Global Entrepreneurship Monitor 2016-17

India Report

Sunil Shukla | Mohammad Ismail Parray | Navniit Siingh Chatwal | Pankaj Bharti | Amit Kumar Dwivedi

Entrepreneurship Development Institute of India (EDII), Ahmedabad

Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP), Bhopal

Jammu & Kashmir Entrepreneurship Development Institute (JKEDI)

Emerald Group Publishing (India) Private Limited
1001-1004, 10th Floor, Hemkunt Towers, 6, Rajendra Place, New Delhi - 110008

Title: **Global Entrepreneurship Monitor 2016-17: India Report**

ISBN: 9781786354211

Global Entrepreneurship Monitor 2016-17

India Report

Sunil Shukla I **Mohammad Ismail Parray** I **Navniit Siingh Chatwal** I **Pankaj Bharti** I **Amit Kumar Dwivedi**

PARTNERING INSTITUTIONS

Entrepreneurship Development Institute of India (EDII), Ahmedabad

Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP), Bhopal

Jammu & Kashmir Entrepreneurship Development Institute (JKEDI)

GEM INDIA TEAM

Sunil Shukla (EDII)
Mohammad Ismail Parray (JKEDI)
Navniit Siingh Chatwal (CEDMAP)
Pankaj Bharti (EDII)
Amit Kumar Dwivedi (EDII)
Arif Khan (JKEDI)
Subhendu Kumar Mishra (EDII)
Sumit Kumar (EDII)

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

CONTENTS

EXECUTIVE SUMMARY

The GEM Report 2016-17 completes its 18 years of measuring entrepreneurship-related activities. The study has a noble mission of generating globally comparative data of entrepreneurial activity. It helps identify factors determining national levels of entrepreneurial activity as well as policies aimed at enhancing entrepreneurial activity. It measures entrepreneurship through surveys and interviews of various field experts, conducted by the teams in their respective countries. The GEM survey generates a variety of relevant, primary information on different aspects of entrepreneurship and provides harmonised measures about individuals' attributes and their activities in different phases of venturing (from nascent to start-up to established business and to discontinuation). The GEM Report 2016-17 covers results based on 64 economies completing the Adult Population Survey (APS) and 65 economies completing the National Expert Survey (NES). The report provides insights into entrepreneurial activities in India. The GEM India study was conducted using a well-established GEM research methodology, consistent across all participating countries, thus enabling a cross-country comparison. The APS was conducted among 3,400 samples, which provided information regarding the level of entrepreneurial activity in their country, based on the national framework conditions, whereas the NES was conducted on 72 national experts. The NES in India focused on entrepreneurial ecosystem, also with regard to the nine entrepreneurial framework conditions.

Major findings of GEM India Survey 2016 in a vignette

APS (2016)

- In India, adults are generally positive about taking up entrepreneurship as a career and believe that entrepreneurs are accorded high status. The GEM India Survey 2016 showed that 44% Indian adults, in the age group of 18–64 years, consider entrepreneurship as a desirable career choice, whereas close to 47% adults think that entrepreneurs enjoy high self-esteem and status in the society and about 40% believe that there is enough media attention on entrepreneurship. However, India ranks below its peers on these measures, both among the factor-driven economies and among the BRICS nations, except Brazil, whose data were unavailable.

- Among the four Indian states, Gujarat ranked high in entrepreneurship as a preferred career choice with 54%, whereas Madhya Pradesh and Chhattisgarh (combined) and Jammu & Kashmir followed with 41% and 9%, respectively.

- The GEM India Survey 2016 found that, in India, 7% adult population are new-firm entrepreneurs, whereas 4% are nascent entrepreneurs actively trying to start a business. It means that 11% adult population is engaged in some aspect of TEA. However, although the Indian TEA rate is considerably lower than the average of factor-driven and efficiency-driven economies, it is higher than the average of the innovation-driven economies. Among the factor-driven economies, the TEA rate is relatively lower than Burkina Faso, Cameroon and Iran but higher than Russia and Kazakhstan.

- Among the states, Gujarat has the highest TEA rate of 7%, followed by Madhya Pradesh and Chhattisgarh, both having 4%. The rate of TEA in Jammu & Kashmir was found to be 2%.

- About 44% adults in India see good opportunities to start a business, while 44% perceive they have capabilities to start a business, and 37% would be prevented from doing so by fear of failure.

- The GEM Survey 2016 reports the entrepreneurial intention rate in India to be 15%, which is higher than the previous year.

- The survey reveals that 7.6% Indian women are involved in early stage entrepreneurship, compared to 13.5% men. Hence, the likelihood that an individual engages in early stage entrepreneurial activity is influenced by gender as well. Indian men are around twice more likely to be involved in early stage entrepreneurship compared to their female counterparts. The ratio of female-to-male participation in TEA is 0.6. The figure is similar to the ratio of female-to-male participation in innovation-driven economies. The survey reports the female participation in opportunity-driven TEA to be higher than their male counterparts in India. Similarly, there is also a drop in the number of female participants in necessity-driven TEAs as against the men in India.

- In India, entrepreneurship motivated by necessity (no other option for work) is reported to be at 35%, whereas 61% respondents are motivated to start early stage enterprises out of opportunity. India also has the highest percentage of improvement-driven entrepreneurship compared to the BRICS economies.

NES (2016)

The opinion of national experts revealed insights on factors impacting the environment for entrepreneurship. These factors are known as Entrepreneurial Framework Conditions (EFCs) of the country.

According to the NES, the major constraints for entrepreneurship development in India are as follows:

- Financial support
- Cultural and social norm
- R&D transfer
- Education and training

The major enablers are the following:

- Government entrepreneurship programmes such as Startup India, Stand Up India, Skill India and Make in India are aimed at support entrepreneurship development and creating a favourable entrepreneurial ecosystem.

- Government regulations and policy reforms.

- Entrepreneurship education and training: With a visible transformation in entrepreneurship education among the universities and higher educational institutions and the role of university-led incubators, the youth are motivated to choose entrepreneurship as a preferred career.

ACKNOWLEDGEMENTS

The GEM India Consortium comprising Entrepreneurship Development Institute of India (EDII), Ahmedabad; Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP), Bhopal and Jammu & Kashmir Entrepreneurship Development Institute (JKEDI) has been consistently putting in efforts to enable a clear conception of the entrepreneurial ecosystem prevailing in the country. The GEM Report 2016–17 is an outcome of concerted efforts and throws light on the trends and contributions to entrepreneurship landscape. While we express gratitude to the GEM India team members, we particularly thank the Heads of the three institutions for their constant guidance and advice. But for their direction, accomplishing such a mammoth project would not have been possible. Our sincere thanks to the GEM Global Team at London Business School, Babson College and the GEM Data Team for their unwavering support and direction.

The support extended by EDII doctoral students and the teams at JKEDI and CEDMAP; including Mr. Anal Jyoti Basu, Mr. Sumit Kumar, Mr. Zahoor Ahmed Parray, Ms. Bindu Jacob, Ms. Tapaswini Swain, Ms. Anista Aggarwal and Mr. Saurabh Kumar is highly commendable and helped us deal with the challenges, besides enabling us to meet the targets.

We put on record a special mention for the national experts and the respondents of various surveys for sparing their valuable time and sharing rich insights with us. Our thanks are also due to Mr. John George and his team at IMRB for high quality data collection, collation and timely submission.

Thanks are also expressed to Institute's BDC team for extending unceasing editorial support.

Author

ABOUT THE AUTHORS

Sunil Shukla

Dr Sunil Shukla is the Director of Entrepreneurship Development Institute of India (EDII). His research and consulting interests include entry barriers to entrepreneurship, curriculum development, intrapreneurship, family business management and organizational culture. Dr Shukla has been helping various organizations and corporates in strategic planning and capacity building of employees besides grooming their managers as intrapreneurs, leading to conducive climate for corporate entrepreneurship. Dr Shukla has been leading, the Global Entrepreneurship Monitor (GEM) India Consortium as a national team leader since 2012.

Mohammad Ismail Parray

Dr. M.I Parray is the founder Director of Jammu and Kashmir Entrepreneurship Development Institute (JKEDI) and national team member of GEM, India Team. Dr. Parray combines extensive experience as a researcher and a trainer with formulating, implementing and managing strategies and programs for creation of a conducive environment for economic development of the state. Under his leadership, JKEDI has grown significantly and today it operates in all the 22 districts of the state. Dr. Parray has also been responsible for development of various programs whereby training, finance and linkages to financial institutions are being provided to thousands of first generation entrepreneurs.

Navniit Siingh Chatwal

Mr. Navniit Siingh Chatwal is presently Executive Director of Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP) Bhopal. He is also the founding and Executive Council member of Bhopal Chapter of Young Indians (Yi), which is an integral part of Confederation of Indian Industries (CII). He has over twenty years of experience in Strategy, Consulting, Entrepreneurship and Academics, working with organizations and Institutions of repute in India and in Canada. He has consulted many Small & Medium Enterprises (SME) on issues related to HR Strategy, Change Management and Intrapreneurial Capacity building and helped them grow. He has also been active in Academics with stints in Education Management, Faculty Development and Teaching. He has been instrumental in establishing a collaborative MBA program of SP Jain Institute of Management & Research Mumbai and Schulich School of Business, Canada in SP Jain's campus in Mumbai India.

Pankaj Bharti

Dr Pankaj Bharti has been working as a Faculty at Entrepreneurship Development Institute of India (EDII), Gandhinagar. He specializes in Organizational Behaviour, Human Resource Management and Corporate Entrepreneurship. He holds more than 11 years' experience in the academics and industry. He is trained in conceptualizing and developing measurement tools for Social Science Research. He is also a National Team Member of GEM India. He has published papers and book on 'Dehumanization of Urban and Rural Poor'. He is associated with more than twenty research projects and programmes.

Amit Kumar Dwivedi

Dr. Amit K. Dwivedi has over 12 years of teaching and research experience. Currently, he is a National Team Member of GEM India. He is associated with reputed national and international journals as editor and editorial board member, and has published research papers, reviews and books. Dr. Dwivedi is also one of the co-authors of GEM India Report 2014. He has presented several research papers at national and international conferences in India and abroad. He participated in a training of trainers programme for teaching 'Business Simulation', organized by ILS, held at University of Tennessee, Texas, USA. Dr. Dwivedi also, participated in GEM Annual Meeting held at Kuala-Lumpur, Malaysia in 2017.

CHAPTER 1

BUSINESS AND ENTREPRENEURSHIP PERSPECTIVE IN INDIA

1.1 India rising – The state of Indian economy

The share of Emerging Markets and Developing Economies (EMDEs) in the world economy has grown by leaps and bounds in the recent years, contributing more than 75% to global growth in terms of both output and consumption.[1] The Indian economy, seventh largest in the world, is at a sweet spot among the EMDEs. As per the estimates of the Central Statistics Office (CSO) and the Reserve Bank of India (RBI), the Indian economy grew at a rate of 7.1% in the financial year (FY) 2016–17. During the same period, the world economy grew at a rate of 3.1 per cent, according to the estimates of International Monetary Fund (IMF), World Bank, Asian Development Bank (ADB) and Organisation for Economic Cooperation and Development (OECD). According to the projections, the Indian economy will continue to grow at a rate of more than 7% in FY 2017–18.

The growth of Indian economy (7.1%) in the backdrop of sluggish growth of the world economy (3.1% as projected by IMF and 2.4% as projected by World Bank[2]) is a positive sign. As per the earlier forecasts, the Indian economy was expected to grow at a rate of 7.6%, but it suffered a few setbacks, including stressed balance sheets in the corporate sector, which affected the firms' spending plans, and the announcement of demonetisation of almost 86% currency in circulation. Both the factors took a toll on the economy temporarily. Despite these, major drivers of the growth were increasing demand from urban households, public investment, moderation in industrial and non-government service sectors, modest pick-up in agricultural growth on the back of improved monsoon and strong growth in public administration and defence services, which propelled the economy to a higher growth trajectory. Subsequently, the announcement of rollout of Goods and Services Tax (GST), effective from July 2017, provided the necessary momentum to the economy.

1.2 Demonetisation and GST – Game changers for Indian economy in 2016–17

From an economic policy perspective, FY 2016–17 has been a landmark year. Indian economy witnessed a major transformation in terms of two significant policies viz. demonetisation and GST.

Demonetisation

On November 8, 2016, during his New Year address to the nation, Prime Minister Narendra Modi declared demonetisation of high-denomination currency, i.e., ₹1,000 and ₹500, in circulation, claiming it to be a cleansing ritual, meant to curb corruption, counterfeit black money and check terror financing. The decision withdrew 86% of the currency in circulation, totalling to about ₹15.4 trillion. Although many hailed it as a welcome step for the economy in the longer run, there were a few sceptics who claimed that it caused apathy to the common man and highlighted its negative impact on the informal economy. International rating agencies, including Moody's and Standard & Poor (S&P), predicted that the move would have a short-term impact on the economic activities of the country and may slow down the rate of growth. Yet, they lauded the move and described its positive impact in the longer run. S&P believed that demonetisation will result in a wider tax base and greater participation in the formal economy. It further added that demonetisation will benefit India's business climate and financial system as well.

Demonetisation resulted in a sharp increase in the deposits across banks. With deposits swelling, the banks started to cut the rates of interest for deposits and lending. State Bank of India (SBI) – the country's largest public-sector bank – cut its marginal cost of funds-based lending rate (MCLR) across all tenors by 90 basis points (bps). This prompted other public- and private-sector lenders, including Punjab National Bank (PNB), Union Bank of India (UBI), ICICI and Axis Bank, to follow suit.

Demonetisation has given a push to digital transactions and payments, thus facilitating a cashless economy. The government hopes that the reduced use of cash and more electronic transactions will help create a digital trail of all transactions and thus curb black money. This will, in effect, increase the tax base and add to tax revenue.

To encourage digital transactions, a list of initiatives was declared by the RBI. It did away with merchant discount rate (MDR) on small transactions made digitally from

---

1 *World Economic Outlook Report*. Published by IMF, April–October 2016.

2 The inputs were taken jointly from IMF's *World Economic Outlook Report* Published in April 2017 and *The Hindu's World Bank cuts 2016 global growth forecast to 2.4%*, September 2016.

January 1 to March 31, 2017. Further, the MDR for debit card payments, including the payments made to the government, was capped at 0.25% for transactions up to ₹1,000 and 0.5% for transactions between ₹1,000 and ₹2,000. The existing MDR cap is at 0.75% for transactions up to ₹2,000 and 1% for transactions more than ₹2,000.

According to the RBI data for December 2016, digital wallet transactions increased by almost four times, in both value and volume, compared to the previous year. There was also an increase in the transactions made by mobile banking. Table 1.1 shows the comparison of transactions.

The government launched an app called Bharat Interface for Money (BHIM) to provide easy access to citizens for making digital transactions and payments. Since its launch, the app has enabled transactions worth ₹361 crore. The government also appointed a high-level panel, comprising six chief ministers and experts such as Nandan Nilekani, former chairman, Unique Identification Authority of India, to prepare a roadmap for the adoption of digital modes of payment.

The government also sought to reduce the tax burden on small traders, who have seen their business shrink, by allowing those with sales of up to ₹2 crore to pay less tax on financial transactions that have been carried out digitally. Under the Presumptive Taxation Scheme under Section 44AD of the Income Tax Act 1961, such entities will now pay a lower 6% of deemed profit in tax, instead of the current 8%, in respect of the gross receipts through banking channels or digital means for FY 2016–17. However, the existing rate of 8% will continue to apply for cash receipts.

