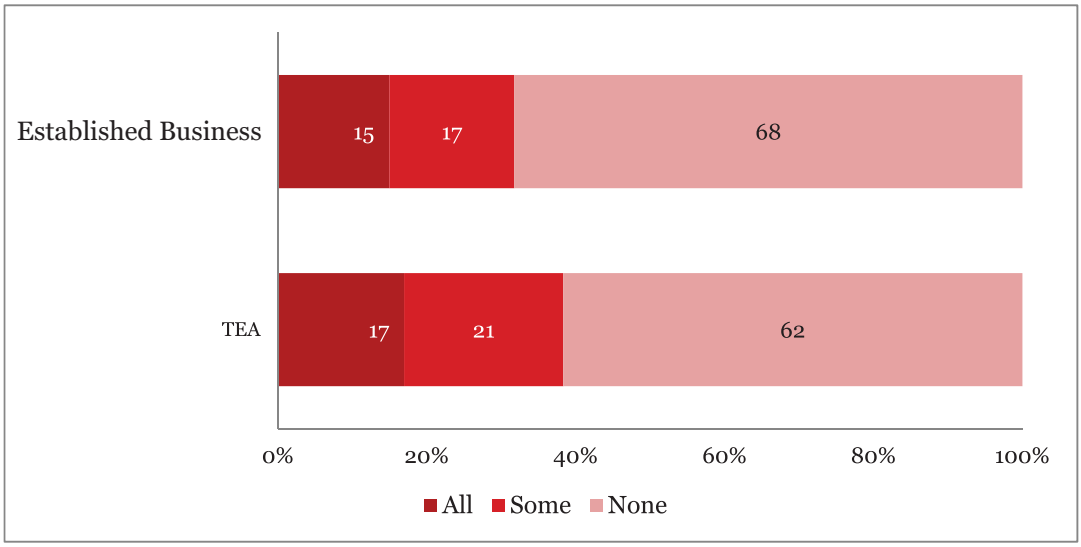
This dimension of growth aspirations rests on the Schumpeterian pillars of innovation. Schumpeter defined entrepreneurship as undertakings through innovation, which include, 'the introduction of new commodities, technological change in the production of existing commodities, opening up of new markets or new sources of supply, setting up new business organizations' (Schumpeter, 1911). The most important catalyst for growth perhaps is innovation. However, since innovation is a constantly changing process it is extremely difficult to measure the same. GEM uses two different ways to assess innovation: (1) innovativeness of the product or service (2) novelty of technology used.

Regarding the level of innovativeness of the product or service, the early-stage entrepreneurs indicate how many customers consider the product or service new or unfamiliar. Three levels of product innovation are distinguished: products/services that are unfamiliar to all (potential) customers, products/services that are unfamiliar to some (potential) customers and products/services that are unfamiliar to no (potential) customers at all. In 2013, 17% of Indian early-stage entrepreneurs introduced new products to customers and 21% noted that only some customers considered the products to be novel, while the remaining 62 were employees. The data confirms that no Indian of early-stage entrepreneurs and 68% of established businesses did not offer any innovative product to customers (Fig. 35).

One way to assess product innovativeness was to evaluate if the firm is offering a product with which none of the customers were familiar. Another metric to gauge product innovation is to consider whether the firm is offering a product, which no other company is offering. Respondents were asked to state how many businesses offer the same product as the one, which they were offering or planning to introduce in the market (Fig. 36). Only 11% of early-stage entrepreneurs indicated that no other firm or business offered the same product. The corresponding figure for established businesses was

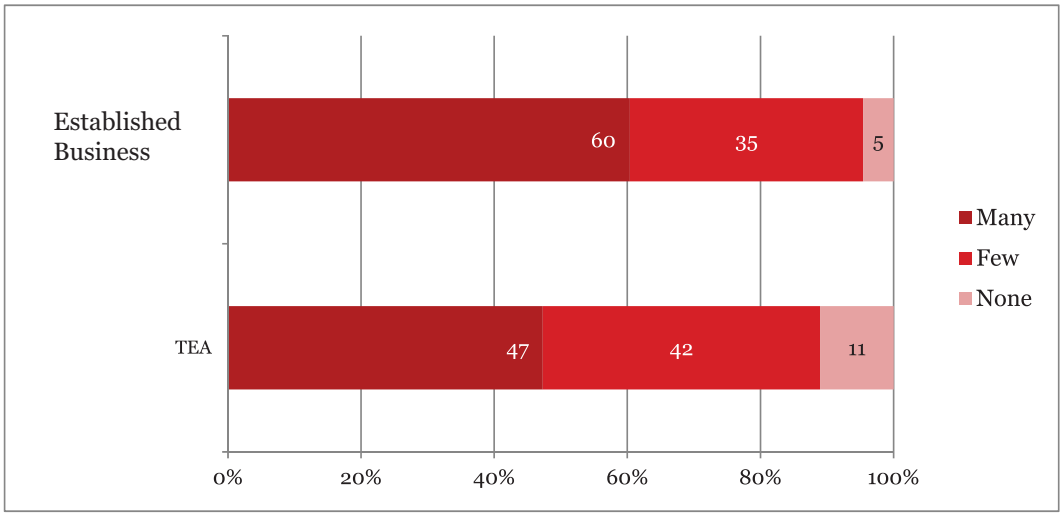
much lower, 5%. At the same time, a majority of Indian entrepreneurs evaluated a competitive environment.

Figure 35: Product Innovativeness, TEA, and Established Business, 2013



Read as: 17% of early-stage entrepreneurs indicated that their product was new to all customers

Figure 36: Product Competitiveness, TEA, and Established Business, 2013

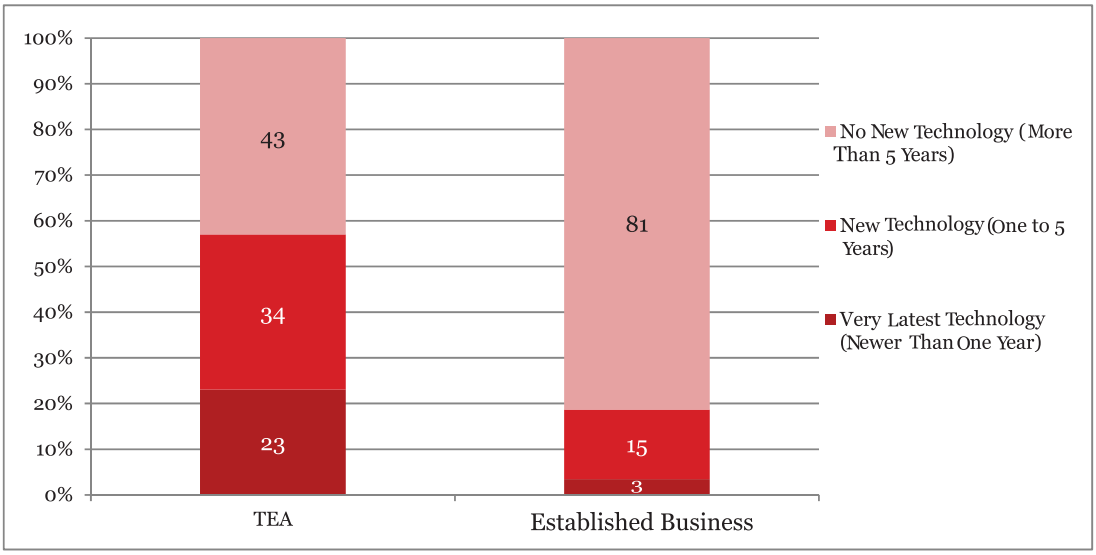


Read as: 47% of early-stage entrepreneurs indicated intense market competition, offering a product which many other firms offer as well

One explanation for the low indicators of product innovation is that a majority of the Indian entrepreneurs operate in the low-tech consumer-oriented sector, which is characterized by standardized products and services. These sectors are usually classified as perfect competition markets with close substitute products, or monopolistic competitive markets with marginally differentiated products. Hence, the scope of innovation is lower in these sectors.

This section focuses on the second way to assess innovation, i.e. process innovation or novelty of technology used. The GEM APS questions the newness of technology used by entrepreneurs. Almost 43% of early-stage entrepreneurs indicate that they do not use any new technology (Fig. 37). Almost two times, 81% of established entrepreneurs indicate that they are not involved in process innovation. Approximately 23% of early-stage entrepreneurs are involved in making use of latest technology, seven times that of established business. The distinctiveness between early-stage entrepreneurs and established businesses indicates the technological dynamism of emergent business in India. It can be inferred from Figure 37 that established businesses are not engaged in R&D and constantly innovating processes or adopting new technologies. This may be due to lack of adequate working capital, which is required to innovate constantly.

Figure 37: Use of Technology, TEA, and Established Business, 2013



Read as: 23% of early-stage entrepreneurs use the latest available technology in their business activities

The process innovation metric is, however, not a strong measure for assessing technology innovation. The indicator essentially captures usage of latest technology by

entrepreneurs. It does not distinguish whether used technology is innovated in-house or purchased from an external innovator.

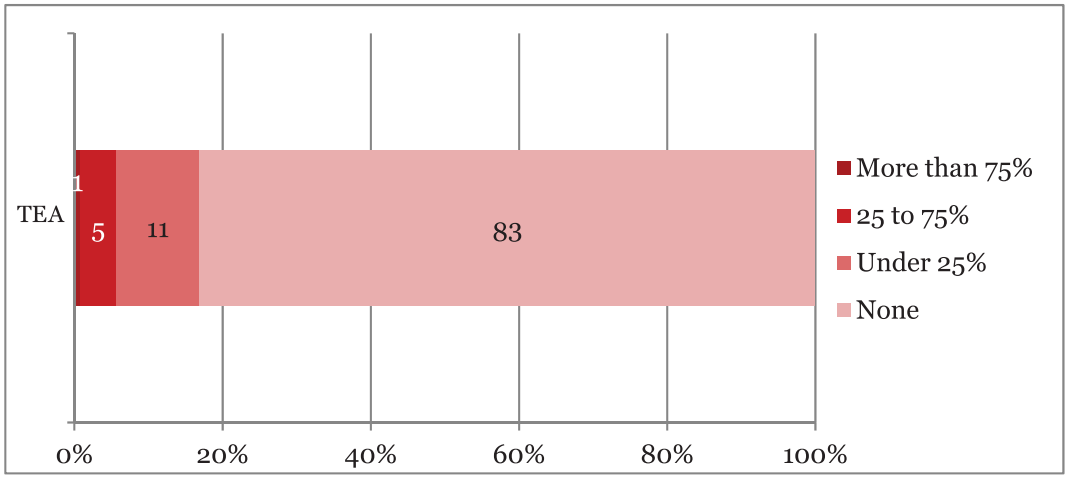
The low involvement in the high-tech space points toward a matter of concern. Policies need to be reformed to encourage incubation cells, increased R&D and knowledge spill-over to stimulate technology innovation. At the same time, since reinventing the wheel is not an optimal solution, technology imitation and transfer should be facilitated and made available at affordable prices.

4.3. Internationalization

The third dimension of growth aspirations refers to the international expansion of geographic scope to enter and compete in international markets. The export of goods and services suggests the competitive advantage of the firm to meet international standards and compete in the global market. In the GEM APS, the internationalization aspect is captured when entrepreneurs confirm that at least 25% of clients are foreigners.

India, however, ranks among the bottom percentile in terms of international growth aspirations. Almost 83% of Indian entrepreneurs cater only to domestic market as seen in Figure 38. Only 5% entrepreneurs aspire for international growth. Entrepreneurs need to be given appropriate and adequate incentives to establish export-oriented high impact firms, which is critically important for the country's current account deficit and balance of payment problems.

Figure 38: TEA by Export Intensity, 2013



Read as: 5% of early-stage entrepreneurs export at least 25% of their goods and services

5. SPECIAL FOCUS TOPIC 2013—YOUTH ENTREPRENEURSHIP

5.1. Introduction

The prime motive behind this special focus is to highlight the importance of youth unemployment, especially in the light of rising global youth population. As the UN Secretary General recently highlighted, 'this generation of youth is the largest in history'. The world will need around half a billion jobs by 2030, as more and more young people join the labor market. This demographic trend unfolds against a backdrop of weak economic recovery and escalating youth unemployment and underemployment rates. "To help meet this challenge, we should encourage, educate, and empower young entrepreneurs[4]." The changing demographic profile in many countries is also leading to a significant increase in youth population, which in turn adds to cumulative youth unemployment. Youth-driven unrest in countries such as Egypt and Tunisia means that research into youth and entrepreneurship is becoming even more important. By 2015, 660 million young people will be looking for work[5]. With the formal sector in many countries experiencing stagnant or extremely slow growth, it is unlikely that this sector will be able to offer work opportunities to the increasing number of young people looking for employment. Unless alternative employment options are encouraged, the number of unemployed youth, underemployed youths, and youth in vulnerable employment will continue to increase. The traditional job for life career path has become rarer and youth entrepreneurship will need to be seen as an additional way of allowing the youth into the labor market and promoting job creation.

It is estimated that each year 121 million young people turn 16 years old, of which 89% will potentially be searching for work in developing regions. With 73 million young people already unemployed and an estimated 1.1 billion new potential workers expected between 2012 and 2020, youth unemployment is likely to become an even greater problem over time. The impact of the global economic recession on the state of youth unemployment is emphasized in the ILO's Global Employment Trends for Youth 2013 publication which estimates that the global youth unemployment rate, estimated at 12.6% in 2013, is close to its crisis peak.

In the light of the above discussion, a spotlight on youth entrepreneurship becomes even more important for a country like India, which boasts of one of the largest and the youngest workforce in the world, with 65% of Indian population is under 35 years of age. India's demographic advantage is expected to last till year 2050. India's demography represents both great opportunity and mammoth challenge for developing and nurturing entrepreneurship. In this regard, governments are rightly concerned about rising levels

[4] Generation Entrepreneur, Youth Business International and GEM publication

[5] Generation Entrepreneur, Youth Business International and GEM publication

of youth unemployment and underemployment not only because of the direct economic costs (loss of economic output and financing unemployment benefits), but also due to the social impact of joblessness as manifested by increased crime, mental health problems, violence, drug taking and social exclusion.

Young job seekers make up 49% of the total unemployed in India[6]. The Worker Population Ratio[7] (WPR) among young people during the past two decades indicates that it has been declining. It declined 9 percentage points, from 55.5% in 1983 to 46.0% in 2004–2005. The decline in WPR during this period was sharper among male youth (11.4% points) in general and rural male youth (12.4% points) in particular, whereas the decline in the WPR of female youth was very minimal. The WPR of urban female youth remained almost constant between 1983 and 2004–2005. The decline in WPR was higher among rural youth compared to their urban counterparts. The unemployment rate for the youth labor force in India was as high as 8%, according to usual status, in 2004–2005 and it shows an increasing trend. In terms of the level of education, the unemployment rate was highest among young graduates at 35.5% according to the usual status in 2004–2005[8].

While entrepreneurship should not be considered to be the perfect solution that can solve unemployment and all other social problems, a number of positive benefits resulting from entrepreneurial activity are summarized by Chigunta et al. (2005). These include the revitalization of local communities, increased competition, and employment.

For the purpose of this section, the youth is defined as individuals between the ages of 18–34 years. The prime focus of this segment is to determine the size of young potential, intentional, and active entrepreneurs; to study the profile of youth early-stage entrepreneurs in India, and finally to assess the factors constraining and fostering youth entrepreneurship in the country.

5.2. Findings

5.2.1. Attitude

It is envisaged that youth entrepreneurship is associated with a higher opportunity cost as it involves forgoing the alternative jobs attracting the youth labor force. This opportunity cost is proposed to be negatively correlated with the social attitude of the youth toward entrepreneurship, reflected through the following parameters:

- Entrepreneurship is considered as a desirable career choice
- Opinion about the level of status entrepreneurs have
- High media attention given to successful entrepreneurs

[6] Sinha, Pravin, “Combating Youth Unemployment in India”, 2013

[7] Ratio of workers to the population of that age group

[8] Sinha, Pravin, “Combating Youth Unemployment in India”, 2013

A more positive attitude toward entrepreneurship is expected to mitigate the high opportunity cost. Table 7 shows that overall Indian youth has a more positive attitude toward entrepreneurship compared to their adult counterpart.

Table 7: Attitude toward Entrepreneurship, Youth vs Non-youth Population

	Youth Population	Non-youth Population
Desirable Career Choice	63	60
Status	72	68.6
Media	64	58

5.2.2. Potential and Intentional Youth Entrepreneurs

Table 8 shows the three determinants of potential entrepreneurship of youth population in India. A little higher proportion of youth (43%) perceives good start up opportunities in the next six months in the areas where they live, relative to 39% of non-youth population. The exponential growth in social media and networking, high penetration of mobile technology and Internet can be seen as a major factor contributing toward a relatively higher rate of perceived opportunities compared to the older age cohort.

However, the youth, relative to non-youth counterparts, does not vary much in terms of possessing the requisite skills and capabilities to start a business and fear of failure. This paves way for capacity building and training among the Indian youth.

Table 8: Entrepreneurial Perceptions, 2013; Percentage of Adult Population (18–64 years)

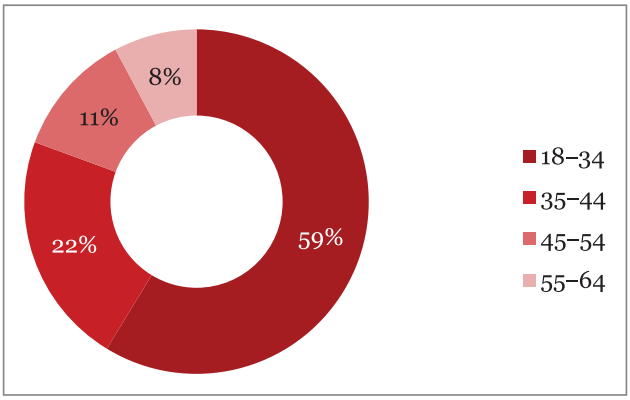
	Youth Population	Non-youth Population
Perceived Opportunities	43	39
Perceived Capabilities	55	56
Fear of Failure	38	38

5.2.3. Entrepreneurial Intentions among Youth

The above figures evidently show that Indian youth has a higher entrepreneurial potential compared to the non-youth population. However, potential does not necessarily guarantee intentions. Those that do decide to pursue the opportunity perceived, become intentional entrepreneurs. Entrepreneurial intentions are important as they predict the decision of the individual to ultimately become an entrepreneur. Respondents in GEM's survey (excluding those already involved in entrepreneurial activity) were asked if they had intentions to pursue a business opportunity within the next three years. The rate of entrepreneurial intentions in the youth population stands at 25% in 2013. This is to say that 25% of Indian

Youth (18–34 years) have intentions to start a business in the next three years. Figure 39 demonstrates the distribution of entrepreneurial intentions across total adult population (18–64 years), the youth cohort determines almost 60% of entrepreneurial intent.

Figure 39: Distribution of Entrepreneurial Intention across Age Groups

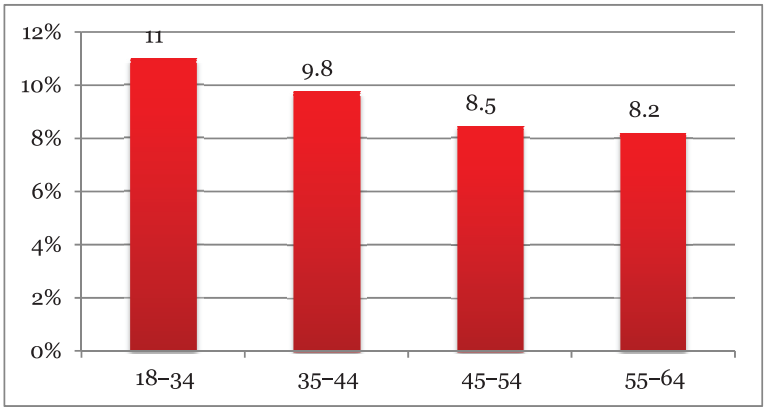


Read as: 59% of entrepreneurial intent is displayed by the Indian youth (18–34 years old)

5.2.4. Total Early-stage Entrepreneurial Activity

In India, 11% of the youth population are nascent entrepreneurs, involved in total early-stage entrepreneurial activity (Fig. 40). The youth segment comprises 55% of total early-stage entrepreneurs in India.

Figure 40: TEA Rates for Different Age Groups



Read as: 11% of Indians belonging to the age group 18–34 years (Youth population) are engaged in early-stage entrepreneurship

India's high unemployment rate in the youth (49%) means that more jobs need to be created since the existing public and private sectors are not going to be able to absorb a surplus labor force, and alternative means such as entrepreneurship need to be pursued. However, with just 11% of the youth being involved in entrepreneurship, India's youth unemployment rate coupled with the confronting demographic dividend that the country is undergoing, it is going to be a threatening challenge to overcome.

Gender

The gender gap seen in the case of total adult early-stage entrepreneurship is reflected in youth entrepreneurship as well. Almost 14% of young males and 7% of young females are involved in early-stage entrepreneurial activity. These findings should not be treated as a surprise given the Indian culture, where the average age of women getting married is 21 years. Indian women give more emphasis to family ties and relationships. They rely more on the extended family, compared to the male counterpart (Brush, 1992; Greve and Salaff, 2003; and Justo and DeTienne, 2008). The emphasis given to family is higher during initial years of marriage, thus reducing work opportunities for such groups.

Motive

The opportunity and necessity motive is of prime importance in the case of youth entrepreneurship given the demographic dividend coupled with high youth unemployment rates. Almost 42% of early-stage youth entrepreneurs believed that they started their business because of lack of alternative options (necessity driven), whereas 55% were driven by opportunity motives. In comparison to this, non-youth entrepreneurs are twice more likely to be opportunity-driven entrepreneurs—63% are opportunity driven relative to 36% being necessity driven. The proposition that a high proportion of necessity entrepreneurship raises a concern given it is considered less profitable than opportunity motivated businesses is consistent with the GEM literature. Although it is accepted that increasing the number of opportunity-motivated businesses would have a positive impact on both the financial resources of the owners and the unemployment rates in India; given the demographic profile of the country facing the challenge of rising youth unemployment, necessity entrepreneurship helps in mitigating the negative impact of high unemployment.

Education

As we have already discussed in section 3.7 above, education plays a role in early-stage entrepreneurial activity. In case of Indian youth, it is observed that those with higher levels of education are more likely to be involved in early-stage entrepreneurship.

5.2.5. Source of Funding

Apart from the above socio-demographic characteristics, we highlight certain interesting findings pertaining to youth entrepreneurs in India in the section below.

The GEM survey asks the respondents—how much money in total will be required to start the business. The results illustrated in Figure 41 indicate that 60% of start-ups require initial capital of not more than 100,000 INR (approx. 1,700 USD). Only 3% start-ups require high initial investment to the tune of 1 million INR. The high concentration of start-up businesses toward small cap projects may indicate necessity-driven nature of the business.