GST

GST is considered a historic reform in India's indirect tax structure. Post implementation, it has replaced various taxes on goods and services, levied by the central and state governments, with a single tax on the value added. It has helped in simplifying administration as it removed multiple taxes at every stage of the trade model. GST further aims at providing a uniform tax rate for all goods and services, thus helping in reducing tax cascading, facilitating a common national market, encouraging voluntary tax compliance, reducing tax-collection costs, supporting investment and improving competitiveness, and facilitating the ease of doing business.

GST proposes four rate slabs of 5%, 12%, 18% and 28% on various goods and services. The essential items are placed in the lower rate category, whereas the luxury, demerit and sin goods are placed in the higher rate category, with an additional cess. Food items such as rice and wheat have been exempted from GST.

Ambivalence persists across small and medium enterprises (SMEs), with regard to the impact of the GST on these enterprises. However, experts believe that the GST can greatly help in improving the efficiency of SMEs. Some advantages of the GST for SMEs are listed below.

- *Ease of starting a business:* A business operating in different states of the country needs value-added tax (VAT) registration under the state laws. Different indirect tax rules in various states add to the complications and high fees of procedural requirements. Under the GST, a centralised registration will make doing business easier and simpler, and the consequent expansion will be an advantage for SMEs.
- *Reduction of tax burden on new business:* In the previous indirect tax structure, businesses with a turnover of more than ₹5 lakh (₹10 lakh in some states) needed to pay a VAT registration fee. The

Table 1.1: A comparison of cashless transactions pre- and post-demonetisation

Going cashless	Dec 15		Nov 16		Dec 16	
	Volume (In million)	Value (₹ cr)	Volume (In million)	Value (₹ cr)	Volume (In million)	Value (₹ cr)
Mobile banking	39	49,029	85	1,37,443	89	1,48,583
Digital wallet	53	2,063	138	3,305	213	7,448
Credit card	69.9	21,400	98	26,432	111	29,989

Source: http://www.thehindubusinessline.com/money-and-banking/digital-transactions-zoom/article9537672.ece

central government has now increased the exemption limit to ₹20 lakh, which is a 75% relaxation for small traders and manufacturers.

- *Advanced and improved logistics with speedy delivery of services:* Under the GST, there will be no entry tax. Consequently, the movement of goods at check posts and interstate borders will be expedited. As per the estimation by the CRISIL, the cost of logistics for the manufacturers of bulk goods will significantly reduce by 20%, thus boosting commerce throughout the country.
- *Elimination of vague distinction between goods and services:* The GST will ensure that the ambiguity between goods and services is eliminated. This will, therefore, ease and simplify several legal proceedings in relation to the packaged products. Reducing the distinction between the services and the material component will also reduce tax evasion.
- *Boosting the manufacturing sector:* With the implementation of the GST, the burden of tax will be reduced for the manufacturers and end-users. The manufacturers will get the benefit of input tax credit, whereas the end-users will have to pay only the tax charged by the last dealer or the retailer in the supply chain.

1.3 Macroeconomic scenario

The Indian economy has shown consistent improvement in terms of its macroeconomic indicators. The intervention of the central government in areas, such as keeping a check on public expenditures, revising and deregulating prices for petroleum products and overhauling of the subsidy regime, has led to the lowering of the fiscal deficit to 3.5% in the FY 2016–17 compared to 3.9% in the previous year. As per the RBI's projected inflation rate range of 4–6%, the average inflation remained at 4.9% in 2016. The current account deficit has declined to about 0.3% of the gross domestic product (GDP) in the first half of FY 2017. Foreign exchange reserves are at comfortable levels, have increased from around $350 billion in January 2016 to $360 billion in December 2016, and are well above the standard norms for reserve adequacy. India emerged as the tenth most attractive destination in the world for foreign direct investment (FDI). The FDI inflows in 2016–17 crossed $56 billion. This shows the result of the reforms taken by the government in opening "conservative" sectors including rail infrastructure and defence to FDI. Reforms were laid for the financial, medical devices and construction sectors as well. For retail trading of food products, the government permitted 100% FDI with an unqualified condition that such food products have to be manufactured or produced in India. In part, surging net FDI inflows, which grew from 1.7% of GDP in FY 2016 to 3.2% of GDP in the second quarter of FY 2017, helped the balance-of-payments (BOP). Tax revenue to the central government increase by 18% to ₹17.1 trillion in the year ended March 31, aided by steady growth in direct taxes and a sharp rise in excise and service tax receipts.

1.4 Financial institutions in India

Since the economic reforms that were initiated in the early 1990s, the Indian financial sector has emerged as a substantial segment of the economy, comprising diverse financial institutions and various markets. See Figure 1.1 for details on financial institutions in India. The Indian banking system is robust and comprises 26 public-sector banks, 25 private-sector banks, 43 foreign banks, 56 regional rural banks, 1,589 urban cooperative banks and 93,550 rural cooperative banks, in addition to cooperative credit institutions.[3] With an objective of widening financial inclusion, the RBI kicked off an era of differentiated banking by allowing small finance banks (SFBs) and payments banks (PBs) to start services. A total of 21 entities were given in-principle nod in the year 2015, including 11 payments banks.[4]

The year 2016 will be memorable for the banks for two reasons: first, the burgeoning of non-performing assets (NPAs) across several banks, and second, demonetisation of high-denomination currency by the government. According to the Ministry of Finance, as of June 2016, gross NPAs for both public- and private-sector banks were ₹6 lakh crore.[5] On the other hand, demonetisation led to an unprecedented rise in the number of customers across bank branches for either exchanging or depositing

[3] *Banking Sector in India* Published in May 2017 by India Brand Equity Foundation (IBEF).

[4] *Paytm gets RBI approval for Payments Bank*, published on January 3, 2017. Retrieved from *http://indianexpress.com/article/business/banking-and-finance/paytm-gets-rbi-approval-for-payments-bank/*

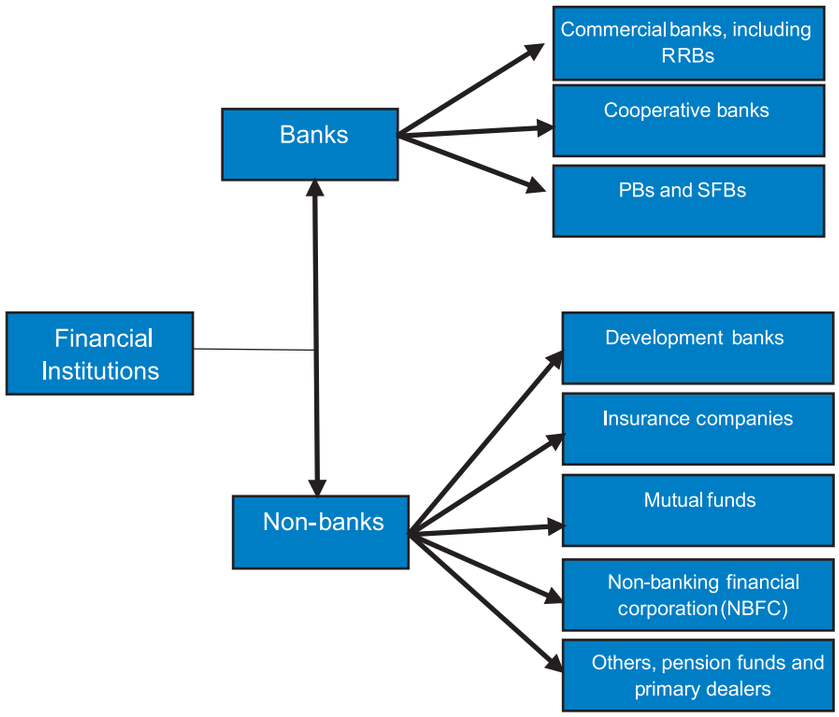
[5] Accessed from Ministry of Finance answer given in the parliament.

invalidated currency. This resulted in an increase in deposits of banks. Between October 28 and December 23, 2016, the deposits of banks increased from around ₹107 lakh crore to ₹112.6 lakh crore. The sharp increase of 4.1 percentage points in the share of Current Account, Savings Account (CASA) deposits in aggregate deposits to 39.3% (up to February 17, 2017) resulted in a reduction in the cost of aggregate deposits. Post demonetisation, several banks lowered their domestic term-deposit rates and lending rates. The median term-deposit rates of state cooperative banks (SCBs) declined by 38 bps between November 2016 and February 2017, whereas the weighted average term-deposit rate of banks declined by 24 bps (up to January 2017). Similarly, the lending rate was slashed to 70–90 bps across banks.[6] See Table 1.2 for details.

1.5 Classification of economies

Rostow (1960) suggested that countries go through five stages of economic growth. Porter (2002) provided a modern rendition of Rostow's typology, by identifying three stages of development (as opposed to growth): a factor-driven stage, an efficiency-driven stage and an innovation-driven stage, and

Figure 1.1: Financial institutions in India



Source: GEM India team compilation

Table 1.2: Lending and deposit rates of banks post demonetisation

Category	MCLR* (Median)	Term-deposit rates (Median)		
	1 year	Up to 1 year	1–3 years	All tenors
Public-sector banks	85	26	35	28
Private-sector banks	65	50	48	50
Foreign banks	40	8	34	6
Scheduled commercial banks	70	31	40	38

**Marginal cost of funds-based lending rate(MCLR) refers to the minimum interest rate of a bank below which it cannot lend.*
Source: Macroeconomic Impact of Demonetisation – A Preliminary Assessment, published by the RBI

[6] *Macroeconomic Impact of Demonetisation – A Preliminary Assessment*, published by the RBI in March, 2017.

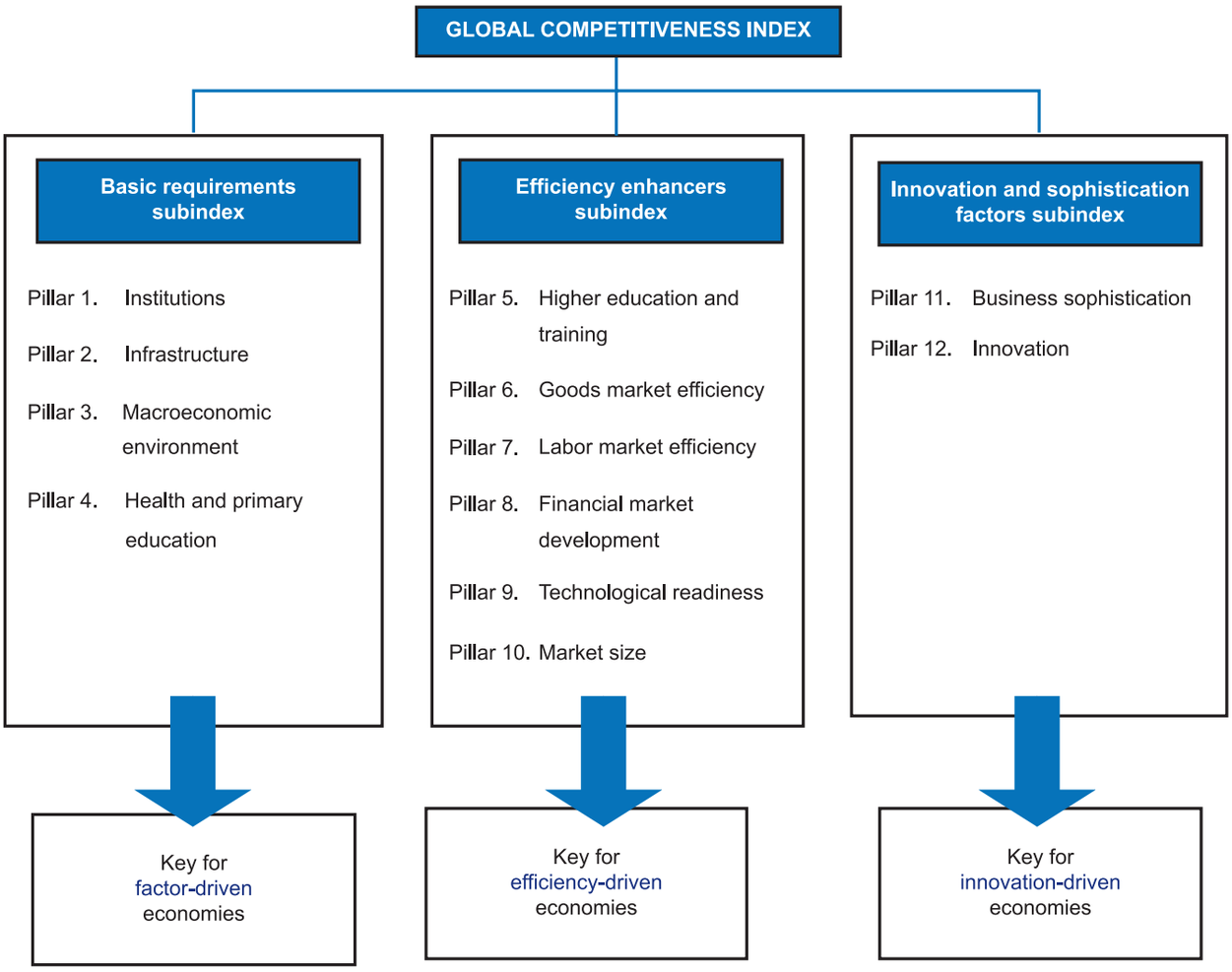
he added two transitions. Although Rostow focused on the age of high mass consumption, Porter's model encompasses recent developments in the economics of knowledge and innovation.

The factor-driven stage is marked by high rates of agricultural self-employment. The countries in this stage compete through low-cost efficiencies in the production of commodities or low value-added products. Sole proprietorships, i.e., the self-employed, probably account for most small manufacturing and service firms. Almost all economies experience this stage of economic development. These countries neither create knowledge for innovation nor use knowledge for exporting.

In order to compete in the efficiency-driven stage, countries must have efficient productive practices in large markets, which allow companies to exploit economies of scale. Industries in this stage are manufacturers that provide basic services. The efficiency-driven stage is marked by a decreasing rate of self-employment. When capital and labour are substitutes, an increase in the capital stock increases returns from working and lowers returns from managing.

The innovation-driven stage is marked by an increase in knowledge-intensive activities (Romer, 1990). In the innovation-driven stage, knowledge provides the key input. In this stage, the focus shifts from firms to agents for the possession of new knowledge (Acs et al., 2009). The agent decides to start a new firm, based on the expected net returns from a new product. The innovation-driven stage is biased towards high value-added industries in which entrepreneurial activity is important. See Figure 1.2 for classification of economies.