Figure 41: Start-up Capital Requirement of Youth Entrepreneurs, 2013

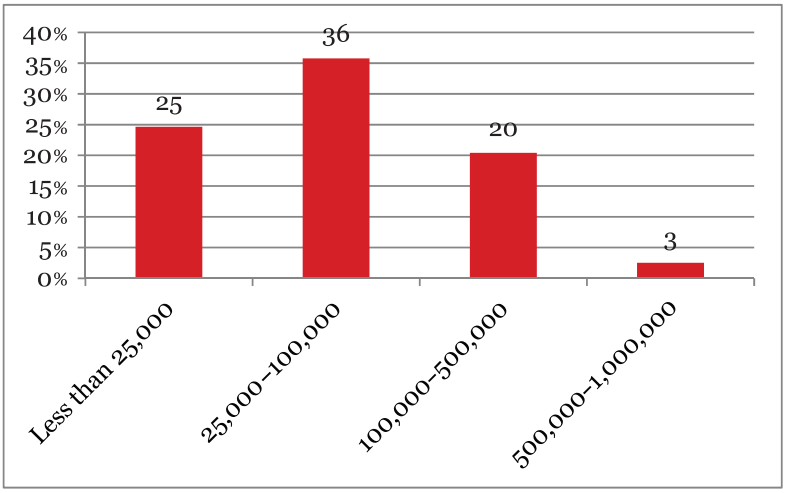
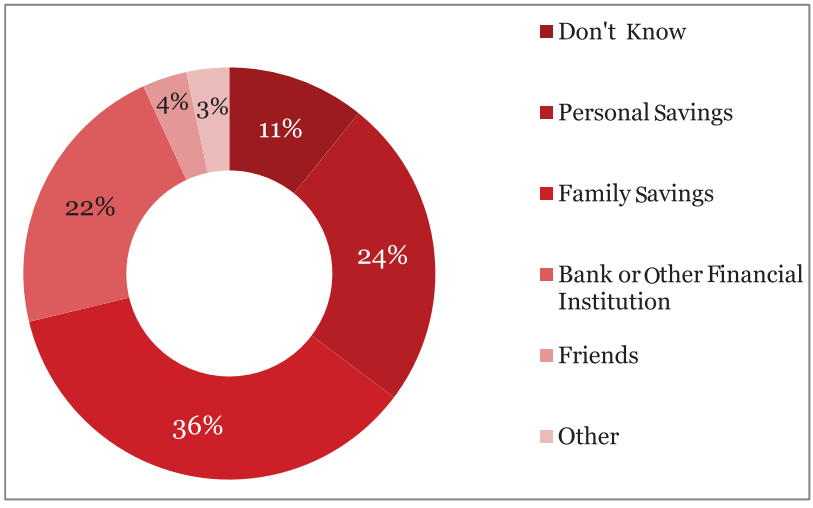


Figure 42: Source of Funding for Youth Entrepreneurs, 2013



5.2.6. State of Business

In this passage, we try and capture the qualitative aspect of youth-driven ventures. Respondents were asked to comment on the state of their existing businesses. Almost

Figure 43: State of Business Started by Youth Entrepreneurs, 2013

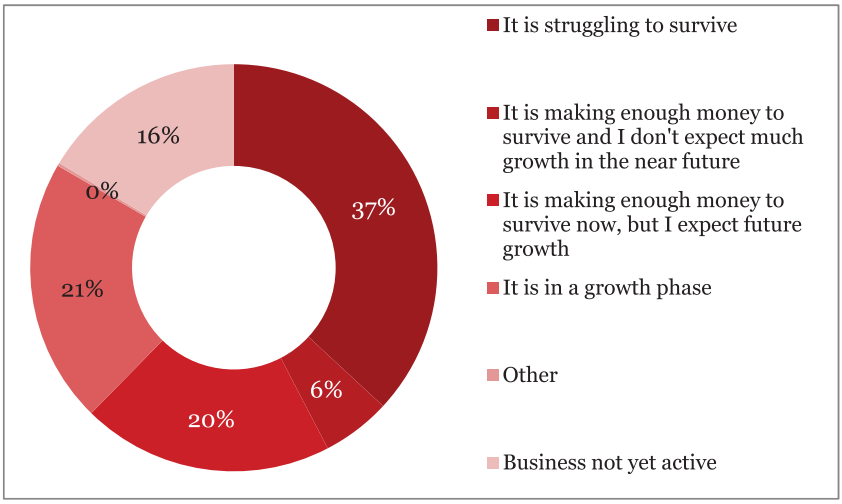
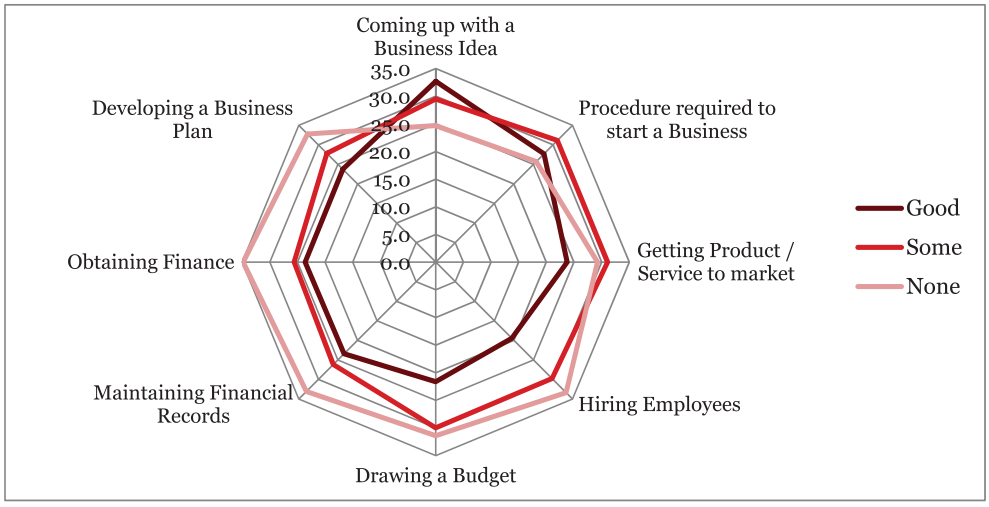


Figure 44: State of Knowledge of Business Areas by Youth Entrepreneurs



Read as: 33% of youth entrepreneurs indicated that they have a good knowledge of coming up with a business idea; 31% indicated that they have fairly some knowledge about procedures required to start a business; 33% indicated they have no knowledge about developing a business plan

37% of youth entrepreneurs are struggling to survive and another 40% are expecting a growth (Fig. 43). This indicates that efficient training needs to be directed toward youth nascent entrepreneurs to assist them survive and grow. Further respondents were asked to comment on their state of knowledge of the building blocks of setting up an enterprise, classified as having a good knowledge, some idea or no knowledge at all. Figure 44 illustrates that 35% of youth has no knowledge in areas of recruitment, finance, and business planning, all three of which are considered as inhibiting factors. This analysis further helps in directing specific training to targeted youth population in specific areas requiring skill development.

Summary of Youth Entrepreneurship

Sluggish growth and high unemployment have created a global perception of negativity. Within this environment, it is even more difficult for governments to work toward limiting the negative and possibly long-term effects of youth unemployment. The financial crisis has had an enormous impact on the global employment and business environment. The ability of young people to perceive good business opportunities in this climate is challenging, however governments, the media and educational institutions need to manage young people's expectations, without which young people are less likely to see themselves as potential entrepreneurs.

6. SPECIAL FOCUS TOPIC 2013—ENTREPRENEURSHIP AND NETWORK

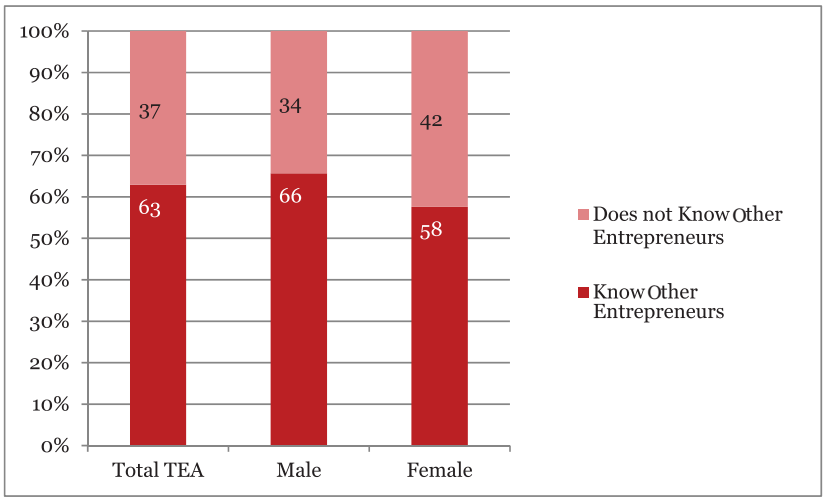
6.1. Introduction

The entrepreneurship research has pointed to the importance of personal and social networks, to entrepreneurs (Johannisson, 1990 and Arenius and DeClercq, 2005). In their works, Christensen and Peterson (1990), Singh et al. (1999), and Granovetter (1985) argue that knowing other entrepreneurs and increasing social interaction with others in general is a potential source of acquiring additional information and knowledge and perceiving new ideas and opportunities. Networks serve as a resource for tacit knowledge, which may include knowledge on the start-up processes; access to business contacts and emotional support from people with similar career interests. Networks and peer groups enhance entrepreneurial confidence by providing advice, support, and setting examples. Scholars like Djankov et al. (2004), Ardagna and Lusardi (2008), Klyver et al. (2007), Davidsson and Honig (2003), Morales-Gualdron and Roig (2005), Arenius and Kovalainen (2006), De Clercq and Arenius (2006), and Menzies et al. (2006) find evidence for a strong effect of social networks/knowing other entrepreneurs in determining entrepreneurial behavior.

6.2. Findings

The GEM data provides evidence to the above proposition. Figure 45 shows that 63% of early-stage entrepreneurs knew other entrepreneurs. The graph displays network effects related to gender differences as well, although not so significant. Almost 66% of male entrepreneurs are connected to entrepreneurs within their social networks, whereas 48% of female entrepreneurs personally know other entrepreneurs.

Figure 45: Nascent Entrepreneurs Displaying Network Effects—Knowing Other Entrepreneurs



Read as: 66% of male entrepreneurs know other entrepreneurs

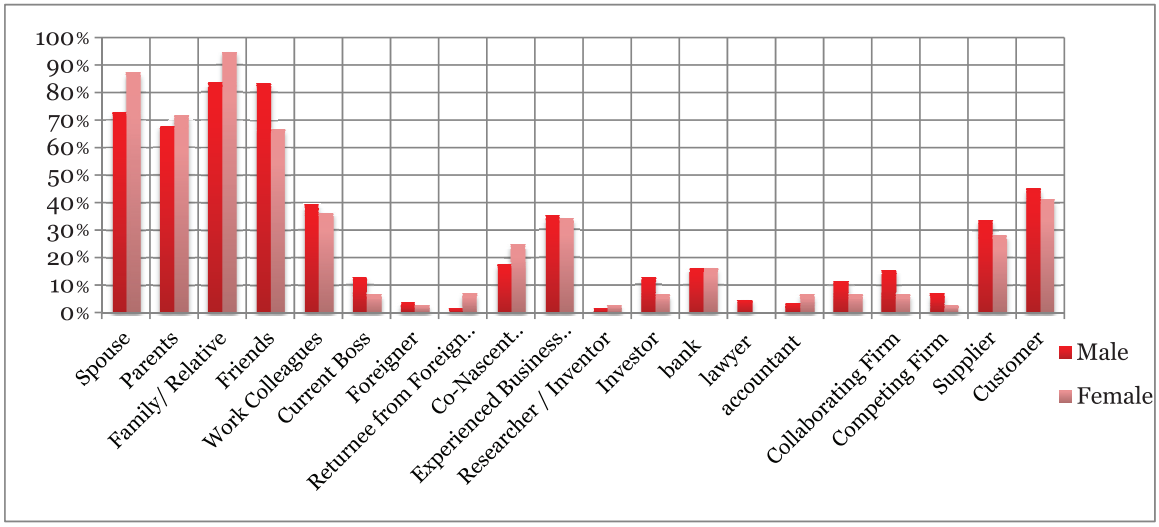
6.2.1. Network Composition

Network is an important component of entrepreneurship ecosystem. Network provides informal and formal support, resources, and risk capital for budding entrepreneurs. Network plays a critical role in matching resource suppliers (Funds, Expertise, and Skills) and resource consumers (start-ups, SMEs). Some of the formal and informal networks are as follows:

- **Community Network:** Informal community networks have been a great source of support for spawning entrepreneurship in India. For example, 'Marwari' community in India is famous for their in-community support to entrepreneurial activity.
- **Alumni Network:** IIT, IIMs, and other premier educational institutions' alumni network are now powerful enough to support entrepreneurship. However, their influence and commitment remains within their group. But these alumni networks are likely to play a bigger role in entrepreneurship development at large.
- **Angel Network:** Angel funding is crucial to early-stage development of a business idea. Angel funding is still individual or network driven in India as opposed to institution-driven venture capital (VC). For example, Mumbai Angels is one of most vibrant angel network in India which is supporting start-ups in scaling up.
- **Entrepreneurs' and Industry Forums:** Industry sectors, like e-commerce, telecom, retail, etc. have their own strong industry forums which provide resources to companies. These industry forums are critical as the entrepreneurial activity in these sectors is very high in India. However, the influence and extent of support of these forums is limited.
- **Educational Institutions:** Educational institutions can play an important role in creating an enabling environment that encourages entrepreneurship over careerism. Some institutions in technological and management streams have robust incubation programs. These programs have supported some successful ventures. However, educational institutions will have to play a bigger role in creating culture of 'entrepreneurship by choice' by making requisite changes in curriculum, addressing behavioral aspects of career decisions and providing more resources to incubation programs.
- **Government Institutions:** Entrepreneurship is not a major focus area of policy in India. It remains an incidental subset of economic policy unlike countries like USA, Israel, China, etc. For example, in Israel, there is vibrant technological incubator program and attractive incentives for funding entrepreneurial ventures. Physical infrastructure represents another major challenge as manufacturing ventures face high costs which make them uncompetitive vis.-à-vis. East Asian countries and China. Even in the technology sector, where entrepreneurial activity is relatively higher, Indian firms are facing challenges due to delayed reforms in telecom sector and poor internet bandwidth infrastructure.

Networks may comprise family, friends, work colleagues, professional advisers, and other informal channels. Figure 46 shows that men and women entrepreneurs in India primarily use their immediate personal network for advice, comprising of spouse, parents, family, relatives and friends. Both men and women entrepreneurs ranked family and relatives as their dominant source of advice, 95% women entrepreneurs and 84% male entrepreneurs received advice from their family and relatives. Interestingly women ranked spouse as the second most important source of advice (87%), while Indian men ranked friends as more important than spouse (83%). On the contrary, entrepreneurial networks do not rank high; although 63% of early-stage entrepreneurs claim to personally know an entrepreneur who started a business in the previous two years; only 20% of nascent entrepreneurs asked for advice from other budding entrepreneurs, and 35% received advice from experienced business men. Overall, the use of network seems to be rather similar for men and women entrepreneurs.

Figure 46: Networks of Entrepreneurs, by Gender



7. ENTREPRENEURIAL FRAMEWORK CONDITIONS

Entrepreneurship is not merely an intrinsic pursuit of the entrepreneurs in isolation of external factors. The success or failure of entrepreneurs is influenced by the entrepreneurial ecosystem around them. Such an ecosystem is made of policies, institutional framework, and supporting mechanisms, which may facilitate the incidence of entrepreneurship in the country. A variety of adverse factors may also form part of the ecosystem, manifested in the form of difficult economic conditions, inability to raise financial resources at affordable cost of capital, risk-averseness, and socio-cultural value system of the society, which might be antagonistic to the entrepreneurial class. It is an established phenomenon that the level of entrepreneurial activity in a country has backward linkages with the conditions affecting entrepreneurship, defined by the Global Entrepreneurship Monitor (GEM) as—Entrepreneurial Framework Conditions (EFCs) and forward linkages with the country's economic growth and development.

In this section, we attempt to evaluate the entrepreneurial ecosystem of India, based on the National Expert Survey (NES). GEM classifies nine conditions for EFCs—which reflect fundamental characteristics of the socioeconomic context that aid the development of entrepreneurial activity. To assess the national conditions influencing entrepreneurial activity at least 36 experts in each country completed a closed questionnaire on factors relating to our entrepreneurial environment. The responses are measured on a 5-point Likert scale where a score of 1 is completely false and 5 is completely true. The statements are phrased so that a score of 4 or 5 would indicate that the expert regarded the factor as positive for entrepreneurship, while a score of 1 or 2 would indicate that the expert regarded the factor as negative for entrepreneurship.

The National Expert Survey provides insights into the ways in which these EFCs foster or constrain an entrepreneurial environment and level of activity. These EFCs are presented in the chart below.

ENTREPRENEURIAL FINANCE
• Availability of financial resources and support, equity and debt, grants and subsidies, and other sources for new and growing firms.
GOVERNMENT POLICY
• The extent to which Government policies such as taxes and statutory regulations are conducive to encouraging new and growing firms. Availability of state support for small and large firms.
GOVERNMENT ENTREPRENEURIAL PROGRAMS
• Existence, effectiveness and efficiency of Government programs and administrators to support entreprenurship. Access and quality of such programs.

EDUCATION AND TRAINING
• The extent to which entrepreneurial education and training is incorporated in the overall education system: primary and secondary schooling as well as university level.
R&D TRANSFER
• The level of development of research and development (R&D), which leads to the creation of new commercial opportunities for business. Also the availability of R&D products to new, small, and growing firms.
PHYSICAL INFRASTRUCTURE
• The accessibility and quality of physical infrastructure—communications (phone, mail, Internet), communal services, transportation (roads, rail, air, and marine), land, real estate, rental market and natural resources—that can provide advantages for potential entrepreneurial growth and development.
COMMERCIAL INFRASTRUCTURE
• The degree of commercial, accounting, and legal services and organization that support new, small, and growing businesses.
MARKET OPENNESS
• The degree of free entry and exit of new firms in the market, market dynamics, and frequency of change.
CULTURE & SOCIAL NORMS
• Existing social and cultural norms that support entrepreneurs and entrepreneurship.

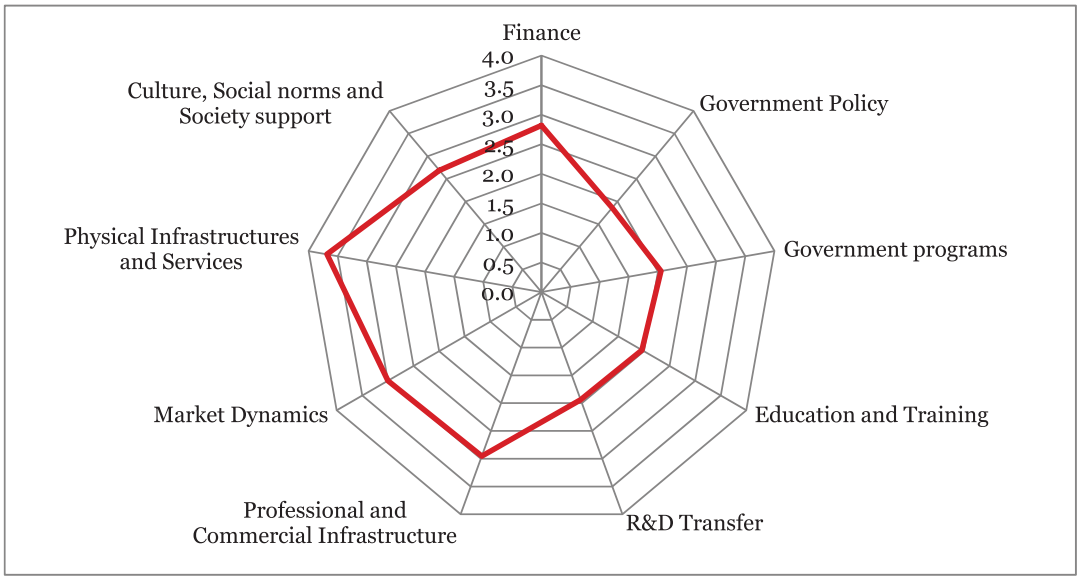
7.1. Entrepreneurial Ecosystem in India

Figure 47 shows the scores for the nine dimensions for India. Figure 48 shows the comparative analysis of each dimension score relative to the mean NES score for India, measured at 2.5 on Likert scale.

We first describe the results for the Indian data and, then, compare these results internationally with factor-driven countries and BRIC nations.

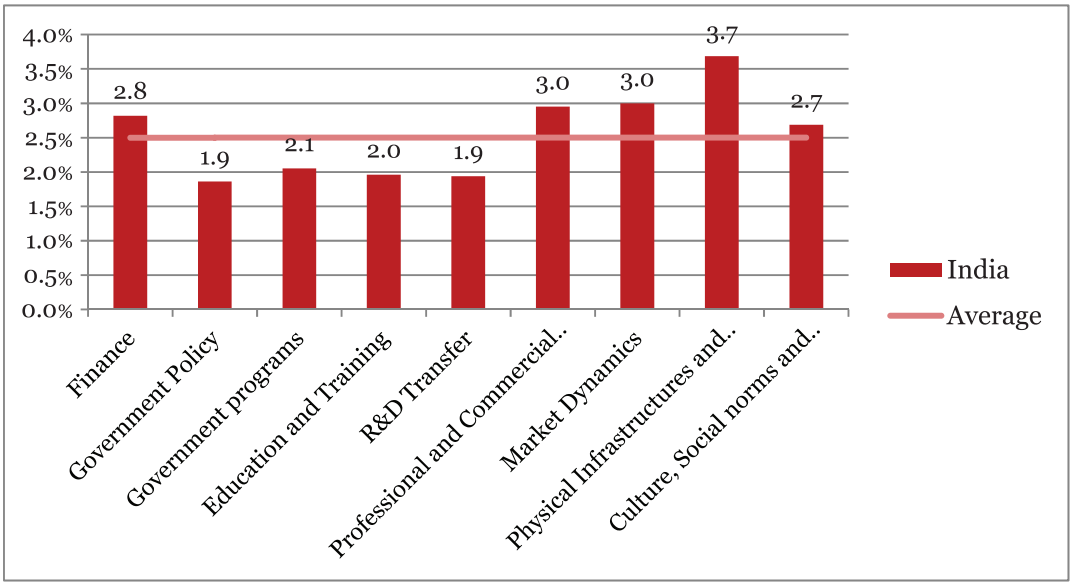
A leading remark is that none of the entrepreneurial framework conditions stand out as a clear propeller for entrepreneurship in India. The physical infrastructure services receive the highest scores from Indian experts (3.7). Experts consider government policy, government programs, education and training and R&D transfer as ecosystem conditions that are not conducive to entrepreneurship in India (in terms of score below 2). On the other hand, there are framework conditions with scores between 2 and 3, indicating a more or less neutral influence on the opening of new businesses; finance, professional and commercial infrastructure; market dynamics, and culture and social norms.