Figure 1.2: Classification of economies



Source: WEF's Global Competiveness Report 2016–17

1.6 Doing business in India

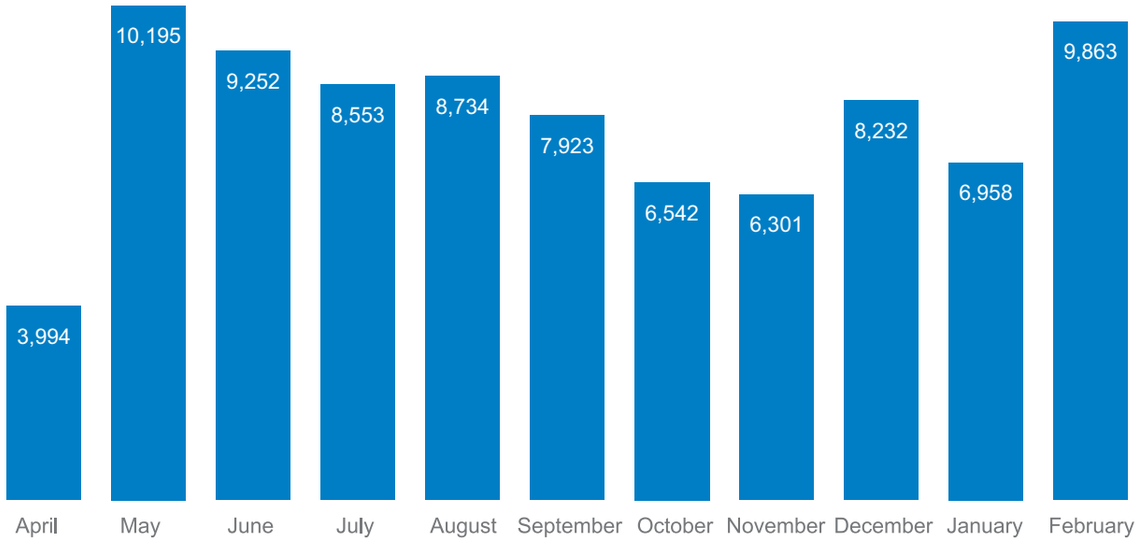
Since 2014, the National Democratic Alliance (NDA) government has introduced several policies to promote a positive business sentiment across the country. Some of the policies are Make in India, Startup India, Stand Up India, Skill India and Digital India. These policy interventions are making India a favourable destination for doing business. According to the data released by the Ministry of Corporate Affairs, during the FY 2016–17, a total of 97,840 companies were registered with a collective authorised capital of ₹31,284.74 crore. The results of these policies are visible and during the past 2 years, India has been improving significantly in its position at the WEF's Global Competitiveness Index. India climbed up to 39th position in 2016–17, from the previous 55th a year ago.[7] Similarly, in the Global Innovation Index rankings, India stood at 60th place among 130 participating countries.[8] See Table 1.3 for comparison of BRICS economies.

Table 1.3: A classification of BRICS economies

Categories	Brazil	Russia	India	China	South Africa
Population	204.5 million	146.3 million	1292.7 million	1374.6 million	55.0 million
GDP	1772.6 billion	1324.7 billion	2090.7 billion	10982.8 billion	313.0 billion
GDP per capita ($)	8670.0	9054.9	1617.3	7989.7	5694.6
World Bank's ease of doing business rank	116/190	51/190	130/190	84/190	73/190
WEF's Global Competitiveness Rank	81/138	43/138	39/138	28/138	47/138
Economy development phase	Efficiency driven	Factor driven	Factor driven	Efficiency driven	Efficiency driven

Source: Compiled from GEM Global Report 2016–17, Doing Business Report 2017, published by the World Bank and Global Competitiveness Report 2016–17, published by the WEF

Figure 1.3: Companies registered in India between April 2016 and February 2017



Source: Newsletter published by Ministry of Corporate Affairs in March, 2017

[7] *Global Competitiveness Index 2017*, published by the WEF.

[8] *Global Innovation Index 2017*, published by Cornell University, INSEAD and World Intellectual Property Organisation.

India also improved its ease of doing business rank to 130 in 2016, among 190 participating countries, by constantly working on parameters that address investors' concerns on conducting business in India. As highlighted by the report, some of the noteworthy reforms were in the areas of electricity, tax-paying, trading across borders and enforcing contracts, and resolving insolvency.[9]

Despite all these positive changes, the Indian economy requires to get out of the grip of a few draconian rules and legislations, which make implementation of reforms difficult and negatively affect the business climate in the country and its competitiveness with peer EMDEs.

A comparison of India with its peers in the BRICS economies reflects that India has the highest number of bureaucratic procedures to comply before starting a business, amounting to 13. With 26 days as the total number of days required to start a business, India stands second, whereas Russia ranks first with 10 days.

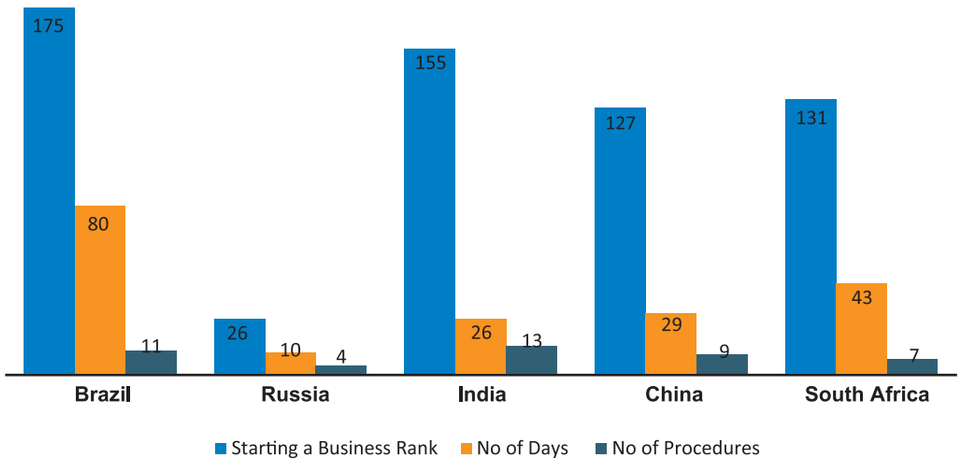
Among its peers in the factor-driven economies, India ranks at the bottom in all the major parameters outlined above. Hence, India needs to speed up its economic reforms agenda to overcome the hurdles in its path of progress.

Table 1.4: Year wise comparison of India's ranking across parameters prescribed for ease of doing business

S. no.	Parameters	2015–16	2016–17
1	Starting a business	151	155
2	Dealing with construction permit	184	185
3	Getting electricity	53	26
4	Registering property	140	138
5	Getting credit	42	44
6	Protecting minority investor	10	13
7	Paying taxes	172	172
8	Trading across borders	144	143
9	Enforcing contracts	178	172
10	Resolving insolvency	135	136

Source: http://www.doingbusiness.org/data/exploreeconomies/india

Figure 1.4: Starting a business in BRICS economies



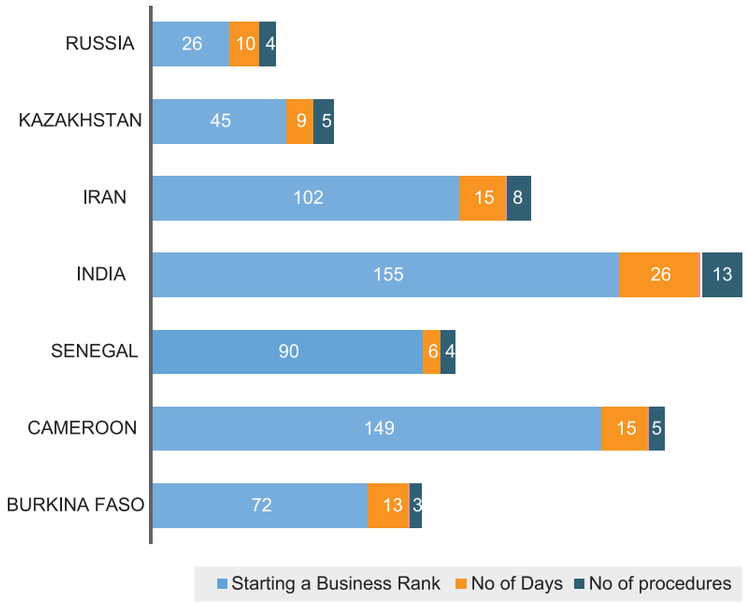
Source: Doing Business Report 2017, published by World Bank

9. *Doing Business Report 2017*, published by the World Bank.

The task at hand is to improve the business climate in the country by ensuring procedural efficiency and transparency, aimed at improving the global ranking in ease of doing business. The Department of Industrial Policy and Promotion (DIPP) has partnered with the World Bank Group to undertake an assessment of state's implementation of business reforms. This assessment studies the extent to which states have implemented DIPP's 340-point Business Reforms Action Plan (BRAP) for the States/Union Territories, covering the period from 1 July 2015 to 30 June 2016. BRAP includes recommendations on 58 regulatory processes, policies, practices and procedures, spread across 10 reform areas, spanning the lifecycle of a typical business. Based on percentage scores, the states were classified into four categories:

1. Leaders, with an overall implementation status of 90–100%.
2. Aspiring leaders, with implementation status between 70% and 90%.
3. Acceleration required for states with implementation status between 40% and 70%.
4. Jumpstart needed for states with implementation status between 0% and 40%.

Figure 1.5: Starting a business in the factor-driven economies



Source: Doing Business Report 2017, published by the World Bank

Figure 1.6: Top 10 states for ease of doing business in 2016

Source: Assessment of Implementation of Business Reforms 2016, published by the DIPP

Major policy thrust for ease of doing business in India

In order to ensure that the entrepreneurs and small businesses are engaged more in terms of their time in business growth and competition and less with bureaucratic red-tapism, the DIPP, Ministry of Commerce and Industries, has set an ambitious target of reducing both the number of days and procedures to start a business from 26 days and 13 procedures to 6 days and 6 procedures, respectively. A comparison of the existing versus the proposed procedures is given below.

Some major reforms undertaken by the government to facilitate ease of doing business are listed below.

- *Passage of Insolvency and Bankruptcy Code:* The government has managed to pass the Insolvency and Bankruptcy Code, thus clearing the last hurdle for making the code a law. The new bankruptcy law is supposed to significantly reduce the average time taken to complete the insolvency process, which is 4.3 years at present.
- *Reduced time for registering companies:* The government has made the process for registering a company faster by reducing the time taken from almost 10 days in December 2014 to 5 days in December 2015. This year, the government plans to further reduce the time taken to 1 or 2 days.
- *Easier processes for incorporation:* For incorporating a new company, five factors have to be taken care of, including name reservation, incorporation of new company and allotment of Director Identification Number (DIN), Permanent Account Number (PAN) and Tax Deduction/ Collection Account Number (TAN). Now, all five factors can be obtained by a single form through Simplified Proforma for Incorporating Company electronically (SPICe) INC-32.
- *Integration of processes through eBiz portal:* The eBiz platform of the DIPP integrates several processes across government departments, to make the process of incorporating a company simpler. One can apply for PAN, TAN, register with Employees Provident Fund Organization (EPFO) and Employees State Insurance Corporation (ESIC), and incorporate a company through the portal.
- *Doing away with requirement for minimum paid-up capital:* The minimum paid-up share capital requirement was ₹1 lakh for a private company and ₹5 lakh for a public company. This requirement has now been done away with for incorporating both private and public companies in India.
- *Making tax laws simpler:* The government has accepted most of the first set of recommendations of Easwar Committee for simplification of

Table 1.5: Procedures for starting a business in India – A comparison of the exiting versus proposed procedures

Existing procedures (13) to start a business in India	Proposed procedures (6) to start a business in India
1. Obtain a Digital Signature Certificate (DSC)	1. Incorporate a company using Simplified Proforma for Incorporating Company electronically (SPICe)
2. Obtain online the Director Identification Number (DIN)	2. Obtain PAN and TAN through a single, integrated form
3. Receive company name online from the Registrar of Companies (ROC)	3. Register with EPFO and ESIC
4. Pay Stamp Duty	4. Open a bank account
5. Make a company stamp	5. Register for VAT and Professional Tax
6. Obtain a Permanent Account Number (PAN)	6. Register with state's Shops and Establishment Act
7. Obtain Tax Deduction/Collection Account Number (TAN)	
8. Register with Employee Provident Fund Organisation (EPFO)	
9. Register with Employee State Insurance Corporation (ESIC)	
10. Open a bank account	
11. Online registration for value-added tax (VAT)	
12. Register with the state's Shop and Establishment Act	
13. Register for Professional Tax	

Source: Compiled from data by DIPP and Ministry of Corporate Affairs

tax laws, the most important ones being exemption to non-residents from mandatorily having a PAN for lower tax deduction at source, hiking the turnover limit for availing presumptive taxation benefits from ₹1 crore to ₹2 crore and deferment of Income Computation and Disclosure Standards (ICDS).

- Small Industries Development Bank of India (SIDBI) launched a ₹2,000-crore India Aspiration Fund (IAF) in August 2015 to boost the start-ups fund-of-funds ecosystem in the country. Along with it, SIDBI's Make in India Loan for Small Enterprises (SMILE) scheme of ₹10,000 crore has also been launched to catalyse thousands of crores of equity investment in start-ups and micro, small and medium enterprises (MSMEs).
- The Pradhan Mantri Mudra Yojana (PMMY) was launched in April 2015 with a corpus fund of ₹3.1 billion and a credit guarantee fund of $470 million. The objective is to provide finance and credit support to the microfinance institutions (MFIs) and other agencies, which lend money to small businesses and individuals. It would also help in registering all the MFIs and introduce a system of performance rating and accreditation, thus helping the last-mile borrowers of finance to evaluate and approach the best MFIs.

1.7 Entrepreneurship and economic development – A background

Entrepreneurship is embedded in the society since ages. Entrepreneurs are people who remain in pursuit of identifying new business possibilities and exploit these possibilities through new ventures, for economic gain. However, during the past six decades, the role of entrepreneurship in the economic development has changed dramatically. Post World War II, Robert Solow was awarded the Nobel Prize in 1956 for identifying physical capital and unskilled labour as two major factors for economic development. Solow's factors of economic growth fit well with large-scale production and represent the state of the economy, post the war. Several pieces of evidence also support the same by referring to an increasing presence of large enterprises in the economy during the period, which spreads over to many countries. The policy thrust for economic development thus rests solely on higher investments in physical capital, and is a key to generate economic growth and increase workers' productivity. It was during this time that entrepreneurship and small business were considered unnecessary from the economies' perspective, and were thus declining fast across the Europe and North America (Scherer, 1991). Gradually, with structural changes in the society during the mid-1970s and 1980s due to economic recession, oil crises, technological progress and globalisation, along with political change in favour of a market-oriented economy, a disequilibrium is created that constituted a favourable ground for new business opportunities and ventures (Bettis & Hitt, 1995). At the same time, many critics of Solow's model of economic growth argued in favour of a knowledge-based economy over the capital-based economy, which can better predict economic growth in a global market (Romer, 1986; Krugman, 1991). Their arguments seemed to work against entrepreneurship and small firms as they cannot invest heavily in R&D, which is a prerequisite for knowledge generation. It would thus reduce their knowledge capabilities and make them less competitive.

Despite such negative predictions, entrepreneurship has evolved as a key activity for fostering prosperity all over the world, and has proved to be a powerful determinant for global growth, innovation and employment.[10] It has become a major contributor to the development of the economy and wealth creation in society.

In the context of discussing the growing role of entrepreneurship, Audretsch & Thurik (2001) introduced a model of managed economy vs. entrepreneurial economy to explain the role of entrepreneurship shifting between both. While the managed economy is the political, social and economic response to an economy dictated by the forces of large-scale production, with predominance over factor of production (capital and unskilled labour) as sources of competitive advantage, entrepreneurial economy is the political, social and economic response to an economy dictated not only by the dominance of knowledge function but also by a very different yet complimentary factor known as entrepreneurship capital or the capacity to engage in and generate entrepreneurial activity.

The entrepreneurial economy is gradually making its way into the

[10] Carree & Thurik (2003). *Impact of Entrepreneurship on Economic Growth. Handbook of Entrepreneurship Research*. Springer.

world, with knowledge-driven goods and services having higher degree of flexibility. Against a backdrop of volatility, uncertainty and complexity in the global economic scenario, entrepreneurs are acting as agents of change by confronting the challenges on account of their agility, innovative mind-set, ability to ride the wave of new technology and attract talented young professionals.