Figure 47: Average Expert Scores—NES, 2013



Read as: The figure indicates the scores for nine dimensions for India. 4 and 5 denote high scores, indication that the EFC under survey fosters the entrepreneurial environment; 1 and 2 denote low scores, indicating that the particular EFC constrains the entrepreneurial environment; median scores are between 2 and 4.

Figure 48: Average Expert Scores, NES, 2013



7.1.1. Finance

First, we observe that the financial support framework condition receives a score of 2.8, just above the average score (2.5). In particular, experts gave low scores (2.4) on the availability of funding for new and growing firms through Initial Public Offerings (IPOs). Stock market volatility has made IPOs very difficult to time, as companies looking to go public don't have a window of certainty to go out and price themselves. Approximately 62% of experts disagreed with the statement that there was sufficient funding available through IPOs for new and growing firms. Notwithstanding the impact of the global financial crisis, Indian capital markets have not been able to match the growth story witnessed ever since the liberalization of the economy till 2008. In the financial year 2013, while India nearly did not contribute anything, with respect to the amount of capital raised, toward global IPO share (0.2%), China contributed almost 10% of the global capital raised in IPOs, and BRIC nations collectively accounted for 16% of the global capital raised in IPOs[9]. The above statistics provide an interesting insight into the growth trajectory of the Indian capital markets and its future role in the financial world. From 2008 to 2010, the amount raised by IPOs in China increased by 250%, but in India, there was no substantial increase[10]. The low scores on the IPO parameter substantiate the indication that the Indian capital market is losing its growth momentum in the post-crisis financial world. Performance of a nation's capital market is reflected not merely by the performance of its secondary market and indices of stock exchanges, but also by the positioning of the market in the global financial circle in terms of reputation and presence of foreign companies, which in turn is governed by the regulatory framework of the nation. In India, there still remains a plethora of disclosure requirements and restrictions on issuers, which at times makes it difficult for them to implement their decision to go public. Recent regulatory changes in India present interesting opportunities for private companies wishing to raise capital overseas. In September 2013, the government announced that domestic companies would be allowed to list directly at overseas exchanges. The move is expected to boost capital.

Moreover, 50% of the experts also indicated the inadequacy of government subsidies available for new firms (2.6). Debt and Equity funding received modest scores of 2.7 and 2.8, respectively.

[9] *2013 Global IPO Update, published by Ernst and Young*

[10] *Global IPO Trends 2011, published by Ernst and Young*

Experts claimed that the more accessible source of financing was friends, relatives, and colleagues (3.0) and venture capital (2.98). While it is true that traditionally debt financing has been more popular in India, in the current scenario VC and PE funds are increasing steadily as well. Investor sentiment regarding the relative attractiveness of markets changes quickly over time, as demonstrated by the results of the Emerging Markets Private Equity Association's annual investor survey. The 2012 results show that India ranks sixth (out of 10) with respect to market attractiveness for private equity investments; while its BRIC counterparts—Latin America (ex-Brazil), Brazil and China—lead the rankings. In contrast to China, Brazil, and Russia, India is a difficult market for traditional private equity strategies. Challenges faced by investors include significant competition for deal flow, a persistent mismatch between private and public company valuations, a difficult exit environment, and an increasingly hostile political and fiscal environment. Although India lost its standing as the fastest growing private equity markets in Asia, declining at a rate of 30% in 2012[11], there is no doubt that private equity has become an important source of persistent capital in India. The number of deals increased by 4% in 2012, indicating the growing acceptance and preference for private equity investment by promoters and entrepreneurs.

Venture capital investments are more visible in the knowledge-intensive sectors, while debt financing has a wider coverage. The millennium year saw the emergence of India-centric VC firms in India. India has seen the most growth among the BRIC nations with respect to venture capital deal activity. The proportion of the number of BRIC venture capital deals represented by India has increased significantly in the last four years, from 31% in 2008 to 55% in 2012[12]. The number of venture capital deals taking place in India has grown from 120 in 2010 to 201 in 2011 and 282 throughout 2012[13]. However, a significant drawback facing India is the time of investment, and more early-stage venture funding is required in the form of seed and angel funding.

[11] India Private Equity Report 2013—Bain & Company

[12] Private Equity Investments in Emerging Markets-Capstone Partners

[13] Private Equity Investments in Emerging Markets-Capstone Partners

CASE STUDY # 2

Early-stage funding is critical for a lot of business ideas to be tried and possibly be successful. While venture funding of proven business ideas and concepts has been relatively easier,seefunding is now gaining ground in India. This has potential to change the landscape of entrepreneurial ideation.

Funding Avenues for Indian Start-ups*

Two of India's top early-stage investors, Kae Capital and Blume Ventures, are raising new funds within two years of inception with an aim to create new pools of capital to support fledgling ventures.

These funds are looking to bridge the gap between abundant seed funding and slightly scarcer venture capital in India's booming start-up ecosystem. The two Mumbai-based firms will begin the process of raising new funds by June. "The larger fund will primarily help invest in follow-on rounds," said Sasha Mirchandani, founder of Kae Capital. "The new fund will certainly be larger than the current $25 million," he said.

Blume Venture, which raised ` 1 billion from domestic investors in July 2012, expects to raise $50 million for its second fund, this time around the fund will also raise money from foreign institutional investors. "You can only go deep when you have the money and do not have to sit on the sidelines," said Karthik Reddy, cofounder of Blume Ventures which has invested in companies such as car-rental service Taxiforsure, robotics services provider Grey Orange Robotics, and cleantech firm Carbon Clean Solutions.

In the past two years, there is a sharp increase in the number of seed-funded start-ups looking for the next round of funding in India with the proliferation of angel networks and accelerators. There are about a dozen active accelerators and about six major angel network groups in the country.

However, many of the start-ups backed by them do not have the requisite size to be attractive enough for venture funds that typically provide the next level of capital. Last year, while the number of seed and angel deals doubled to 226, the number of first-round venture capital deals dropped to 61 from 128 in the previous year, according to industry estimates.

This rising imbalance that the industry refers to as the "series-A crunch" is what has prompted seedfunds like Blume and Kae to step up and bridge the gap. A number of other early-stage investors are also heading in a similar route.

*Source:http://economictimes.indiatimes.com/news/emerging-businesses/startups/investors-expand-capital-funds-to-support-startups/articleshow/32322135.cms

7.1.2. Government Policy and Programs

Second, government policy receives the lowest score of 1.9 followed by government programs at 2.1. In fact, experts consider the unfavorable government policies and programs as the prime constraining factor to fostering entrepreneurship in the country. Experts are of the opinion that fulfillment of state policy is one factor negatively influencing entrepreneurial development in the Indian context. It is important to mention that the experts gave the lowest scores on the statement that new firms can get requisite licenses within a week's time (1.27). Another critical area is red tapism and bureaucracy (1.48). Experts also hold a low opinion of government programs and policy supporting and favoring new firms (1.60 and 1.62, respectively). Government must adopt more horizontal structures for developing and implementing an integrated policy approach. Since entrepreneurship is a concurrent subject, and given the decentralized nature of the Indian government, the complex political system, with government bodies differentiated right from the central level till the grass root panchayat level, both the central-level and state-level governments comprise an important stakeholder in the entrepreneurial ecosystem. A 'one stop shop' approach is what is missing in the Indian system. It is not possible to avail of government assistance by contacting a single government agency or department (1.67). There is no single body, ministry or department responsible only for new firm creation. However, there is a plethora of government schemes, policies, regulations, and statutory requirements, affecting new firms directly and indirectly, imposed by a number of ministries and departments in conjunction with each other. Experts also feel that framing policies to support new firms is not considered to be a priority for both the national and the local government (2.02 and 2.11). India is often criticized for lack of government and regulation support, and the country has not witnessed major reforms post the liberalization of 1991. The World Bank ranked India at 166 among 183 countries in its 'Doing Business 2012: Doing Business in a More Transparent World' report, a ranking unchanged from 2011. India ranks 182 out of 183 countries on enforcing contracts. The time needed to enforce contracts in India is almost triple the average among the Organization for Economic Co-operation and Development (OECD) countries, and the cost of doing so is almost double the OECD average. The lack of judicial infrastructure on enforcement does little to protect the trusting relationship between entrepreneurs and business partners or between entrepreneurs and customers. A lack of trust inhibits collaboration and significantly increases the risk an entrepreneur takes, ultimately slowing growth. Experts also assign a moderate score of 2.05 to the taxation burden for Indian start-ups. In contrast, techno-parks and business incubators provided more effective support for business development (2.98).

Table 9: Government Policies Scoreboard

New firms can get most of the required permits and licenses in about a week	1.27
Coping with government bureaucracy, regulations and licensing requirements it is not unduly difficult for new and growing firms	1.48
Government policies (e.g. public procurement) consistently favor new firms	1.62
Wide range of government assistance for new and growing firms can be obtained through contact with a single agency	1.67
People working for government agencies are competent and effective in supporting new and growing firms	1.95
Support for new and growing firms is a high priority for policy at the national government level	2.02
The amount of taxes is NOT a burden for new and growing firms	2.05
Support for new and growing firms is a high priority for policy at the local government level	2.11
Taxes and other government regulations are applied to new and growing firms in a predictable and consistent way	2.58

Table 10: Government Program Scoreboard

Almost anyone who needs help from a government program for a new or growing business can find what they need	1.60
Government programs aimed at supporting new and growing firms are effective	1.95
There are an adequate number of government programs for new and growing businesses	2.30
Science parks and business incubators provide effective support for new and growing firms	2.98

- Table 9,10,11,12,13 represent high scores (4 and 5) denoted by green cells, indicating that the EFC under survey fosters the entrepreneurial environment; low scores (1 and 2) denoted by red cells, indicating that the particular EFC constrains the entrepreneurial environment; median scores (between 2 and 4) yellow cell

7.1.3. Education and Training

Another reason for India's weak entrepreneurial affinity is the system of primary and secondary education (2.0). Experts believe Indian primary and secondary education does not provide adequate attention toward entrepreneurship courses (1.42) and neither does it foster creativity and innovation (1.63). Also undergraduate and university education does not train students to undertake start-up ventures (1.93). Experts find vocational, professional and management education to be satisfactory in providing necessary skills and training toward building entrepreneurial capacity (2.59 and 2.79). The number of business incubation centers needs to be increased keeping in mind the exponential growth in the Indian population, with a larger share of youth population. According to a study on entrepreneurship conducted by the National Knowledge Commission, USA has about 1,400 business incubators, China has 800, and Korea has 400. According to the Indian STEPS (Science and Technology Entrepreneur's Park) and Business Incubation Association (ISBA), India has only 100 incubators[14].

Table 11: Education and Training Scoreboard

Teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation	1.42
Teaching in primary and secondary education provides adequate instruction in market economic principles	1.47
Teaching in primary and secondary education encourages creativity, self-sufficiency and personal initiative	1.63
Colleges and universities provide good and adequate preparation for starting up and growing new firms	1.93
The vocational, professional, and continuing education systems provide good and adequate preparation for starting up and growing new firms	2.59
The level of business and management education provide good and adequate preparation for starting up and growing new firms	2.79

[14] National Knowledge Commission study

CASE STUDY # 3

Higher education institutions are taking lead in nurturing startups in India. IITs, IIMs and other premiere professional institutions are taking nascent but firm steps in building entrepreneurial culture. Here few such initiatives are highlighted.

Incubation Programs at Institutions of Higher Learning*

Start-up incubation holds significant importance in a country like India where entrepreneurs by the score are launching new set-ups and changing the game of business by the day. Almost every other prestigious B-school today houses an incubation center so that great ideas can be nurtured from their very source. Here is a look at some of the good business incubation centers in India.

Innovation and Entrepreneurship (SINE), Mumbai

If you have heard of Webaroo, Bhugol GIS, and SMSGupshup.com, you must know that these ventures came into existence because they were nurtured and incubated by SINE—the technology incubator housed at the Indian Institute of Technology (IIT), Mumbai. ThinkLABS Technosolutions, an educational robotics venture, Myzus Technologies, and EInfinitus are among some of the famous businesses that SINE has incubated. These start-ups have been successful in raising venture capital investment after incubation of up to ₹30 million from the market.

Technopark Technology Business Incubator (T-TBI), Kerala

Established in 2006 with the support of the Government of Kerala, T-TBI offers fully furnished working spaces spread over 15,000 sq ft, expert opinions and guidance from the industry, marketing and legal management consultancy, and financial assistance. T-TBI has till date successfully incubated about 60 companies and has had a 92% success rate. In early 2011, T-TBI was chosen as the world's best software incubating company and the first Indian organization to have achieved this status.

Centre for Innovation, Incubation and Entrepreneurship (CIIE), Ahmedabad

A business incubator housed at India's prime business school simply cannot be left out of the list. Having started incubation initiatives in 2007, CIIE has an interesting perspective on why it does not provide physical space for business incubation. They want entrepreneurs to build their ideas from wherever they are stationed so that the local economy benefits from its growth.

From the time it started, CIIE has incubated more than 50 companies, only a handful of which were owned by IIM students. CIIE has been incubating businesses in the areas of Internet and mobile technology, clean technology, social sector start-ups, and health care.

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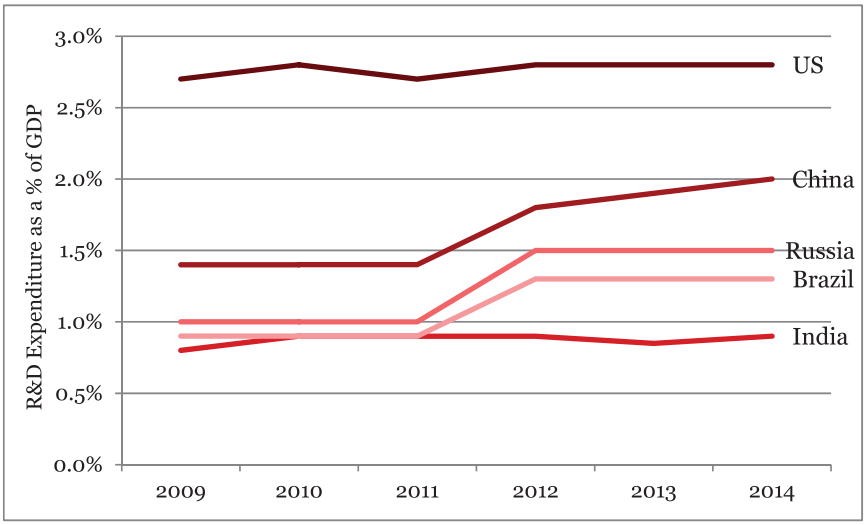
*Source: http://trak.in/tags/business/2012/03/27/top-5-famous-startup-incubation-centers-india/

7.1.4. R&D Transfer

One of the important factors deterring the entrepreneurial climate in India is the level of R&D transfer with a score of 1.9. Research and development and knowledge transfer is the stepping-stone for innovation, propelling growth and an important benchmark for development. The R&D framework condition refers to the extent to which R&D efforts implemented at the country level will lead to opportunities for commercialization for young and growing firms. We first look at the demand side for technology by new firms and then analyze the supply side regarding the availability of the same. Indian experts consider that there is no good support available to engineers and scientists to have their ideas commercialized through new firms (2.2). The experts are less favorable concerning the transfer of new technologies and knowledge from universities and public research centers to new and growing firms (1.8). In addition, they perceive unequal access to research and technology between new and growing firms and large established firms in favor of the large incumbents (1.7). Apart from the supply side bottlenecks, there are also issues regarding affordability of such technology. Experts do not perceive a promising score on affordability of R&D in India; 90% of experts feel that new firms cannot afford the latest available technology (1.8) and that the state subsidies do not help new and growing firms to acquire new technologies (1.9).

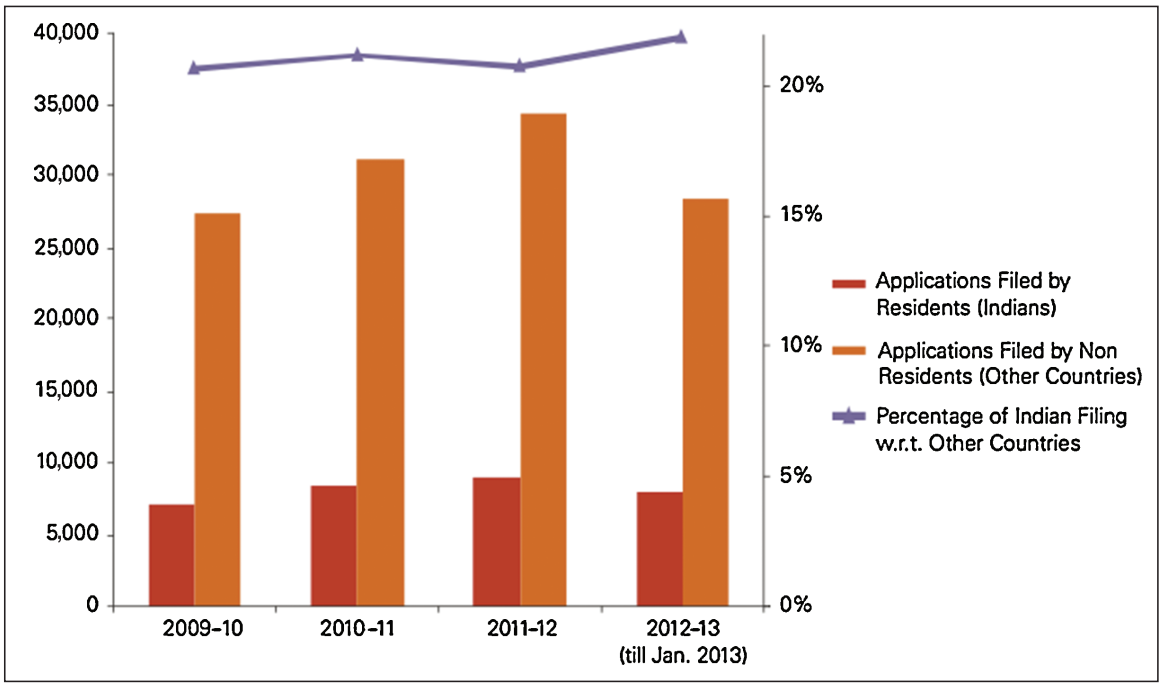
According to Battelle R&D report, 2014, USA contributes approximately 31% toward global R&D spending, China accounts for 16.5% while India's share is a mere 2.7% as of 2013. Gross Expenditure on R&D (GERD) by India for 2013 was projected to be US $42 billion in purchasing power parity terms, which works out to 0.85% of GDP. This is low both in absolute terms and as a proportion of GDP compared to other countries. Results from the same report indicate that BRIC countries—except India—are increasing research intensity as shown in Figure 49.

Figure 49: Cross Country R&D Spending



The share of patents filed by Indians at the Indian Patent Office (IPO) has been rising only marginally over the years. Figure 50 depicts the patenting trends by Indians in the Indian Patent Office (IPO) vs patent filing from India outside India, over the past four years[15].

Figure 50: Indian Patent Filing Trend in India vs Patent Filed from India in Other Countries



7.1.5. Physical and Commercial Infrastructure

The Indian experts rank infrastructure more favorably than other framework conditions, both the physical and the commercial element. The total investment in infrastructure, including roads, railways, ports, airports, electricity, telecommunications, oil gas pipelines, and irrigation, was expected to increase from 5.7% of India's GDP in the first year of the Eleventh Plan to around 8.3% in the last year of the plan. The Twelfth Plan proposes to increase the share to more than 10.5% by the end of the plan period. However, national experts are more positive about telecommunication, IT, and utilities, compared to roadways, rail, and transport with a below average score of 2.3. This implies that investments need to be prioritized in these sectors coupled with privatization. The expert scores are in tune with the actual sectorial share of investment in infrastructure

[15] Global R&D Summit 2013, Destination India

in India. With the major share invested in the Telecom and the oil and gas sectors, other critical infrastructure segments, including roads, railways, and ports, have witnessed a shortfall in actual investments. Of the total investment in infrastructure in the 12th Five Year Plan, only 12% is allocated toward roads and bridges, 7% to railways, and airport and merely 2% account for ports. A large chunk of investment is directed toward power (31%) and telecom (25%). Some of the major issues affecting the former sectors include insufficient funds, misplaced investment priorities, lack of timely reforms in organizations and inability to attract private investments. Furthermore, the internal revenue surplus is too small to fund investments and private investments only constitute 4% of the total investment in the sector[16].

7.1.6. Market Dynamics

A satisfactory score is found for overall market dynamism and openness (3.0). The dynamic component of internal market openness, i.e. the yearly changes in both consumer (3.63) and business (3.40) markets, indicates availability of new opportunities for potential entrepreneurs. The dynamism signals the churn in entrepreneurship with old businesses exiting coupled with new venture creation in the market. This rate of dynamism is, however, moderate in the Indian framework with an average score of 3.5. On the one hand, where barriers to market entry is satisfactory (2.9) the effect is counteracted by high entry costs, monopolistic obstacles posed by incumbent firms to block entry of the new firm (2.6) and ineffective anti-trust legislations (1.9). The lack of judicial infrastructure on enforcement does little to protect the trusting relationship between entrepreneurs and business partners or between entrepreneurs and customers. A lack of trust inhibits collaboration and significantly increases the risk an entrepreneur takes, ultimately slowing growth. All of the above indicates the intimidating challenges faced by new firms to have a footing in the market, which awaits other challenges of sustainability.

[16] India Infrastructure Summit—Ernst &Young

CASE STUDY # 4

India rank abysmally low in the Ease of Doing Businessí index. A major attribute of such low ranking is the difficulty in closing down business operations. Regulatory hurdles in shutting down pose barriers in opening new businesses and discourage entrepreneurs.

Regulatory Ecosystem in India—Struggling to Shut Shop*

"Entrepreneurs keen to down shutters on failed businesses and start afresh are finding that Indian laws do not make it easy to move on. Instead, the process wrecks them financially."

For nearly three years now, Ashok Segu has been on a fruitless quest. The 52-year-old technology entrepreneur, who is trying to wind down a failed venture, is being held back by red-tape that makes it impossible to formally close a business swiftly in India.

Segu's software outsourcing firm Zen Sutra has been dormant ever since the cofounders exited the venture eight years ago. Eager to start anew, he decided to complete legal formalities for the closure of the firm in 2011. That's when his troubles began. Efforts to delete Zen Sutra from the listing in the Registrar of Companies have remained unsuccessful so far, while it took nearly three years to complete formalities to close tax accounts in the company's name. Meanwhile, his new venture, a real estate development firm, had to remain on ice. The reason being that as a director in a defunct company that is alive on paper, he cannot raise funds or invite directors onto the board of his new company. "Starting a company in India is a one way journey with no exits," said Segu, who returned to India after having closed a technology start-up in the US a decade ago. "In the US, you can close a company in weeks, if not days." Every day at least two new start-ups are set up in India. However, at the end of three years, only one in 10 survive and entrepreneurs keen to close a failed venture and move on find that Indian laws do not let go so easily.