There was a dichotomy in thought for defining entrepreneurs. One was based on the entrepreneurial behaviour of an individual, i.e., as one would act under uncertainty, and more or less contingent on luck (Gartner, 1990). The other termed it a societal phenomenon that emphasised entrepreneurship as an outcome of competitive behaviour that drives the market process (Kirzner, 1973). Therefore, it would affect the market in a positive way (Davidsson, 2001). Davidsson further classified entrepreneurship, in relation to the creation of new activities, with the help of two criteria, viz., the status of offering to the market and the status of offering to the firm.

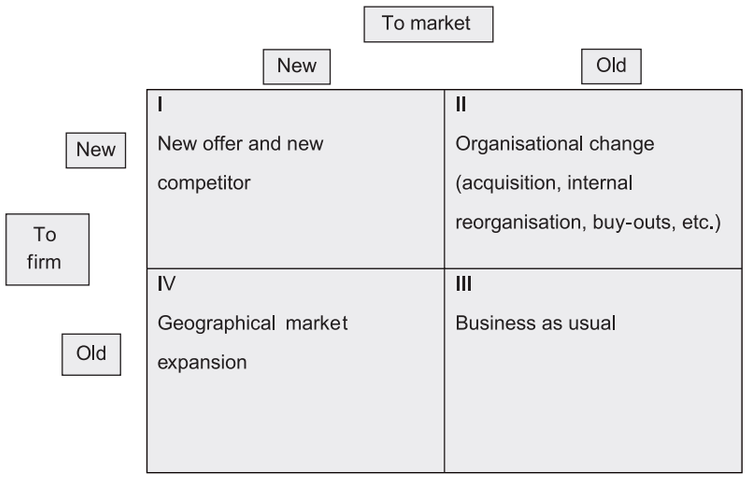
Further to the discussion on entrepreneurship is the presence or absence of an entrepreneurship ecosystem that has a significant role for fostering entrepreneurial activities in a country or region.

Entrepreneurship ecosystem is defined as 'a set of interconnected entrepreneurial actors (business angels, banks), institutions (universities, public-sector agencies, financial bodies) and entrepreneurial processes (e.g., the business birth rate, numbers of high-growth firms, levels of "blockbuster entrepreneurship", number of serial entrepreneurs, degree of sell-out mentality within firms and levels of entrepreneurial ambition), which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment'.[11]

In recent years, a particularly influential approach has been developed by Daniel Isenberg at Babson College, who has started to articulate what he refers to as an 'entrepreneurship ecosystem strategy for economic development'. He maintains that such an approach constitutes a novel and cost-effective strategy for stimulating economic prosperity. According to him, this approach potentially 'replaces' or becomes a 'precondition' for the successful deployment of cluster strategies, innovation systems, knowledge economy or national competitiveness policies. He identifies six domains within the entrepreneurial system: conducive culture, enabling policies and leadership, availability of appropriate finance, quality human capital, venture-friendly markets for products and a range of institutional supports.[12]

In addition, McKinsey has developed a composite index to measure the quality of entrepreneurial context of a nation, which rests on three pillars – a fertile entrepreneurial ecosystem, financing new ventures and infusing an entrepreneurial culture (Table 1.6).

Figure 1.7. Classification of entrepreneurship



Source: Davidsson, 2001, 2003

[11] *Entrepreneurial Ecosystem and Growth*, working paper published by OECD, 2014.
[12] *Six domains of Entrepreneurial Ecosystem*, developed by Daniel Isenberg (2011) at Babson College.

Table 1.6. Pillars of entrepreneurial context

Ecosystem	Financing	Culture

• Protective and fluid environment
  ■ Intellectual property protection
  ■ Ease of doing business
  ■ Judicial independence
  ■ Low level of irregular payments and bribes
• Quality of education
  ■ Quality of management schools
  ■ Overall quality of education system
• Burden of tax and regulation
  ■ Burden of government regulation
  ■ Extent and effect of taxation
• Collaboration
  ■ State of cluster development – university–industry collaboration in R&D
  ■ Administrative burden in starting a business
  ■ Number of procedures
  ■ Time required
  ■ Cost of starting a business
	• Ease of access to loans
	• Perception of venture capital availability
	• Financing through local equity market
	• Value per capita of venture capital investment
	• Number of venture capital deals
		• Perception of personal capabilities and opportunities
		  ■ Perceived opportunities
		  ■ Perceived capabilities
		• Perception of entrepreneurship
		  ■ Entrepreneurship seen as a good career choice
		  ■ High social status for successful entrepreneurs
		• Attention to entrepreneurship
		  ■ Media attention on entrepreneurship
		  ■ Role of schools in helping understand entrepreneurship
		• Inclination to entrepreneurship
		  ■ Entrepreneurial intentions
		  ■ Fear of failure

Source: 'The Power of Many' McKinsey Report 2011

Fostering entrepreneurship has become a core component of economic development in countries around the world. The predominant metaphor for fostering entrepreneurship as an economic development strategy is the 'entrepreneurship ecosystem'. The term ecosystem was originally coined by James Moore in an influential article in the *Harvard Business Review,* published during the 1990s.[13] He claimed that businesses do not evolve in a 'vacuum' and noted how the relationally embedded nature of firms interacts with suppliers, customers and financiers.

1.8 Entrepreneurship development in India – Progress and challenges

Entrepreneurship in the context of India can be traced to early days. Historical evidence suggests that India has been among the largest and advanced economies in the world. It was carrying out trade with several countries, including those in the European continent, during the 15th and 16th centuries. The early occupations were largely involved in trading and money lending, and found to be prevalent mainly among the Parsi, Hindu (Gujarati), Bohra and Jain communities. These groups possessed entrepreneurial qualities, such as aptitude for risk-taking, trading on a difference and a speculative attitude towards transactions, which they used mainly for conducting trading (Medhora, 1965). Even with the entry of European commercial enterprises, there was hardly any effect on the activities of the commercial classes; the demand for Indian goods in Europe was higher in the 17th century (Tripathy, 1971).

During the colonial period, an unusual form of institution flourished, called the 'Managing Agency Firms'.[14] These firms were atypical and unique to India in which the promotion, finance and administration of one or more legally separate and presumably independent companies were controlled by a single firm, mostly located in England (Brimmer, 1955). The agents who managed the independent companies in India were either British or Indian traders, bankers or merchants, possessing huge wealth or technical capabilities. Truly speaking, the businessmen operating through the managing agency firms were the real entrepreneurs in India. They have been the ones primarily responsible for the introduction of new products, new methods of production and new sources of raw materials; they discovered

[13] *Predators and Prey: A new Ecology for Competition, Harvard Business Review*, May–June 1993 Issue.

[14] For a better understanding of the Managing Agency Firms, read the article *Managing Agency Systems Far From Dead,* written by R. K. Hazari and published in *Economic and Political Weekly*, 1965.

and exploited new markets and usually undertook whatever re-organisation Indian industry has experienced.[15] During the late 19th century, following the restrictions imposed by the British Raj, many Marwari traders from Rajasthan quickly expanded over large parts of northern, central and eastern India. Chettiar traders from southern India, too, moved to distant Myanmar and parts of southeast Asia. At the same time, the Parsis and Gujaratis built textile mills in Ahmedabad and then in Bombay (now known as Mumbai). This clearly shows that India already had a well-exhibited culture of entrepreneurship before independence. The enterprise spirit remained alive even in the backdrop of two world wars, the great depression, India's independence struggle and the Hindu rate of growth.[16]

With India's independence in 1947 and under the political leadership of Jawaharlal Nehru, a decision was taken to establish large-scale public-sector enterprises in the country. The purpose was to give momentum to industrial development and create massive employment opportunities. With the domination of public-sector enterprises, the period was marked with the Licence Raj, controls on foreign exchange and expansion, which acted as major roadblocks for private enterprises and entrepreneurs. However, despite the challenges, a few private Indian companies led by some brilliant entrepreneurs survived the odds and carved their path of growth. Some of these distinguished entrepreneurs are J. R. D. Tata, Aditya Birla, Rahul Bajaj, Rama Prasad Goenka and Dhirubhai Ambani.

In 1991, a major push to revive the ailing Indian economy started as a result of a foreign exchange crisis and balance of payment (BOP) deficit due to the rise in prices of oil after the first gulf war. The Indian economy moved towards liberalisation. Industrial licensing was abolished in many sectors, import duties were cut, and private and foreign investments were allowed in reserved sectors.

A paper, published by the Ministry of Finance in July 1993, reads the objective of the reforms as '*To bring about rapid and sustainable improvement in the quality of the people of India. Central to this goal is the rapid growth in incomes and productive employments. The only durable solution to the curse of poverty is sustained growth of incomes and employment. Such growth requires investment in firms, in roads, in irrigation, in Industry and above all in people and this investment must be productive*'.

The set of reforms were a boon for the private companies. Soon, India witnessed a steady rise in the number of entrepreneurs spanning across diverse fields. While in the traditional private companies, established during the middle 19th and early 20th centuries, the next generation took charge over the businesses, the most notable phenomena being the rise of a new set of technocrat-turned entrepreneurs having no previous

Table 1.7. List of selected enterprises established before independence

S. no.	Name of the enterprise	Year of establishment
1	Britannia	1892
2	Dabur	1884
3	Tata Steel	1907
4	Century Textiles	1897
5	CESC	1897
6	Kirloskar	1888
7	Godrej	1897
8	TVS	1911
9	Bajaj	1926
10	Parle	1929

Source: Compiled from archives of the websites of the respected companies

[15] Daniel H. Buchanan, Development of Capitalistic Enterprise in India (New York: 1934), p. 145.
[16] The Hindu rate of growth was a term given by Indian Economist Raj Krishna and later popularised by Robert McNamra. It refers to the low rate of growth achieved by India post- independence in comparison to other export oriented Asian economies.

background of business. These new entrepreneurs entered the territory and established businesses that later competed globally. As a testimony to rising entrepreneurship in India in those times, the case of Infosys is an interesting example. In 1981, N. R. Narayana Murthy, along with six other engineers – Nandan Nilekani, S. D. Sibulal, Kris Gopalakrishnan, N. S. Raghavan, K. Dinesh and Ashok Arora – established Infosys at Pune with an initial capital of $250, mostly pooled from the savings of their spouses. Today, the company is a $10-billion organisation and employs over 200,000 people worldwide. It also became the first company from India to be listed with the New York Stock Exchange (NYSE).

Peter Drucker mentioned in his classic book *Innovation and Entrepreneurship* the shift of a managerial economy to an entrepreneurial economy. The post-liberalisation phase offered a suitable platform for the Indian economy to transform into an entrepreneurial economy.

India, a young country (Status of youth and employment)

In the beginning of the 21st century, India projected as a young nation. According to *World Population Prospects: The 2015 Revision* by the Population Database of United Nations Population Division, India has the world's highest number of 15–24 year olds, i.e., 234 million. More than 50% of its population is below the age of 25 and more than 65% is below the age of 35. It is expected that by 2020, the average age of an Indian will become 29 years.[17] With the rise in the population of youth, it will face multiple challenges in terms of job creation and employment, as highlighted by the report. The report also suggested that the employment scenario was struggling to keep pace with the economic development in the country. The unemployment rate was reported to be 4.8%, highest in the past 2 years. According to the data released by OECD, more than 30% Indian youth (aged 15–29) are neither in employment nor in education or training. This is double than the OECD average and three times compared to that of China.[18]

From 1991 to 2013, the size of the working-age population in India increased by 300 million, whereas the number of employed people increased by only 140 million. Therefore, the economy could absorb less than half the new entrants into the labour market. The number is further expected to grow, and by 2050, it is estimated that around one billion people will be in the working-age group. However, the scenario has both positive and negative implications for the Indian economy. The positive effect would be a greater share of the population working and earning, thus increasing their savings, taxes and consumption, which would lead to an increased demand for goods and services. This shift will provide necessary boost to the economy and power investments in healthcare, education and other building blocks, and lead to a prosperous future. The transition can ideally be termed as 'reaping the demographic dividend'.

In hindsight, the opportunity in the form of human development gains will be lost or will affect negatively, if not complemented with suitable policy changes and governance. The policies should focus on education, skill development, entrepreneurship and innovation. The Indian government, at present, is working to create jobs by promulgating policies: Skill India, to offer skill training to millions of youths and prepare them for job prospects; Startup India, Stand Up India, for entrepreneurship development with an aim to promote a healthy start-up ecosystem in the country; and Make in India, to ensure a growth vibrancy in the manufacturing sector and thus facilitating ease of doing business for SMEs in India.

In the past decade, entrepreneurship in India has emerged as one of the most discussed topics. There has been an influx of new-generation entrepreneurs, mostly graduates of engineering and management courses, who chose entrepreneurship as a preferred career option. According to a report published in 2016 by the Associated Chambers of Commerce and Industry of India (ASSOCHAM), India is home to around 4,750 start-ups and is ranked as the third largest start-up ecosystem globally. These start-ups have generated employment for about 85,000 people, and have secured funding of about ₹3.8 billion.[19] It is further estimated that by 2020, the number of start-ups will cross 10,000, with an employment generation for over 2 million in the country.

---

[17] *The 2015 Revision Population Database,* published by United Nations Population Division

[18] *OECD Economic Survey India*, *2017*.

[19] *Indian Startup Ecosystem Maturing* 2016 – An ASSOHAM-Zinnov report.

A positive sentiment was also echoed by the *India Startup Outlook Report 2016*. The report projected that in FY 2016, more than 50% bootstrapped start-ups and 45% angel investors-funded start-ups are expected to turn profitable, whereas only 22% venture capitalists (VC)-funded companies are expected to turn profitable. On the funding side, 130 companies were expected to raise $700 million over the next 12 months. From a demographic angle, New Delhi emerged as the most sought-after locations for starting new ventures. Bengaluru and Mumbai were the next preferred start-up hubs. An industry-wise analysis revealed that irrespective of the funding, consumer internet and e-commerce remained the most popular segments. From a hiring perspective, 97% start-ups felt they were likely to hire new employees, whereas 28% would be on the technology front.

The study further projected a surge in the number of job opportunities, with over 5,000 jobs expected to be created by about 130 start-ups over the next 12 months. There was significant gender diversity across the start-up workforce, as evaluated by the report. It showed that 41% of the VC-funded start-ups had women founders or CXO-level executives, whereas this number stood at 31% for bootstrapped ventures and at 29% for ventures with angel funding.[20]

The enthusiasm of the youths is aptly visible as the median age of new-generation entrepreneurs touched 31 years in 2016. The ecosystem for both technology and traditional start-ups has been expanding at a rapid pace. This has resulted in the emergence of a number of home-grown unicorns[21] across the country: Flipkart, Paytm, Urban Ladder, OLA Cabs, Snapdeal, Zomato, InMobi being a few of them. There has been a significant rise in the number of co-working space, incubators and accelerators in India. Presently, 280 of these are operational in the country, as per the reports of National Institution for Transforming India (NITI) Aayog. This number grew at a rate of 40% year-over-year (YOY) in 2016.[22]

Similarly, the growth of venture-capital firms and angel investors is also on the rise. Most notably, the entrepreneurs of the liberalisation era, including Ratan Tata, N. R. Narayana Murthy, Ronnie Screwvala and Azim Premji, among others, are backing the start-up ecosystem in India. Ratan Tata is the most aggressive angel investor among his peers and invests through his firm RNT Associates. He had invested in 36 companies in 30 months between 2014 and 2016.[23]

There is a significant presence of major global VCs and hedge funds from both the West and the East. These include Tiger Global, Sequoia Capital, Accel Partners, Matrix Partners, Inventus Capital, Nexus Venture Partners, Norwest Venture Partners, Bessemer Venture Partners, CapitalG, IDG Ventures, DST Global, Intel Capital and Qualcomm Ventures from the West. Japan's SoftBank and Singapore's Temasek are among major investors from the East. Chinese giants – Alibaba and Tencent – have also been picking up stakes in Indian start-ups.

The present National Democratic Alliance at Centre, showing agility to assess the concerns of start-ups, launched the Startup India Action Plan in January 2016. The plan outlined a 19-point action plan to help the start-up ecosystem and clear the logjam relating to matters like compliance and taxation and promote innovation.

Women entrepreneurs of India

'If you educate a man, you educate an individual but, if you educate a woman, you educate a family.[24]

This old proverb holds a lot of significance in terms of explaining not only how important it is to educate women but also how equally relevant it is for predicting the superior role that women can play in economic development and progress of a nation.

The role of women in the society has always been traditional and bound by oppression of the patriarchal ideology. They were treated unfairly across various parameters, including economic participation and opportunity, educational attainment, health and survival and political empowerment.

The United Nations Decade for Women (1975–85) laid the

[20] InnoVen Capital "India Startup Outlook report", 2016.

[21] A unicorn is a startup company valued at over $1 billion. The term was coined in 2013 by venture capitalist Aileen Lee.

[22] *Indian Startup Ecosystem Maturing 2016* – An ASSOHAM-Zinnov report.

[23] *http://techcircle.vccircle.com/2016/06/29/meet-the-men-who-advise-ratan-tata-on-his-angel-investments/*

[24] The proverb is given by the famous Ghanaian scholar Ghanaian scholar Dr. James Emmanuel Kwegyir-Aggrey (1875–1927), one of this century's greatest educators. Kwegyir-Aggrey probably used this proverb to convince African parents who were more willing to allow their male children to attend missionary schools than their daughters.

Table 1.8. Startup India Action Plan highlights

S. no.	Broad plan	Highlights of the plan
1	Funding	• A corpus of ₹10,000 crore to be invested in start-ups over the next 4 years • Credit guarantee fund of ₹500 crore
2	Compliance	• Start-ups can self-certify compliances with nine labour and environment laws • No inspection for a period of 3 years • The Bankruptcy Bill 2015 will make the exit easier for start-ups
3	Taxation	• Tax exemption for 3 years • Tax exemption in investment above fair market value • Tax exemption on capital gains • Relaxed norms of public procurement
4	Innovation	• Atal Innovation Mission • Faster Patent examination with Government bearing the cost of facilitation up to 80% • Innovation awards per state • Innovation centres at national Institutes • 7 new research parks • Promoting innovation at school level with prototyping support • Annual Incubator grand challenge
5	Infrastructure and Support Service	• A dedicated mobile app and Portal • Startup India hub

Source: Startup India Action Plan, unveiled on January 2016, accessed from startupindia.gov.in

foundation for a new wave of programmes to promote the role of women in the global economy. This has, thus, not only led to gender equality but also to exploring of ways in which the economic activities pursued by women could lead to economic development.

In a recent study conducted by the *Global Entrepreneurship Monitor* in 2015, on women entrepreneurship, it was found that women entrepreneurship rose by 6% worldwide, in the past 2 years. Furthermore, women entrepreneurs in half of the 83 economies surveyed by *GEM* were considered to be as innovative as, or more innovative than, their male counterparts. Women entrepreneurs play an increasingly vital role – socially, professionally and economically – in turning developing countries into more knowledge- and innovation-driven economies.

The *Mastercard Index of Women Entrepreneurs (MIEW) Report 2017* found that indicators such as support for SMEs, financial inclusion of women, ease of doing business, quality of governance, cultural perception of women entrepreneurs and entrepreneurial supportive factors are the strongest enablers of women ownership of businesses. It also predicted a few enabling factors such as a positive business mind-set, sheer drive and determination to succeed and high ability to identify good business opportunities as crucial, as found in the *GEM Report* as well. The *MIEW Report* also suggested that some of the most common and biggest constraints to women business ownership are lack of financial funding/venture capital, regulatory restrictions and institutional inefficiencies, lack of self-belief or entrepreneurial drive, fear of failure, socio-cultural restrictions and lack of training and education. In almost all the 54 economies evaluated, at least one or more of these constraints were holding back the progress of women in the field of business/ entrepreneurship.

A discussion on the entrepreneurial landscape in India will be incomplete without mentioning the role of its women entrepreneurs. Historical evidence suggests that in India, representation of women entrepreneurs was abysmally low during both the colonial and post-independence era – much attributed to the social set-up and the role entrusted upon women. Despite the barriers, three organisations – Shri Mahila Griha Udyog Lijjat Papad[25] founded in 1959, Self Employed Women's

[25] Started by seven housewives by taking out time from their household chores and making rolled *papads* at Girgaum at Mumbai in 1959, with a modest sum of ₹80. Today, the organization has 43,000 sisters engaged, with annual sales revenue crossing ₹650 crore. To know more, visit *www.lijjat.com.*

Association (SEWA)[26] founded in 1971 and Biocon[27] founded in 1978 – were founded by women. The history and legacy of these organisations explain the potential of women as entrepreneurs. During liberalisation, there was a push towards women entrepreneurship across small businesses, with several women-centric institutions cropping up, such as Federation of Indian Women Entrepreneurs (FIWE) and Consortium of Women Entrepreneurs of India (CWEI). To support the women entrepreneurial initiatives, many banks, including Small Industries Development Bank of India (SIDBI), National Agricultural Development Bank of India (NABARD), State Bank of India (SBI) and Punjab National Bank (PNB), started to offer credit assistance to the women. Several government schemes were also launched to provide necessary momentum to women entrepreneurship in the country. Some of the schemes are mentioned below.

- Support to Training & Employment Programme for Women (STEP) was launched in 1986 to help groups of vulnerable women set up their own businesses and get out of poverty and, therefore, improve their social status by creating self-help groups (SHGs).
- National Credit Fund for Women, also known as Rashtriya Mahila Kosh (RMK), was set up in 1993 to provide micro-credit to poor Indian women, by provision of loans by microfinance institutions (MFIs).
- Swayam Sidha Scheme, also known as Integrated Women Empowerment Programme, was launched in 2001. It extended the STEP by putting more emphasis on its first stage. After the creation of the initial SHGs, Swayam Sidha Scheme requires them to federate into Village Societies, including representatives of each SHG and local functionaries. These Village Societies then federate into Block Societies (the block being the administrative unit directly under the district), which could ask for registration as a non-profit society. The aim is to strengthen the links between women SHGs and make them more powerful.
- Under the Prime Minister's Employment Generation Programme (PMEGP), the share of the government grant in setting up a microenterprise has risen from 15% to 25% in urban areas and from 25% to 35% in rural areas, when the beneficiary is a woman. Additionally, the share of the project cost, to be supported by the beneficiary, drops from 10% to 5%, the remaining 60–70% being covered by a bank loan.
- Under the Micro and Small Enterprises-Cluster Development Programme (MSE-CDP) started in 2007, clusters with more than 50% of female-owned enterprises benefit from a government grant of 90% for soft interventions (organisation of training sessions and seminars, hiring of business consultants, etc.) and for hard interventions (creation of common facility centres such as testing centres, warehouses, effluents treatment plant, etc.)
- Under the Credit Guarantee Fund Scheme for Micro and Small Enterprises, launched in 2000, the guarantee cover for women-owned businesses in case of default was extended to 80% of the bank loan, instead of the previous 75%.
- The Trade Related Entrepreneurship Assistance and Development (TREAD) for Women aims at improving access to credit for female entrepreneurs in non-agricultural activities. The objective is to mobilise the help of local non-governmental organisations (NGOs) formulate business plans and obtain bank loans for one or several female entrepreneurs, and provide technical training and business-related advice. The government grant amounts to 30% of the total project cost, which includes not only fixed assets and working capital but also training and consultancy fee, and participation in product exhibitions.
- The Mahila Coir Yojana, managed by the Coir Board, Ministry of MSME, was launched in 1994 to modernise the traditional industry of the coir fibre by providing technical training (for a period of 2 months) and subsidies (up to 75%) for the use of motorised spinning machines.
- SIDBI also has its own scheme for women entrepreneurs, namely the Mahila Udyam Nidhi Scheme, to provide subsidised loans to female

[26] SEWA, founded by Dr. Ela Bhatt, is an organization that unites petty workers and self-employed females. The trade union was registered in the year 1972. To know more, visit *www.sewa.org*.

[27] Founded by Dr. Kiran Majumdar Shaw as an enzyme-manufacturing company, expanded to a full-fledged biopharmaceutical company later on. It employs over 3,000 bioscientists, engineers and managers. To know more, visit *www.biocon.com*.

entrepreneurs in small-scale businesses. New businesses as well as existing businesses can apply for assistance to upgrade technology, increase of production capacity or financial bailout. The soft loan (subsidised loan) is not to exceed 25% of the project cost, whereas the remaining 65% (taking into account the beneficiary's own contribution of 10%) can be financed under the usual SIDBI loan policy.

- Finally, the Ministry of Rural Development and the Ministry of Housing & Urban Poverty Alleviation have designed a preferential treatment for women through their own self-employment schemes (the Swarna Jayanti Gram Swarozgar Yojana and the Swarna Jayanti Shahari Rozgar Yojana, respectively). These schemes are analogous to PMEGP, but they apply to rural or urban areas only. The Ministry of Rural Development has issued guidelines stating that women should constitute no less than 40% of the beneficiaries.
- Pradhan Mantri Mudra Yojana (PMMY) was launched in 2015, with an allocation of ₹20,000 crore for credit and financial assistance to MFIs and other agencies that lend money to small businesses with a nominal rate of interest.

Combining the concerted efforts at all levels and a rise in the number of educated women, the possibilities for women taking part in formal employment are aplenty, which further contribute to a rise in the number of entrepreneurial ventures by them. The scenario for large family businesses, once resistant to the idea of women leadership, is also now welcoming and favouring women entrepreneurs or leaders. According to *BNP Paribas Global Entrepreneurialism Report 2016*, India ranks as the most active country for women entrepreneurs, with the figure touching 49%. It puts India ahead of countries like Hong Kong and France, in terms of active women entrepreneurs. The findings are also supported by the *Dell Women's Global Entrepreneurship Study*, which found India to be one of the most favourable places for women entrepreneurs. The study suggested that businesses owned by women will thrive and are expected to grow by up to 90% in the next 5 years. The rate of growth of new-generation female entrepreneurs-led businesses gives direction to the entrepreneurial movement in the country. They are active in creating high-impact enterprises covering financial services, IT/ITES/e-commerce, life sciences and small- and large-format retail businesses.

However, with majority of these ventures belonging to women from upper class, the middle and lower class are yet to join the league. The situation is changing rapidly, backed by the support of an ideal environment and infrastructure for the education of girls, skill development and a thriving ecosystem for entrepreneurship.

1.9 Genesis of the Global Entrepreneurship Monitor (GEM), India

The GEM research was initiated in India by the N S Raghavan Centre for Entrepreneurial Learning (NSRCEL) at IIM Bengaluru (IIM-B) in 2001. Following the successful accomplishment of GEM India Research Project 2001, it was undertaken again in 2002. Back

Table 1.9: List of new-generation female entrepreneurs in India

S. no.	Name	Name of enterprise	Year of establishment
1	Aditi Gupta	Menstrupedia	2012
2	Anu Acharya	MapMyGenome	2011
3	Falguni Nayar	Nykaa	2012
4	Meena Ganesh	Protea	2013
5	Nidhi Agarwal	KAARYAH	2015
6	Radhika Aggarwal	ShopClues	2011
7	Richa Kar	Zivame	2011
8	Sairee Chahal	Sheroes	2014
9	Shraddha Sharma	YourStory.com	2008
10	Suchi Mukherjee	Limeroad	2012
11	Upasana Takku	MobiKwik	2009

Source: Compiled from websites of the respected start-ups

then, the GEM research model was in its nascent stage and the 'Assessment of Entrepreneurial Activity' in India was a novel concept. Prof. Mathew J. Manimala of NSRCEL, IIM-B conducted the GEM India survey during 2001 and 2002 under the GEM Research Project and delivered research work in the form of two annual reports. Subsequently, during 2006–08, a team of Prof. I. M. Pandey, Prof. Ashutosh Bhupatkar and Prof. Janki Raman from the Pearl School of Business, Gurugram, conducted the GEM India study. The surveys were conducted over a period of 3 years and its data featured in the *GEM Global Report* (2006, 2007 and 2008). The GEM India team, on the other hand, could not publish the national report during the same period. Moreover, due to some reasons, in the succeeding years, i.e., 2008–11, the GEM India study was not undertaken.

GEM India Study (2012–15)

In 2011, with an aim of continuing with the GEM India study, the heads of three institutions – Dinesh Awasthi (Entrepreneurship Development Institute of India or EDII, Gandhinagar), Krishna Tanuku (Wadhwani Centre for Entrepreneurship Development, Indian School of Business or ISB, Hyderabad) and Bibek Banerjee (Institute of Management Technology or IMT, Ghaziabad) along with Vijay Vyas (Faculty, Portsmouth Business School, UK) and Mathew J. Manimala (NSRCEL, IIM-B) discussed the possibility of forming the GEM India Consortium. Finally, the three institutions – EDII, ISB and IMT Ghaziabad – formed a national-level consortium by signing a Memorandum of Understanding (MoU). The GEM India Plus Consortium was formed on February 2, 2012 for conducting the study over a period of 3 consecutive years, starting from 2012 to 2015. All the three partnering institutions unanimously agreed to nominate EDII as the lead institution and Sunil Shukla, Director, EDII as the Team Leader. As per the stipulated requirements, GEM India Plus Consortium conducted research studies during the years 2012, 2013 and 2014. The *GEM National Report, 2014* featured the study results conducted during the year 2014.

GEM India Study (2015–18)

To continue the GEM India study, GEM India Plus 2012–15 Consortium was reconstituted. The present GEM India Team comprises EDII, Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP), Bhopal and Jammu & Kashmir Entrepreneurship Development Institute (JKEDI), Srinagar. The three institutions signed an MoU on April 11, 2015 at EDII, Gandhinagar, for conducting the GEM study over the next 3 years, starting April 2015. The institutions agreed to fulfil/complete the GEM annual cycle and its obligations, in a time-bound manner, to suit GEM's global schedule. Yet again, EDII was nominated as the Lead Institution as well as the Secretariat of the GEM India team and Sunil Shukla was designated as the National Team Leader.

About the GEM India partner institutions

Being a pioneer in entrepreneurship education and research in India, EDII took the initiative of continuing GEM India study by reconstituting the consortium with new partners. For this, EDII initiated dialogue with two state-level institutions practicing entrepreneurship namely CEDMAP, Bhopal, and JKEDI, Srinagar. Subsequently, their individual strengths, capabilities and enthusiasm for working together as partner institutions led to the formation of GEM India Consortium in April 2015.