The Ministry of Corporate Affairs lists 1.36 million registered companies in the country of which nearly 0.5 million are dormant, inactive, or defunct. This lack of clarity is affecting entrepreneurial growth, said experts. "India's archaic laws to shut down ventures tear down entrepreneurs financially and emotionally at a time when they are bankrupt and most vulnerable," said Ravi Gururaj, chairman of Nasscom's product council and cofounder of Frictionless Ventures, a technology incubator.

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*Source: http://economictimes.indiatimes.com/news/emerging-businesses/entrepreneurship/why-failed-entrepreneurs-cant-legally-close-startups-in-india-and-start-afresh/articleshow/31969667.cms

7.1.7. Culture and Social Norms

Finally the experts' view on support of culture and social norms is in line with the results from the APS survey on social attitude toward entrepreneurship—on an average only 50% of non-entrepreneur Indian adults had high regards for entrepreneurship and entrepreneurs in India. Similarly, Indian experts have assigned a score of 2.7 (just above average) to cultural support framework in India.

Apart from commenting on the state of entrepreneurial ecosystem, experts hold an optimistic view of the opportunities available for new business creation.

Table 12: Experts' Assessment of Available Opportunities for Start-ups

Individuals can easily pursue entrepreneurial opportunities	3.2
There are more good opportunities for the creation of new firms than there are people able to take advantage of them	3.66
There are plenty of good opportunities to create truly high growth firms	3.86
There are plenty of good opportunities for the creation of new firms	3.91
Good opportunities for new firms have considerably increased in the past five years	4.23

The gender disparity, which was revealed from the APS survey, finds support in the NES as well. The table below suggests unfavorable conditions for female entrepreneurship and lack of support for the same.

Table 13: Experts' Assessment of Female Entrepreneurship

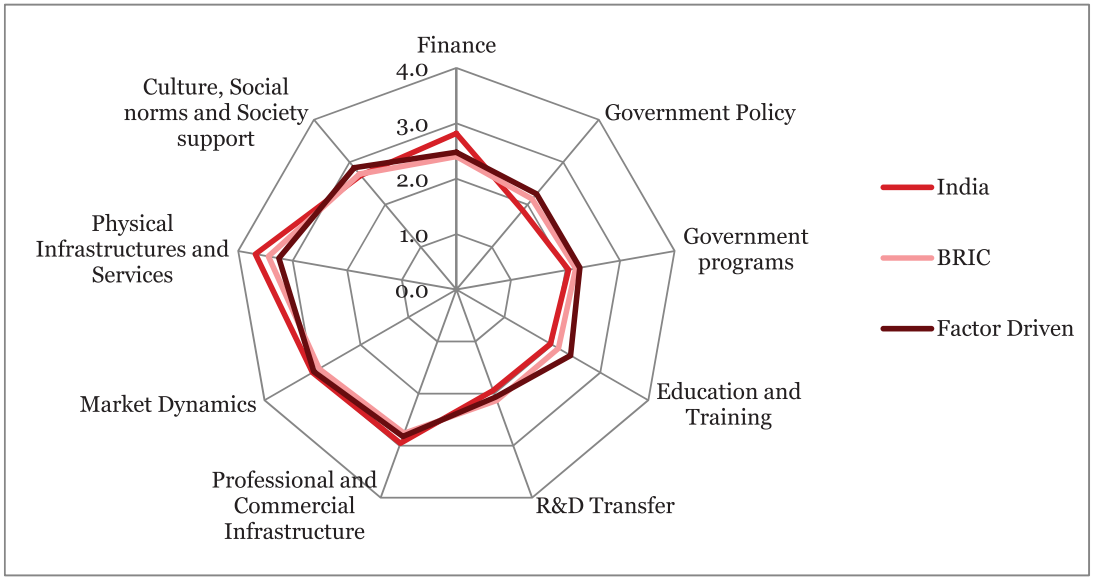
There are sufficient social services available so that women can continue to work even after they start a family	2.29
Women are encouraged to become self-employed or start a new business	2.38
Men and women get equally exposed to good opportunities to start a new business	2.48
Starting a new business is a socially acceptable career option for women	2.68
Men and women have the same level of knowledge and skills to start a new business	2.93

7.2. An International Comparison

We compare the Indian entrepreneurial framework conditions with that of factor-driven countries as well as BRIC nations. One observation is that the Indian scores are similar to its comparable economies. This finding suggests that variation in entrepreneurial activities may not be attributed largely to contextual conditions for entrepreneurship in these developing countries.

While reviewing the differences between the average of the factor-driven economies, BRIC countries and India, as depicted in Figure 51, we note that while India scores higher in the areas of finance and physical infrastructure, it has a relative disadvantage in the sphere of government policy and programs as well as education and training. Although, on an average, India scores lower compared to its counter BRIC nations and factor-driven countries, the difference is not so pronounced.

Figure 51: Entrepreneurial Framework Conditions, International Comparison



Summary of Indian Entrepreneurial Ecosystem

In sum, the main conclusion to be drawn from the National Expert Survey is that the institutional framework conditions in India do not foster a very positive entrepreneurial climate. India is often criticized for lack of government and regulation support. The NES reveals the institutional weakness prevailing in India, such as the lack of credible legal frameworks, the lack of stable political structures and the lack of strategic factor markets. These results point to the importance of institution-building efforts and the more conducive government policies, which foster a more entrepreneur-friendly national environment.

8. CONCLUSION AND KEY POLICY IMPLICATIONS

Entrepreneurship has never been more important than it is today in the light of global economic instability as well as the idiosyncratic challenges faced by India primarily reflected through its demographic transition. The GEM India 2013 report has revealed a range of dynamic and multifaceted insights about entrepreneurship in India in 2013. In fact, the GEM India report is one of the only holistic study unveiling entrepreneurial dynamics in the country. A key intention is to provide a broad audience—academicians, researchers, policymakers, and practitioners—with data and analysis that can enhance understanding, decision-making, and actions with regard to entrepreneurship. Another significant contribution is that it will enable us to assess how the entrepreneurial activity and profiles change as political and socioeconomic development evolves over time.

The report examined key aspects of entrepreneurship among Indians, measuring their attitudes, activities, and aspirations. We believe that the findings can provide policymakers with a foundation for reviewing current and prospective policies to enhance and highlight the vital role and need for entrepreneurship in the economy. Stimulating entrepreneurship and then supporting it appropriately will need considerable reforms. To conclude this study, we have highlighted several key findings and key policy implications intended to provoke further research and analysis. The findings are based on a random survey of 3,000 individuals sampled across the country weighted using age groups, gender, and urban−rural classifications to represent the national population.

8.1. Key Summary Points

Entrepreneurial Attitudes and Intentions

- Indians have positive attitudes toward entrepreneurship with nearly 6 in 10 Indians perceiving that entrepreneurship is a good career choice and that there is adequate media attention on entrepreneurship.
- Around 55% of Indians perceive that they have the requisite skills to start a new venture, but only 41% of Indians are able to exploit good opportunities to start a business in the next six months. As such 23 % of the Indian adult population exhibits entrepreneurial intent.

Entrepreneurial Activity

- Total Early-stage Entrepreneurial Activity (TEA) for 2013 stands at 9.9%. 1 out of every 10 Indian adults is an entrepreneur

Entrepreneurial Exits

- 1.5% of Indian entrepreneurs discontinued their businesses in the 12 months preceding 2013, and nearly 60% cited unprofitability and raising finance as the primary reason for discontinuation.

Entrepreneurial Motive

- 60% of the Total Early-stage Entrepreneurs are driven to start a venture by foreseeing a good opportunity whereas 40% of the same are forced into entrepreneurship because of lack of other work opportunities. The ratio of opportunity to necessity-driven entrepreneurship for India is far below the average mark (3), compared to its peer group nations.

Entrepreneurial Profile

- Indian entrepreneurs are predominantly male aged 25−34 years, with some secondary education, predominantly engaged in consumer-oriented sectors.

Entrepreneurial Aspirations

- Indian entrepreneurs in 2013 were seen to stage low job growth expectations with only 7.5% of early-stage entrepreneurs expecting to hire five or more people in the next five years.
- Only 5% entrepreneurs aspire for international growth. The rate of product innovation is also fairly low (17%) compared to other emerging economies like Colombia, Chile, Taiwan, and South Africa having high rates of new products (over 17%)

Entrepreneurial Framework Conditions

- The Entrepreneurial Framework Conditions (EFCs) received mediocre rating on most of the framework measures, indicating the need to foster a more positive entrepreneurial climate in India.
- Weakest factors in India include government policy and programs, education and training, and R&D development.
- Physical infrastructure and market dynamics do not seem to be a major deterrent factor to entrepreneurship.

8.2. Key Policy Implications

Finance

- Inadequate access to finance suggests the need for more liberalization of Indian capital markets to catalyze availability of funding to new firms as well as liquid exit routes through local stock markets.
- Raising capital also demands fair valuation practices to avoid under-pricing of new firms.

- There is a need to incentivize private individuals and corporations that provide equity to new ventures, through tax deductions.
- Large corporates should be allowed to prevent entrepreneurial exits that discontinue ventures due to lack of profitability or financial crunch, through structures similar to that of corporate debt restructuring. This activity can be made part of the 2% CSR mandate implemented under the new Companies Act, 2013[17]. According to the new policy sizeable companies will need to spend 2% of their three-year average annual net profit on CSR activities in each financial year, beginning the next fiscal, 2014−2015.

Government Policies and Programs

- Government policy needs to be restructured to promote liberalization. A fresh era of liberalization needs to be infused as the 1991 reforms are now history. Liberalization policies should be targeted to make doing business in India easy and fast.
- Processing of regulatory applications needs to be improved and the business registration process should be made easier and quicker in practice. India needs to move toward a single window system by adopting a one-stop shop approach.
- Policies and programs should be undertaken to foster development of so-called 'Institutional Entrepreneurship'. Entrepreneurs can exploit the uncertain institutional environment by either becoming the missing institution themselves or creating such institutions to fill up the void. Paul and Nelson (2011) have cited an interesting example, the case of "Grameen Bank" founded by the visionary entrepreneur—Muhammad Yunus, who created an alternative banking system based on trust and community-based risk sharing to fill the vacuum of missing capital institution for the rural poor in Bangladesh. Such institutional entrepreneurship models need to be explored at greater levels of innovation to suit the emerging environment.
- Policies to be structured to promote youth and female entrepreneurship. Concessions in interest rates or taxation benefits may be considered. Such lucrative incentive schemes could lead to breach of code of corporate governance in terms of adoption of faulty practices and false promoter registration to avail the said benefits. Therefore, such policies need to be accompanied by stringent due diligence in such cases and such infrastructure required for monitoring of the same needs to be developed parallelly.

[17] With effect from 1 April 2014, every company, private limited or public limited, which either has a net worth of Rs 500 crore or a turnover of Rs 1,000 crore or net profit of Rs 5 crore, needs to spend at least 2% of its average net profit for the immediately preceding three financial years on corporate social responsibility activities. The CSR activities should not be undertaken in the normal course of business and must be with respect to any of the activities mentioned in Schedule VII of the 2013 Act.

- Provision of export subsidies for newly created firms to promote entrepreneurial internationalization.
- Government supported innovation funds to promote start-ups need to be created and promoted at state level. Although there are provisions for national innovation funds, the awareness of the same needs to be emphasized and marketed well.