ENTREPRENEURSHIP IN FOUR STATES

(GUJARAT, MADHYA PRADESH, CHHATTISGARH AND JAMMU & KASHMIR)

CHAPTER 2

A REVIEW OF ENTREPRENEURSHIP DEVELOPMENT IN GUJARAT

2.1 Introduction

Gujarat, situated in Western India, shares its borders with Rajasthan in the north, Madhya Pradesh in the east, Maharashtra and the Union Territories of Daman & Diu and Dadra & Nagar Haveli in the south. The Arabian Sea borders the state along its west and south-western boundary. With a literacy rate of 78.03%, the state is spread over an area of 196,024 km^2 and is home to nearly 62.7 million people.

2.2 The business environment in Gujarat

The average annual growth of gross state domestic product (GSDP) in Gujarat, from 2004–05 to 2015–16, stood at 12.02%. The state's net state domestic product (NSDP) expanded at a compounded annual growth rate (CAGR) of 11.78% from 2004–05 to 2015–16.[1] Gujarat has achieved the distinction of being one of the most industrially-developed states and contributes about a quarter to India's goods exports. According to the assessment conducted by the DIPP, Gujarat was the second most-preferred destination for investment during 2016.[2] It also ranked first as per the N-SIPI 21,[3] an index of National Council of Applied Economic Research (NCAER)'s State Investment Potential Index (N-SIPI) 2016, which evaluated each state on five key factors (labour, infrastructure, economic condition, political stability and governance and perception of a good business climate).

The state's structural advantages such as its long coastline, deep-sea ports and presence of a large business community with a strong entrepreneurial culture contributed to its fast pace of growth. These factors were further bolstered by its well-functioning administrative machinery and massive investment in infrastructure, especially in the power and logistics sectors. Gujarat is a leader in industrial sectors such as chemicals, petrochemicals, dairy, drugs and pharmaceuticals, cement and ceramics, gems and jewellery, textiles and engineering.

The industrial sector comprises more than 800 large industries and 453,339 MSMEs. The state supplemented the manufacturing thrust with focused efforts towards improving agricultural productivity and service-sector growth. Its agricultural GDP growth rate increased from under 2% in the 1980s and 1990s to more than 6% during the period 2000–2013. Recently, the state has started focusing on tourism as the next sunrise sector, with a steady rise in inflow of tourists. The tourist flow influx during the year 2014–15 was 13.56% higher than that during 2013–14.

Table 2.1: At a glance: Gujarat

Capital	Gandhinagar
Language	Official language – Gujarati Other languages – Marwari, Hindi, Marathi, Urdu, Sindhi and Kutchi
Area (km^2)	196,024
Per-capita gross state domestic product ($)	2619
Total population (million)	62.7
Literacy rate (%)	78.03
Number of districts	26
Major rivers	Narmada, Sabarmati, Tapi (or Tapti) and Mahi
Prominent cities	Ahmedabad, Gandhinagar, Surat, Vadodara and Rajkot
Major tourist destinations	Great Rann of Kutch, Gir, Somnath, Dwarka, Gandhi Ashram, Calico Museum, Nal Sarovar, Lothal, Sarkhej Roza, among others
Prominent airport	18
Prominent major and minor ports	1+41
Major industries	Chemical, petrochemical, textiles, pharmaceuticals, gems and jewellery
Natural resources	Natural gas, limestone, manganese, bauxite, China clay, fire clay, calcite, dolomite, fluorspar, gypsum, bentonite, quartz, silica sand and steatite

1. *https://www.ibef.org/download/Gujarat-January-2017.pdf*, Gujarat Budget Estimates 2016–17.
2. *https://www.ibef.org/download/Gujarat-January-2017.pdf.*
3. *Vibrant Gujarat Report 2016.*

2.2.1 Handicrafts of Gujarat

The state is an amalgam of three regions – the industrial mainland of Gujarat, the southern peninsula of Saurashtra and the desert and marshlands of Kutch. Due to the proximity of ports such as Surat and Porbandar, several crafts of the state, such as *patola*, *mochi* embroidery and *mashru* and block-printed fabrics, have been exported to the far-East and Europe since centuries. It also led to the assimilation of cultures of Arabs, Moghuls, Portuguese, Dutch and British.

Gujarat consists of five metaclusters at Kutch, Surat, Ahmedabad, Vadodara and Rajkot and is home to crafts of painted terracotta, embroidery, *bandhani*, Applique, *patola* and *mashru*-weaving, kite-making, wood-carving, rogan painting, boatmaking, blockmaking and marquetry. According to the *Crafting a Livelihood* report by Dasra, a large number of artisans in Gujarat are engaged in various traditional crafts.

To promote entrepreneurship and encourage employment for artisans engaged in traditional crafts, the government of Gujarat announced its first-ever Cottage and Rural Industries Policy 2016. Under the policy, the state government will support artisans in terms of training, marketing, branding and design development. The policy will also bring artisans under various social security schemes. The government will also set up a design studio where artisans will be imparted training by experts from National Institute of Design (NID), National Institute of Fashion Technology (NIFT) and CEPT University.

To attract youths to this industry, a provision has been made for cash awards ranging from ₹1 lakh to ₹1.51 lakh for Best Young Artisan, Best Female Artisan and Best Artisan of Languishing Craft. The scheme has also included a venture capital fund for new entrepreneurs, encouraging start-ups in the sector, subsidy for purchasing tools, e-commence websites to sell the products, a crafts museum and a raw materials' bank for selected craft products.

2.3 Entrepreneurship development in Gujarat

Gujarat is renowned for its entrepreneurial culture. Apart from hosting a vibrant business community and a large number of MSMEs, the state presents a unique human capital opportunity with its demographic dividend and a rising educated youth population. The state is host to premiere institutions like Indian Institute of Management (IIM), Indian Institute of Technology (IIT), NID and EDII. There are more than 15 incubators in the state, which have primarily been set-up or hosted to support start-ups in the nascent stage. Some of these incubators are established or are being hosted at IIM Ahmedabad, Gujarat Technology University, MICA, NIRMA University, Ahmedabad University, Dhirubhai Ambani Institute of Information and Communication Technology and EDII. The state has more than 30 research institutions focusing on applied research in fields such as manufacturing, textiles, pharmaceuticals, biotechnology, petrochemicals and renewable energy. The state has always been ahead of others because of its proactive approach for boosting entrepreneurial activities. It has also been a pioneer in taking initiatives in entrepreneurship development across the country. The state enjoys a dominant position in the start-up landscape of the country, post introducing the New Industrial Policy in 2015, which aims at aiding the start-ups and innovation in the state. The primary mission of the policy includes proactive support for innovation, start-ups and technology transfer. Under the scheme, the state government has created Nodal Institutions (NIs) to promote start-ups. Any incubator of an academic institute/university/private body is eligible to register as an NI. The NIs will be responsible for inviting proposals from start-ups, evaluating them and providing incubation as well as mentoring facilities.

2.3.1 Entrepreneurship Development Institute of India (EDII)

An internationally acclaimed institution with over three decades of engagement for facilitating entrepreneurship development, the EDII has carved a niche for itself. The institute has been instrumental in setting up 12 state-level exclusive entrepreneurship development centres and institutes in India. Further, it has played a pivotal role in entrepreneurship education, being the first in India to offer a full-fledged Post Graduate Diploma in Business Entrepreneurship. As per its Alumni Survey 2017, 78% alumni of the institute have chosen an entrepreneurial career post graduating, which reflects the institution's credibility and commitment towards nurturing entrepreneurship. It has also played a major role in spreading entrepreneurship education by partnering and handholding a large number of schools, colleges, science and technology institutions and management schools in several states.

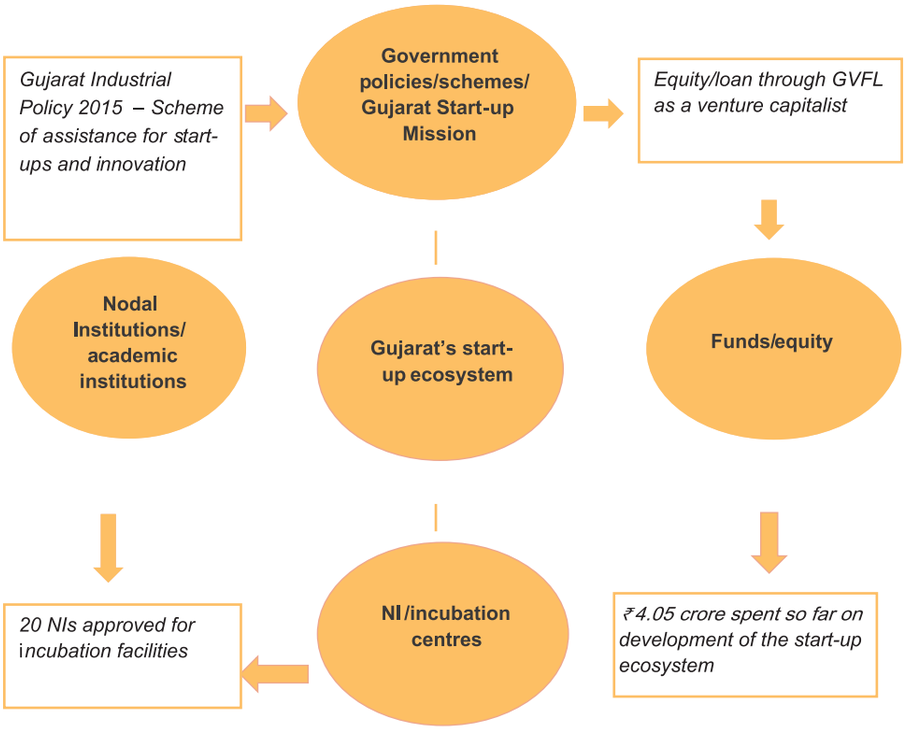
In view of EDII's expertise in entrepreneurship, the University Grants Commission (UGC) had assigned EDII the task of developing curriculum on entrepreneurship for the state. The Gujarat State School Textbook Board assigned to it the task of developing textbooks on entrepreneurship for students of Standard XI and XII. At the international level, to institutionalise entrepreneurship movement, the institute has established EDII-like affiliate institutes in Cambodia, Lao PDR, Myanmar and Vietnam. EDII has also signed an MoU with Pembangunan Sumber Manusia Berhad (PSMB)—an arm of the Ministry of Human Resources, Malaysia for skill development of its workforce. Under the agreement, EDII will assist in enhancing the capabilities of PSMB's trainers in delivering quality training programmes for Malaysian women, low-household-income community and youths, and thus help the country in meeting its target of a 35% skilled workforce.

In order to broaden the frontiers of entrepreneurship research, EDII has established a Centre for Research in Entrepreneurship Education and Development (CREED) to investigate a range of issues surrounding the SME sector through its publication—*The Journal of Entrepreneurship*. The CREED also establishes a network of researchers and trainers by conducting a biennial conference on entrepreneurship education and research.

In the international arena, efforts to develop entrepreneurship by way of sharing resources and organising training programmes have helped the institute earn accolades and support from the World Bank, Commonwealth Secretariat, UNIDO, ILO, FNSt, British Council, Ford Foundation, European Union, ASEAN Secretariat and several other renowned agencies. In recognition of its international achievements, the United Nations Economic & Social Commission for Asia and Pacific (UN-ESCAP), Bangkok, Thailand, has declared EDII as a 'Centre of Excellence'.

As part of the student start-up support system, many institutes have incorporated entrepreneurship in their curriculum. The Gujarat Technological University (GTU) offers specialisation in Technology Entrepreneurship, whereas the EDII offers PGDM in Business Entrepreneurship. Industry Associations (IAs) or organizations such as the TiE, Confederation of Indian Industry (CII), Gujarat Chamber of Commerce & Industry (GCCI), Federation of Indian Chambers of Commerce and Industry (FICCI), National Association of Software and Services Companies (NASSCOM) and others encourage entrepreneurship. The presence of

Figure 2.1: Startup ecosystem in Gujarat



Source: Gujarat State Start-up Initiative, published in July 2016

Industrial Training Institutes (ITIs) in each district is abundant proof of technology orientation by the state government.

The government of Gujarat has framed a Student Startup and Innovation Policy to issue grants worth ₹200 crore to students for their innovations. As per the new policy, the government will create pre-incubation support facilities, called Innovation and Pre-incubation Ecosystem Support (IPIES) in universities.[4]

To add further momentum to the growth of start-ups, the state government has introduced the Electronics and IT/ITeS Start-up Policy 2016. Although the New Industrial Policy aims at the manufacturing sector, the IT/ITeS policy is focused on promoting technology-based start-ups. The government is looking to facilitate at least 2,000 start-ups in the fields of electronics, IT and nanotechnology, which have availed a minimum round of VC funding. The government also aims to establish at least 100 incubators in the state to develop two million square feet of 'incubation space' and facilitate investment (VC funding) of $1 billion to start-ups over the next 5 years. Several incentives for incubators and start-ups were announced through this policy.

Table 2.2: Incentives under the IT/ITeS Start-up Policy

Incentives for incubators	Incentives for start-ups
• Capital assistance of up to 50% of gross fixed capital investment up to ₹50 lakh • Annual mentoring assistance of ₹5 lakh • Operational assistance of 25% of funds mobilised by them from non-governmental sources, subject to a ceiling of ₹1 crore per annum • Assistance for procurement of software at the rate of 50% of the software cost up to ₹1 crore • 100% reimbursement of Stamp Duty and registration fee paid on sale/lease/transfer of land and office space for the first transaction • Incentive on power tariff and Electricity Duty	• Monthly lease rental reimbursement at the rate of ₹15 per square feet for 2 years • Interest subsidy at 9% per annum, subject to a ceiling of ₹2 lakh per year for 2 years • Additional support of 25% of equity capital raised without scrutiny up to ₹5 crore • 100% reimbursement of Stamp Duty and registration fee • Reimbursement for the cost of patents up to ₹2 lakh per patent • Skill certification grant, marketing assistance and subsidy on bandwidth charges

Source: https://dst.gujarat.gov.in/images/pdf/Start-up-Policy-2016-21.pdf

Table 2.3: Selected incubators in Gujarat

S. no.	Name of incubator	Focus area	Notable start-ups from the incubator
1	Centre for Innovation, Incubation and Entrepreneurship (CIIE), IIM-A	ICT, renewable energy, social impact	Travelyaari, Innoz, Thrillophilia, Gridle
2	CrAdLE, EDII	Manufacturing, healthcare, renewable energy, food/agribusiness	Innersense
3	DA IICT Centre for Entrepreneurship and Incubation	Technology, ICT	Alma Connect Solutions Pvt. Ltd., PlayPower Labs India Pvt. Ltd.
4	iCreate Ahmedabad	IT, electronics, biotechnology, nanotechnology, robotics, non-conventional/green energy, biomedical equipment and devices, agro and food processing	Naka Foods, Almashines, Hubilo, Purpledocs
5	IIT-GN Incubation Centre	Technology	Cubeit, Tinker Tank, 4DEA, Cretif

[4] *Economic Times*, January 9, 2017

6	MICA Incubator	Communication service technologies, communication product technologies, communication equipment, applications tools for communication business	Shabda Nagri, Don't Scratch Your Head, DialogueMakers
7	Venture Studio, Ahmedabad University		OoWomaniya (a product by Impetus Wellness), Cruxbot, Wockito, Biofics, Vendaxo, Lightspeed
8	Innovation & Incubation Centre, PDPU, Gandhinagar	New and renewable energy, oil and gas, agricultural, healthcare and pharmaceuticals, transportation, computer technology, information technology, chemical, education, material science, civil and infrastructure, ecommerce, art, automobile technology, aerospace technology, communication and electronics	Power Tree, Yobo
9	National Design Business Incubator, National Institute of Design, NID Ahmedabad	Design and technology	Dhama Apparel Innovations Pvt. Ltd., Robots Alive Consulting Pvt. Ltd., Taparch, Fluvina
10	Gujarat Technological University (GTU) Innovation Council	Energy, agri, IoT, SaaS, logistics	Ovenbell

CHAPTER 3

A REVIEW OF ENTREPRENEURSHIP DEVELOPMENT IN MP & CG

3.1 Introduction

The state of Madhya Pradesh was formed on November 1, 1956 by merging the then states of Madhya Bharat, Vindhya Pradesh and the princely state of Bhopal, upon the recommendation of State Reorganisation Committee. With the enactment of Madhya Pradesh Re-organisation Act 2000, it was bifurcated to carve out a new state, Chhattisgarh. Before carving out Chhattisgarh, Madhya Pradesh was the largest state with abundant natural resources and economically useful minerals, such as diamond (sole producer in the country), copper mining (80% in the country), magnesium ore, limestone, coal and coal-bed methane.

Madhya Pradesh, the second largest Indian state, is popularly known as the heart of India and is the ninth biggest state economy in the country. It is spread across an area of 308,000 km^2. According to 2011 Census, Madhya Pradesh has a population of 73.3 million and a literacy rate of 69%. The state is endowed with vast natural resources such as forests, minerals, rare and valuable herbs, and medicinal plants. The state is also rich in terms of water resources, with eight important rivers flowing through its landscape. It is the largest producer of oilseeds, pulses, garlic and coriander in the country. Low cost of basic infrastructure, availability of skilled manpower and cheap unskilled labour further paved way for expanding the existing industrial base to a greater extent. Its rich cultural heritage and comparatively peaceful law and order situation, coupled with good connectivity with neighbouring states, have led the state towards growth.

Chhattisgarh (36 forts) is the tenth largest state in India, with an area of 135,194 km^2 (52,199 miles^2). The 2011 Census reports that the state has a population of 25.5 million and a literacy rate of 70.3%. Chhattisgarh has a large reserve of mineral resources including iron, limestone and coal. It is a major source of electricity and steel, accounting for 15% of the total production in the country.

3.2 The business environment in Madhya Pradesh and Chhattisgarh

Madhya Pradesh has pursued a different path to accelerate economic growth. Between 2004–05 and 2015–16, its GSDP expanded at a CAGR of 11.84% to $86.32 billion, whereas the NSDP expanded at a CAGR of 12% to $77.55 billion. According to the assessment conducted by DIPP, Madhya Pradesh had secured fifth rank in 2016. It has made significant reforms as suggested by DIPP's 340-Point Business Reforms Action Plan. The turnaround in the state's economic performance is more broad based, with agricultural GDP

Table 3.1: At a glance: Madhya Pradesh and Chhattisgarh

State	Madhya Pradesh	Chhattisgarh
Capital	Bhopal	Raipur
Language	Official language is Hindi. Other languages include Malvi, Nimadi, Bundeli, Bagheli, Urdu, Sindhi, Punjabi and Gujarati	Official languages are Hindi and Chhattisgarhi. Other languages include Halbi and Bhatri
Area (km^2)	308,000	135,194
Per-capita GSDP ($)	1,188.98	1257.7
Total population (million)	73.3	25.5
Literacy rate (%)	69	70
Number of districts	51	16
Prominent cities	Bhopal, Gwalior, Indore, Jabalpur and Ujjain	Raipur, Bilaspur, Bastar and Raigarh
Major rivers	Narmada, Tapti, Shipra, Chambal, Son, Mahanandi	Narmada, Mahanadi and Seonath
Airports	5	1
Major industries	Pharmaceuticals, textile, food processing, IT and auto components, engineering, biotech, herbal, garments, mineral and stone, FMCG and engineering	Mining, iron and steel, cement, power, IT and ITeS, and biotechnology
Natural resources	Iron ore, diamonds, copper, magnesium ore, limestone, coal and marble, granite and coal-bed methane	Iron, limestone and coal

growing by 10% annually between 2005 and 2014, much higher than its historical annualised growth rate of 2.3% during 1995–2004. The power sector was reformed and grew at an approximate annual rate of 14% between 2008 and 2013. An investment of ₹20,000 crore (about $400 million) is being proposed by the National Thermal Power Corporation (NTPC) to build a generation capacity of about 4 gW. Such changes substantively improved the investment climate in the state.

3.2.1 Handicrafts of Madhya Pradesh

Madhya Pradesh has a rich heritage that is reflected in its crafts. Historically, the region encompassing Malwa was ruled by succession of dynasties. It also greatly influenced the culture and architecture of the region. The Stupa of Sanchi and the Khajuraho temple are some reminisces of the ancient times. The state has the highest number of tribal population and they contribute significantly to the crafts landscape. The artisans from the non-tribal communities are engaged in traditional crafts, economic and cultural interaction with diverse set of communities.

Madhya Pradesh has seven metaclusters for various crafts, located at Betul, Bhopal, Gwalior, Indore, Jhabua, Mandla and Ujjain. The state is also home to crafts like terracotta, *bandhani* painting, glasswork, *dhokra*, woodcraft, stone craft, block-printing, iron craft, bead work and tribal painting. The sector employs over 102,000 artisans. The government is promoting and marketing handicrafts through its exclusive stores—Mrignayani, chain of government-sponsored emporia, a unit of Madhya Pradesh Hastshilp Evam Hathkargha Vikas Nigam Ltd. It helps showcase the range of the art and creations of the master craftsmen of Madhya Pradesh. The showrooms of Mrignayani in major towns of the state, metro towns and major tourist destinations in India display and sell a vast and exclusive range of handicraft items, metal items, terracotta and pottery, paintings, jewellery and textiles, and so on.

Madhya Pradesh also implemented a concerted thrust on tourism, awarding it 'industry' status that has led to faster clearances of tourism-related investment projects. With reforms and rising incomes, demand-led sectors such as communication and financial services have also been growing rapidly.

Chhattisgarh is one of the fastest growing states in India. Between the years 2004–05 and 2015–16, Chhattisgarh's GSDP expanded at a CAGR of 11.83% to $36.6 billion. According to the assessment conducted by DIPP, it had secured fourth rank in 2015 on account of its significant reforms for promoting the business environment. Chhattisgarh State Industrial Development Corporation (CSIDC) has set up industrial growth centres, five industrial parks and three Integrated Infrastructure Development Centres (IIDCs). The state also boasts a notified Special Economic Zone (SEZ) in the Rajnandgaon district.

Chhattisgarh has recorded a strong growth in agriculture and allied industries between 2004-05 and 2015-16; the absolute contribution of agriculture in the state's GSDP grew at a CAGR of 7.71%. The state government has proposed to develop India's largest herbal and medicinal park in Dhamtari on nearly 250-acre land. For conservation, development and sustainable management of medicinal plants, central government invested around $1 million in 2014–15. The approximate cost of the project is estimated to be $3.8–5.3 million.[1]

3.2.2 Handicrafts of Chhattisgarh

With a vast majority of the population being tribal, the state has three metaclusters for crafts, located at Bastar, Sarguja and Raigarh. The major crafts include weaving, iron craft, terracotta and pottery, bronzeware, brass vessels, lost wax metal castings, bamboo basketry and painted clay relief.

3.3 Entrepreneurship development in Madhya Pradesh and Chhattisgarh

Madhya Pradesh has established itself as one of the most favourable destinations for high-tech industries, including heavy engineering, IT, ESDM, telecommunications and automobiles, along with other industries like textiles, pharmaceuticals, cement, agro and food processing-based industries by setting up dedicated industrial clusters at various locations. This industrial growth has resulted in the demand for incubation, plug and play facilities for young, budding entrepreneurs within the state.

Furthermore, the presence of prominent technical, management and other professional institutes, such as IIT Indore, IIT Gwalior,

1. *IBEF State Report Chhattisgarh 2017*

IIM Indore, Maulana Azad National Institute of Technology (MANIT) Bhopal, Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Jabalpur, Indian Institute of Science Education and Research (IISER) Bhopal and National Institute of Fashion technology (NIFT) Bhopal, along with more than 224 engineering colleges, 114 polytechnics, 415 ITIs, 135 skill development centres and other vocational training centres, makes Madhya Pradesh an ideal destination for entrepreneurs, start-ups and technology transfer. The state has also designed clusters in Indore, Bhopal, Jabalpur, Gwalior, Reva and Sager in the fields of pharmaceuticals, textile, food processing, IT, auto-components, engineering, fabrication, biotechnology, herbal products, garments, minerals, forest and herbal-based industries, electronics, FMCG, light engineering, refractories, limestone, forest-based industries, major and minor minerals processing.

3.3.1 Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP)

The CEDMAP, in a span of over 25 years, has achieved enormous success in the field of entrepreneurship development activities in the states of Madhya Pradesh and Chhattisgarh.

Promoted by the state government of Madhya Pradesh and Central Financial Institution as well as lead banks of the state, the CEDMAP is an autonomous body and not-for-profit institution set-up in the year 1988, registered under the Firms & Societies Act 1973. The CEDMAP, being an ISO 9001:2008 certified institution, today enjoys the status of a premier institution for undertaking various entrepreneurship skills as well as livelihood development activities in Madhya Pradesh and Chhattisgarh.

The Centre has been actively conducting several training programmes including Entrepreneurship Development Programmes (EDPs), Rani Durgawati Swarojgar Yojana (RDSY), Pradhan Mantri Swarojgar Yojana (PMRY), Entrepreneurship Awareness Camps (EACs), skill training for DUDA/DST, Mid-Day Meal Scheme (MDM), self-help groups (SHGS), training to officials of government departments, Teachers Training Programmes (TTPs), etc. besides HRD training to the central and state government employees. The CEDMAP also offers vocational training programmes in areas such as mobile repairing, soft toys, leather goods, automobile repair, welding, electrician, nursing, food processing and agro-based training.

Apart from training, the CEDMAP in collaboration with IGNOU has started a community college to offer refresher courses across various skills for increasing self-employability.

The CEDMAP is also undertaking financial inclusion drive in the state. It has created opportunity for several youths in the villages to become village-level entrepreneurs (VEs) to reach out to millions of the financially excluded in the state.

Chhattisgarh also has an excellent educational ecosystem with the presence of institutes IIM, International Institute of Information Technology (IIIT), National Institute of Technology (NIT), All India Institute of Medical Sciences (AIIMS), National Law University (NLU), Indian Institute of Technology (IIT) Bhilai and a Centre of Excellence by Siemens.

The state has a proactive stance in building an entrepreneur-friendly ecosystem by promulgating major policies such as Chhattisgarh Innovation and Entrepreneurship Policy, Chhattisgarh IT/ITeS Policy 2014–19 and Chhattisgarh Industrial Policy 2014–19.

The Chhattisgarh Innovation and Entrepreneurship Policy 2016–17 is aimed at creating an enabling environment for entrepreneurship development in the state. The policy can prove to be a catalyst for nurturing start-ups. It will offer major tax relief to the first 36 start-ups in the state. It also announced that start-ups would get a subsidy of 75% on term loans up to ₹70 lakh for 6 years, fixed capital subsidy of 35–40% up to ₹3.5 crore, Electricity Duty exemption for 10 years, Stamp Duty exemption on land purchase or lease, besides assistance in preparing project reports, quality certification and technical patent costs.

The MSME start-ups shall be eligible for 60% subsidy on land premium in state-run Industrial Parks. The units shall be given the facility to self-certify for various state laws.

The objectives of the policy are as follows:

1) establish accelerators/TBIs in the state;
2) at least 100 ventures to be set up;
3) start-ups incubated in the state to have funding raised from VCs, financial institutions and angel investors;

4) conduct start-up bootcamps in academia, covering all schools and universities;
5) large innovative companies to link with the state and thus establish start-up infrastructure such as accelerators, incubators, R&D spaces, etc.;
6) to be recognised as one of the top hubs of innovation and entrepreneurship in Asia and the world;
7) promote gender equality by encouraging women in entrepreneurship;
8) enable the citizens of the state to be associated directly or indirectly with the start-ups to achieve a higher quality of life.

The government of Chhattisgarh has further initiated '36INC' – the first business incubator-cum-accelerator. It will act as a hub for network of incubators and accelerators across the state. The Startup Chhattisgarh was kick-started by the government, and under the scheme, innovative business ideas will be collected through a bootcamp covering all 27 districts. The top 36 ideas will be selected for further development and handholding. The first 36 start-ups will also be given tax benefits.

3.3.2 The start-up ecosystem in Madhya Pradesh

Madhya Pradesh has more than 500 start-ups, with a majority of them situated in Bhopal and Indore. Most of these are in the IT or ITeS category, followed by e-commerce. The government of Madhya Pradesh had earlier collaborated with Small Industries Development Bank of India (SIDBI) to set up a VC fund of over ₹200 crore, with ₹75 crore being provided by the government. It also launched its Incubation and Start-up Policy 2016 to promote a sustainable start-up ecosystem in the state.[2] The Incubation and Startup Policy 2016 is applicable to domains such as Internet of Things (IoT)/e-commerce/mobile technology, IT/ITeS/BPM/software development, manufacturing including ESDM/robotics/3-D printing, healthcare and pharmaceuticals, biochemicals and agriculture, green energy/clean technology/water and recycling, education or any innovative idea or technology as approved by the State-level Implementation Committee. The three focus areas of the policy are shown in Figure 3.1.

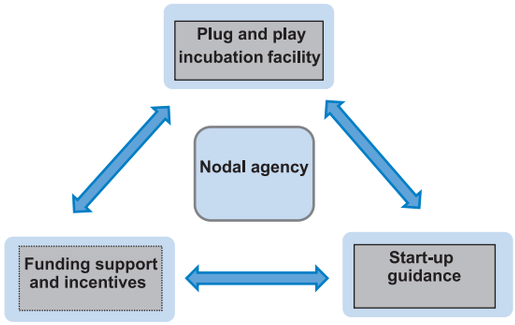
The policy aims to build a robust incubator network across academic institutions and to create a network of venture capitalists and angel investors. The policy has declared lucrative incentives for both incubators and start-ups.