Education and Training

- Education and training need to be imparted to fill in gaps at grass root levels. Quality of education diminishes as one goes outside Tier 1 cities in India. Quality education at all levels, will not only increase employment opportunities for the individual, thus reducing necessary-driven entrepreneurship but also increase the individual's alertness to identify and exploit business prospects, thus, increasing opportunity-driven entrepreneurship.
- Introduction of entrepreneurship education at undergraduate university level as well as at engineering and technical institutions to promote commercialization of R&D and technology-based enterprises should be made mandatory in all states.
- Entrepreneurship education needs to be complemented with dynamic lecture delivery by expert faculty in this field. Experienced business people with proven track records in business should be sought and recruited for mentorship programs. This would help mitigate fears of failure and set role models for potential entrepreneurs.
- Capacity building and opportunity recognition need to go hand-in-hand. Academic institutions and corporates need to work jointly to achieve this. The corporate houses can be seen as the initiative driver to identify opportunities and tie up with educational institutions, and academic institutions undertake the responsibility of skill training and capacity building. Strengthening the nexus between industry and academia (including university system and research labs) is extremely important to take advantage of each other and undertake joint research, which could be jointly patented. Such partnerships bring financial and intellectual capital at one platform, leading to enhanced pace of commercialization of research. Corporate backing through not only funding the initiative but also completing the cycle by facilitating free flow of ideas as well as financially supporting these entrepreneurial ideas creates both backward and forward linkages with academic institutions, thus strengthening the entrepreneurial ecosystem.

Research and Development

- A comprehensive program to develop incubation centers throughout the country, supported by appropriate infrastructure and forward and backward linkages with

venture capitalists and angel fund investors is needed. There are over 1,300 incubators in USA and Canada, 900 in Europe, over 800 in China, about 300 in South Korea, 200 in Japan and 100 in a small country like Taiwan. In contrast, India has only about 115 technology business incubators[18].

Physical Infrastructure

- Greater need for privatization in roadway and rail infrastructure, education and knowledge-intensive sectors. Public Private Partnership (PPP) models to be encouraged by the government.

Media and Network

- Ideally, local role models with whom the masses can identify, in terms of background and demographics, should be highlighted in addition to national level popular entrepreneurs. Small innovations at grass root levels, in both urban and rural setting, need to be projected at both state and national level. The media needs to embrace entrepreneurship by applauding the personal journeys of successful entrepreneurs, both big and small ventures. Doordarshan (DD) National[19] can be a good medium to promote an entrepreneurial culture by disseminating entrepreneurial success stories at the regional and rural level. A separate private-owned television channel focused solely on entrepreneurship could be aired in urban markets. This would help in cultivating a positive attitude toward risky innovations and opportunities, which tend to have path-breaking significance, if successful.
- Development of an ecosystem of expert advice, resources, networking platform, and forum to support the ideation process, new businesses in crucial phases of their lifecycle and enable them to grow and increase their chances of success. Social media is a powerful tool of communication to achieve the same.
- Improved networks between large and small firms, as well as between established and new firms, within similar sectors are required.
- Corporates should be incentivized to promote and develop intrapreneurship, which may include developing an entrepreneurial culture, provision of such training, investing or supporting of ideas, provision of resources, etc. The incentive can be in the form of tax benefits, or even recognized as CSR activity by the firm, or attaining social recognition.

[18] Awasthi. D, Draft National Entrepreneurship Policy

[19] Doordarshan is an Indian public service broadcaster. DD National is a state owned general interest terrestrial television channel in India.

It may be the case that the entrepreneurial opportunities (10%) in India are generated not so much by an extremely conducive entrepreneurial ecosystem supported by progressive and supportive policy adoption, but by the downturn in Indian economic growth. Accompanied by a high proportion of necessity-driven entrepreneurship (40%), youth population, and rising unemployment, it is not surprising that a large portion of the Indian adult population recourses to entrepreneurial activities.

It would appear that for the future the way forward would be to foster opportunity-driven entrepreneurship via innovations, as the goal is to transit from a factor-driven economy to an efficiency-driven economy. Following the U-shaped theory of entrepreneurship[20], a fall in TEA should not be treated as an unhealthy indicator, if accompanied by rising GDP per capita. This is not to say that policies should be targeted to reducing entrepreneurial activity. In fact, India stands at a unique and indeed crucial juncture, given the undergoing demographic transition, which poses a huge challenge of unemployment, which on the contrary usually finds recourse in necessity-driven entrepreneurship. The challenge is not only to increase opportunity-driven entrepreneurship but also to promote entrepreneurial aspirations in terms of greater employment creation and focus on capital-intensive sectors. This should boost productivity and will push us squarely into an efficiency-driven economy. Ambition for high growth, innovation and employment creation is crucial to entrepreneurial India.

[20] TEA rates decline with increase in GDP per capita, reaches a threshold level and rises thereafter

Appendix 1

India GEM 2013 Research Methodology

For the research, primary data collection was executed to investigate the level of entrepreneurial activity in the country. A stratified random sampling method was used to select cities or villages across the country. Further, a city/village was divided into four–five strata, and the selection of a certain number of survey starting points within each city/village was ensured. Moreover, with the help of the Kish Grid method, households and adults were identified for the survey. Rather than selecting the respondents directly from the population, the two-stage sampling method was used. Hence, after the identification of the household, the eligible age group was listed in the descending order.Additionally, an eligible respondent was identified by next birthday methods. If the selected person was not available at the initial visit, at least three more visits were to be made before moving on to the next household. In all, 3,000 respondents were included in the survey. More than 23% of the data was collected from each of the four regions of India to ensure overall regional representation, in the research (See Table 1). Apart from regional representation an effort was also made to ensure appropriate representation of gender and location, i.e. male/female and urban/rural, respectively.

Table1: Regional Distribution

Regions	No.	Percentage
East	701	23.4
West	714	23.8
North	870	29.0
South	715	23.8
Total	3,000	100.0

For the generalization of findings, appropriate weightage was decided on the basis of various criteria. The census data 2011 was used for developing the weightage systems for various indices, i.e. male, female, urban, and rural. The computation of the TEA index is the major outcome of this part of the study, and it has also led to the identification of several characteristics of the entrepreneurial individuals and firms. However, the India Report 2013 is mainly a description of the level and nature of entrepreneurial activity among the adult population of the country and the quality of entrepreneurial framework conditions in the country.

Appendix 2

GEM NES

The National Expert Survey (NES) is used by Global Entrepreneurship Monitor (GEM) to complement the Adult Population Survey (APS), which provides in-depth opinions from selected national experts on the factors that impact the nature and level of entrepreneurship in the country. These experts are directly involved in delivering or assessing a major aspect of an entrepreneurial framework condition in the country. They can be politicians, academicians, entrepreneurs, government officials, or other professionals in the field of entrepreneurship, and are classified as either professionals or entrepreneurs. Data collection is done by conducting a 15–20 minute interview, which is usually self-administered, providing a detailed quantitative evaluation of the unique features of nine entrepreneurial framework conditions and brief open opinions on three main constraints for entrepreneurship, three main supports for entrepreneurship, and three main recommendations to improve the entrepreneurial framework conditions in a territory. NES provides insights into the entrepreneurial start-up environment in each economy with regard to the nine Entrepreneurial Framework Conditions (EFCs), namely:

1. Entrepreneurial Finance: The availability of financial resources, equity, and debt for new and growing firms, including grants and subsidies.
2. Government Policy: The extent to which government policies, such as taxes or regulations, are either size-neutral or encourage new and growing firms.
3. Government Entrepreneurship Programs: The extent to which taxes or regulations are either size-neutral or encourage new and growing firms.
4. Entrepreneurship Education: The extent to which training in creating/managing new, small, or growing business entities is incorporated within the education and training system at all levels. There are two sub-divisions – first, the primary and secondary school entrepreneurship education and training; second, post-school entrepreneurship education and training.
5. R&D Transfer: The extent to which national research and development will lead to new commercial opportunities, and whether or not these are available for new, small, and growing firms.
6. Commercial and Legal Infrastructure: The presence of commercial, accounting, and other legal services and institutions that allow or promote the emergence of small, new, and growing business entities.
7. Entry Regulations: There are two sub-divisions – first, the market dynamics, i.e. the extent to which markets change dramatically from one year to another; second, market openness, i.e. the extent to which new firms are free to enter the existing markets.

8. Physical Infrastructure: Ease of access to the available physical resources – communication, utilities, transportation, land, or space – at a price that does not discriminate against new, small, or growing firms.
9. Cultural and Social Norms: The extent to which the existing social and cultural norms encourage, or do not discourage, individual actions that might lead to new ways of conducting business or economic activities. In turn, these activities might lead to greater dispersion in personal wealth and income.

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Institute of Management Technology (IMT), Ghaziabad, located in the Delhi–NCR region of India, was established in 1980 with the mission of providing high quality management education in India. With a world-class infrastructure supported by state-of-the-art technology and an accomplished faculty body, IMT looks beyond the routine and the obvious to make innovative and impactful engagement possible with all stakeholders in the world of business and management. With Ghaziabad as its flagship, today IMT has campuses in Dubai, Nagpur, and Hyderabad, and an independent institute of online and distance education. The IMT Decision Analytics Centre is a center of excellence where faculty and students work with industry data to co-create models that deliver business impact. The Entrepreneurship Cell at IMT incubates and nurtures budding student-entrepreneurs from a very early stage. IMT has collaborations with more than 70 international business schools for research collaborations and faculty and student mobility. IMT's biannual journal *Paradigm* is considered to be one of the reputed management journals coming out of India. Today, IMT Ghaziabad is considered among the top ten B-Schools in India in most national rankings. For more information, visit www.imt.edu.

Indian School of Business (ISB) was established in 2001 with an aspiration to put India on the global map of management education. Over the years, the ISB has successfully pioneered several new trends in management education in India and has firmly established itself as a world-class management institution. In 2008, the ISB became the youngest institution to be ranked among the Top 20, in the Global B-school Rankings by the Financial Times, London, and since then, it has been ranked consistently among the top B-schools globally. Recently, ISB earned the distinction of becoming the first South Asian B-school to receive the AACSB accreditation. Chartering its next phase of growth, ISB flagged off its second campus at Mohali, Punjab in April 2012. Though located at Hyderabad and Mohali, the School will function as one entity with a seamless integration across both the campuses.

A strong pool of research-oriented resident and international faculty from reputed B-schools has been a key factor that helped the ISB to emerge as one of the leading centers with its cutting edge research and pedagogy. It has set up eight research centers serving as a bridge between the industry and the academia and carries forward its research agenda as well as promotes education in areas critical to India's development. ISB offers its flagship one–year Post-graduate Programme in Management (PGP) besides the Post-graduate Programme in Management for Senior Executives (PGPMAX), and a bouquet of Executive Education Programmes that cater to top and middle management. The school also recently launched its Fellow Programme in Management (FPM). The school has over 4,200+ PGP Alumni and 13,000+ Executive Education Alumni spread across over 25 countries making an impact on the business and society. For more information, visit www.isb.edu.

Entrepreneurship Development Institute of India (EDI), an autonomous and not-for-profit institute, set up in 1983, is engaged in promoting entrepreneurship through education, research, training, and institution building at national and international levels. One of the major thrust areas of the institute is Entrepreneurship Education and Research. While the center is committed to promote entrepreneurship as a discipline, it also acts as a crucial link between theory and practice in entrepreneurship with focus on applied research backed by sound theoretical underpinnings. EDI has also taken entrepreneurship to a large number of schools, colleges, science and technology institutions, and management schools. Besides Distance Education Programme in Entrepreneurship, the Institute conducts two full time, AICTE-approved programmes, viz, Post-graduate Diploma in Management - Business Entrepreneurship and Post-graduate Diploma In Management - Development Studies. The Ministry of External Affairs, Govt. of India assigned EDI the task of setting up Entrepreneurship Development centres in Cambodia, Lao PDR, Myanmar, Vietnam, and Uzbekistan. Five such centres in African region will be established very soon. In recognition of its international achievements, the United Nations Economic & Social Commission for Asia and Pacific (UN-ESCAP), Bangkok, Thailand, has declared EDI as a 'Center of Excellence'.