Table 3.2: Selected start-ups in Chhattisgarh

S. no.	Name of the start-up	Description
1	Ascent Edutech	By integrating technology in education, the start-up creates interactive lectures with a perfect combination of classroom teaching, 3-D animation and industry interface, which makes learning more interesting and effective, especially for engineering and technology sectors
2	Healing Accelerated	e-platform for super-specialist medical opinion
3	MediKlik	The company is active in patient engagement and doctor discovery through an e-platform, with millions of pages on health-related content
4	Quick Search	An interactive local search and discovery platform focused on serving all your information needs and queries concerning various businesses and establishments
5	SpareGuru	SpareGuru is a B2B solutions provider that enables seamless purchasing of business needs across the country
6	Foodinger	It is a cloud-based restaurant with a vision of providing quality, delicious and economical food with your smartphone

2. *MP Incubation & Startup Policy 2016, (Draft),* Department of MSME, Government of Madhya Pradesh

Figure 3.1: Focus areas of Madhya Pradesh Incubation and Start-up Policy 2016



Source: MP Incubation and Start-up Policy 2016

Table 3.3: Incentives under the MP Incubation and Start-up Policy 2016

Incentives for incubators	Incentives for start-ups
• Capital assistance up to 50% of gross fixed capital investment up to ₹50 lakh • Capacity expansion support for existing incubators for 2 years • Mentoring assistance of ₹2 lakh for a period of 3 years • Operational assistance to the tune of 50% of actual expense to the limit of ₹5 lakh per year • 100% reimbursement of Stamp Duty and Registration Fee	• Reimbursement of 25% of lease rental subsidy to start-ups for a period of 3 years subject to the ceiling of ₹4 lakh per annum • Interest subsidy at 8% per annum subject to an annual ceiling of ₹4 lakh for 3 years • Marketing assistance of maximum ₹10 lakh to eligible start-ups for their product/service launch in the market, upon securing minimum funding of 25% from a registered angel/venture funds/ reputed incubators by the start-ups • Cost reimbursement for maximum 3 patents to a limit of ₹2 lakh for domestic and ₹5 lakh for international patents • Credential development assistance

Source: MP Incubation and Start-up Policy 2016

Table 3.4: Selected start-ups in Madhya Pradesh

S. no.	Name of the start-up	Description
1	*The Miraculous Millets*	*The start-up is working to promote indigenous millets (millets are referred to as coarse cereals) of India as health food options by innovating on food processing and marketing techniques*
2	*Appointy*	*Appointy is online scheduling software that helps small- and medium-sized businesses to accept appointments online*
3	*Kisan Suvidha*	*A parallel marketing network providing all the agri-input chemicals and machineries at almost half the market cost*
4	*REOFT Technologies*	*REOFT stands for Research & Engineering of Futuristic Technologies. The aim is to create new or existing technologies more viable, efficient and innovative and most importantly, affordable. REOFT's first product is an anti-theft device, manufactured and assembled indigenously*
5	*WittyFeed*	*WittyFeed is India's answer to Buzzfeed in the viral content space. The start-up is a modern-day blogging platform having photostories and listicles*
6	*MyChild*	*MyChild is an app helping parents to spot developmental disorders in their child within a matter of 45 seconds*
7	*Bindaaskart*	*Bindaaskart is an online healthcare assistance service provider, targeting chronic disease patients (heart disease, diabetic patients, cancer patients, thyroid patients, skin diseases, to name a few)*
8	*MotorBabu*	*MotorBabu is an app that helps users find service centres in vicinity and allow them to book services (bike/car) hassle-free, and with transparency*
9	*Pintrip*	*A search engine dedicated to travel and tourism sector; Pintrip is the smartest itinerary builder in India*

CHAPTER 4

ENTREPRENEURSHIP DEVELOPMENT IN J&K

4.1 Introduction

Perched along the snow-clad Himalayas, the state of Jammu & Kashmir comprises three regions – Kashmir, Jammu and Ladakh. It is further divided into 22 districts – 2 in Ladakh, 10 each in Jammu and Kashmir. The total geographical area of the state is 2,22,236 km^2. According to Census 2011, the population of the state was 12.55 million and the literacy rate stood at 67%. The state enjoys a special status on account of applicability of Article 370 of the Indian Constitution.

4.2 Business environment in Jammu & Kashmir

The economy is primarily services-based and agro-oriented. Between 2004–05 and 2015–16, the GSDP of Jammu & Kashmir increased at a CAGR of 10.2% to $17.73 billion and the NSDP increased at a CAGR of 8.3% to $12.5 billion.

A vast natural resource base has enabled cultivation of various fruits in Jammu & Kashmir. With varied agro-climatic conditions, the scope for horticulture is significantly high in the state. Food processing and agro-based industries (excluding conventional grinding and extraction units) thrive in the state. It has the ideal climate for floriculture and boasts an enormous assortment of flora and fauna. The state has Asia's largest tulip garden and is among the very few places in the world where saffron can be cultivated.

The handicrafts of Jammu & Kashmir are famous all over the world, and the traditional handicraft industry has emerged as a large one in the state. Due to its large employment base and export potential, the industry has been receiving attention from the government.

4.2.1 Handicrafts of Jammu & Kashmir

The state of Jammu & Kashmir consists of three geographical zones – Jammu, a land encompassing plains, mountains and foothills; Kashmir, a mosaic of forests, orchids, rice fields, lakes and waterways; and the high-altitude desert of Ladakh. Each region has its own cultural traditions and is influenced by the political domination of rulers of various religious predilections. It also reflects in the art and craft of these regions.

Handicraft is a major industry in the state and is the backbone of the economy of Jammu & Kashmir. The state has 14 districts and 3 metaclusters located at Jammu, Kashmir and Ladakh. Major crafts include papier mache, *kaleen* or knit carpets, *kashmiri* embroidery, woollen textiles, metal castings, *chikri* wood work, metal work, jewellery, painted wood, cooperware, hand-spinning and basketry. The total number of artisans employed in these crafts is close to 250,000.

In order to give greater impetus to the development of handicrafts, the government has been constantly introducing new programmes and schemes. All of these are directed

Table 4.1: At a glance: Jammu & Kashmir

State	Jammu & Kashmir
Capital	Srinagar
Language	Official language is Urdu. Other languages are Kashmiri, Dogri, Hindi, Punjabi, Ladakhi
Area (km^2)	222,236
Per-capita GSDP ($)	1,418
Total population (millions)	12.55
Literacy rate (%)	67.1
Number of districts	22
Prominent cities	Srinagar, Jammu, Anantnag, Udhampur, Leh and Ladakh
Prominent airports	3
Major industries	Handicrafts (silk textile, carpet-making and woollen textile), forest and agro-based industries, cement
Natural resources	The state has limited mineral and fossil-fuel resources, much of which are concentrated in the Jammu region. Small reserves of natural gas are found near the city of Jammu, and bauxite and gypsum deposits occur in the vicinity of Udhampur. Other minerals include limestone, coal, zinc and copper

to training and skill development, market linkage and providing funds for technology adoption and modernisation of looms. Craft *bazars* and expos are being organised at various locations in the country to showcase the crafts and sell them directly to customers. The government has introduced Artisan Credit Card Scheme under which it pays 10% interest subsidy on loans up to ₹1 lakh for a period of 5 years. The state award for the master craftsmen/women is in place to encourage the next generation to take it up as an occupational choice.

Tourism industry is one of the major contributors to the state's economy. Besides scenic beauty, the state is also a popular pilgrim centre. World-famous tourist attractions in the state include the Vaishno Devi shrine, Chashma Shahi springs, Shalimar Bagh, the Dal Lake, Gulmarg, Pahalgam, Sonmarg, Ladakh and Patnitop. The Ladakh festival in September and the Sindhu Darshan in June are popular events and are celebrated annually.

The cement industry has a huge potential for growth due to a large reserves of limestone, approximately to the tune of 3,500 million tonne.

4.3 Entrepreneurship development in Jammu & Kashmir

Jammu & Kashmir State Industrial Development Corporation (JK SIDCO) is the nodal agency for the promotion and development of medium- and large-scale industries in the state. Thrust areas identified by the state government include food processing and agro-based industries, auto ancillaries, precision engineering, computer hardware and electronics, mineral exploration, eco-tourism, silk, handicrafts and leather goods.

The Jammu & Kashmir Industrial Policy 2015 unfolds the state's ambition to promote trade and commerce activities by leveraging the natural and human resources of the state. It aims to put forward the state as an attractive investment destination.

The state has 67% literacy rate and is a host to 11 universities, 70 degree colleges, 28,307 schools, 91 ITIs, 34 polytechnics and 5 medical colleges. In 2014, 17,000 youths of the state were provided corporate training. Two central universities have been set up to boost educational infrastructure in the state, one in Kashmir division and the other in Jammu division.

As on December 31, 2015, a total of 29,449 small-scale units were registered in the state, with a total investment of ₹3,609.82 crore, which provided employment to 135,892 people.

The state has focused its attention on creating facilities in emerging sectors such as renewable energy, IT, biotechnology, nanotechnology and food processing. DIPP has extended the Special Incentive Package in the state, which includes 100% premium reimbursement under the Central Comprehensive Insurance Subsidy Scheme to all units on expansion over the next 5 years.

4.3.1 Jammu & Kashmir Entrepreneurship Development Institute (JKEDI)

JKEDI has always played the role of a pioneer in promoting entrepreneurship development in the state. Established by the state government in March 1997, JKEDI established itself as a resource centre par excellence and is working in a mission mode to create an enabling entrepreneurial ecosystem in the state.

The institute implements a host of government-sponsored employment schemes, which inter aila include Seed Capital Fund Scheme (SCFS), Youth Startup Loan Scheme (YSLS) and Education & Term Loan Scheme for Minorities sponsored by the Agency for National Minorities Development & Finance Corporation (NMFDC), Ministry of Minority Affairs. JKEDI also partners with Ministry of Rural Development for the implementation of the employment component of the Himayat Scheme in which a 3-week residential training is organised for the youths of the region. They are also extended credit facility for enabling them to start their own businesses.

With the launch of JKEDI Technology, Design, Innovation Incubation Programme (TDII), the institute has taken another leap. The JKEDI-TDII aims at nurturing start-ups, primarily in technology, design and innovative fields. The programme offers a comprehensive range of incubation services to technology and design professionals to facilitate their transformation into resourceful entrepreneurs. JKEDI is playing a pivotal role in giving the necessary momentum to entrepreneurship development in the state.

4.3.2 Other initiatives to promote start-ups in the state

Keeping in mind the role of university-led incubators in offering a desired platform for young minds, Shri Mata Vaishno Devi University-

Technology Business Incubator (SMVDU-TBIC) was launched in April 2016. It is the first-ever TBI in the state of Jammu & Kashmir. SMVDU-TBIC has been identified as one of the 68 incubators to recommend start-ups under the Startup India initiative. Since its launch, six incubates have been shortlisted as resident incubatees, including one virtual incubatee.

The state government has also proposed to allocate ₹5 crore to set up two business incubators in the twin capital cities of Jammu and Srinagar, which will provide finances, branding and marketing support to the entrepreneurs of the state. To address the issues of infrastructure facilities as a barrier for young entrepreneurs in the valley, a young woman Tabish Habib came forward to set up a co-working space by the name of 'ThinkPod' in March 2017. With over 86 applicants, Tabish believes it would reinforce the speed of entrepreneurial activity for Kashmir-based start-ups.

In addition, the Confederation of Indian industries (CII) has launched the CII J&K Angel Network as a single largest platform in Jammu & Kashmir and the only preferred choice for aspiring entrepreneurs to meet and network with business leaders, who can fund, nurture, mentor and help them build a stronger business plan.

All these initiatives are transforming the start-ups ecosystem in the state, which is slowly making its presence felt in the national start-ups landscape. Although opportunities were plenty in developing businesses around food items, tea and spices, dry fruits, fruits and vegetables, and handicrafts, the lack of technology has remained the biggest barrier. However, several start-ups have been founded by integrating technology, thus making the outside world access the offerings of Kashmir. A list of a few such start-ups is presented in Table 4.2.

Undoubtedly, entrepreneurship development is gaining momentum across all the states discussed. However, each state has its unique advantages and limitations in terms of the existing entrepreneurial ecosystem, which comprises access to markets, availability of human capital, funding support and physical infrastructure, regulatory framework, quality of education and training, and prevailing culture. Although Gujarat is popular for its entrepreneurial culture and supportive ecosystem for entrepreneurship, other states like Chhattisgarh and Madhya Pradesh are not far behind. These states are promoting entrepreneurship development on a large scale too. Taking cognizance of the importance of entrepreneurship development as a major driving force of socio-economic development, these states have promulgated their respective entrepreneurship and start-up policies for creating an enabling ecosystem. In 2016, Gujarat, Chhattisgarh and Madhya Pradesh were among the top five states for ease of doing business in India. On the other hand, Jammu & Kashmir has a long road ahead as far as entrepreneurship development is concerned. However, reasons for the same can be attributed to multiple factors, predominantly geo-political factors. However, during recent times, the state has made remarkable efforts to support entrepreneurship

Table 4.2: Major start-ups in Kashmir

S. no.	Name of the start-up	Description
1	KashmirOneStop	An e-commerce platform for customised Kashmiri products like food items, tea and spices, dry fruits and vegetables, religious articles, etc
2	GoKash Adventures	The company offers affordable small-group tours, safaris and expeditions, exotic Kashmiri cuisine and local transport for tourists to help them connect with the culture and landscape of Kashmir
3	Kashmir Basket	Kashmir Basket is a website interface which offers an array of products like dry fruits, home décor, handicrafts, silk items, saffron, spices, Kashmiri tea, Kahwah, Kashmiri art and designs including woodcarving and papier-mâché
4	Pure Mart	Offers a wide range of organic products
5	Kashmir Box	A virtual market place for the local artisans, craftsmen, producers and creative entrepreneurs; the company intend to create microentrepreneurs out of these artisans, thus giving them what they deserve and increasing employment in this field and, in turn, improving their standard of living

CHAPTER 5

GLOBAL ENTREPRENEURSHIP MONITOR (GEM)

CONCEPTUAL FRAMEWORK

5.1 Introduction

Entrepreneurship is perceived as an engine of economic and social development throughout the world (Acs & Audretsch, 2001), and an entrepreneur is the single most important player in the modern economy. Thus, it is essential to have a fair understanding of countries that are highly entrepreneurial and the factors responsible, compared to those that are less entrepreneurial.

Several studies have been conducted to explain how entrepreneurship is rooted in economics, social sciences and management disciplines; it makes the boundaries of the study of entrepreneurship highly permeable, and the knowledge platform is found to be fragmented and multidisciplinary. Although most of the studies are restricted to a single country or region, they lack uniformity and fail to explain the entrepreneurial qualities of the population. Hence, there have been apprehensions about our understanding of entrepreneurship as a global phenomenon. As a result of which the *GEM Survey* was conceived.

The project started in 1997 as a collaborative initiative by Michael Hay of London Business School (LBS) and Bill Bygrave of Babson College, USA. The survey was intended for collection and analysis of harmonised data on the prevalence of nascent entrepreneurship and young enterprises across nations. It aimed at generating and propagating knowledge on entrepreneurship across the globe by exploring the entrepreneurial behaviour and attitude of individuals and the national context, and its effect on entrepreneurship as well.

The *GEM Survey 2016* represents the 18th consecutive year that GEM has tracked rates of entrepreneurship across multiple phases of entrepreneurial activity; assessed the characteristics, motivations and ambitions of entrepreneurs; and explored the attitude of societies towards this activity. This report includes results based on 64 world economies completing the APS (between the age of 18 and 64 years) and 65 economies completing the NES. The GEM countries in the 2016 survey cover 69.2% of the world's population and 84.9% of the world's gross domestic product (GDP).

Table 5.1: Classification of economies participating in the GEM Survey 2016 (grouped by geographic regions and economic development)

Geographic region	Factor driven	Efficiency driven	Innovation driven
Africa	Burkina Faso Cameroon	Morocco South Africa Egypt	
Asia and Oceania	India Iran Kazakhstan	China Indonesia Lebanon Malaysia Thailand Turkey Georgia Jordan Saudi Arabia	Australia Israel Japan Hong Kong Republic of South Korea Taiwan United Arab Emirates Qatar
Latin America and Caribbean		Argentina Belize Brazil Chile Colombia El Salvador Ecuador Guatemala Panama Peru Uruguay	Puerto Rico

Europe	Russian Federation	Bulgaria Croatia Hungary Latvia Poland Romania Macedonia Slovakia	Austria Cyprus Estonia Finland France Germany Greece Ireland Italy Luxembourg Netherlands Portugal Slovenia Spain Sweden Switzerland United Kingdom
North America			Canada United States

Source: GEM Global Report 2016–17

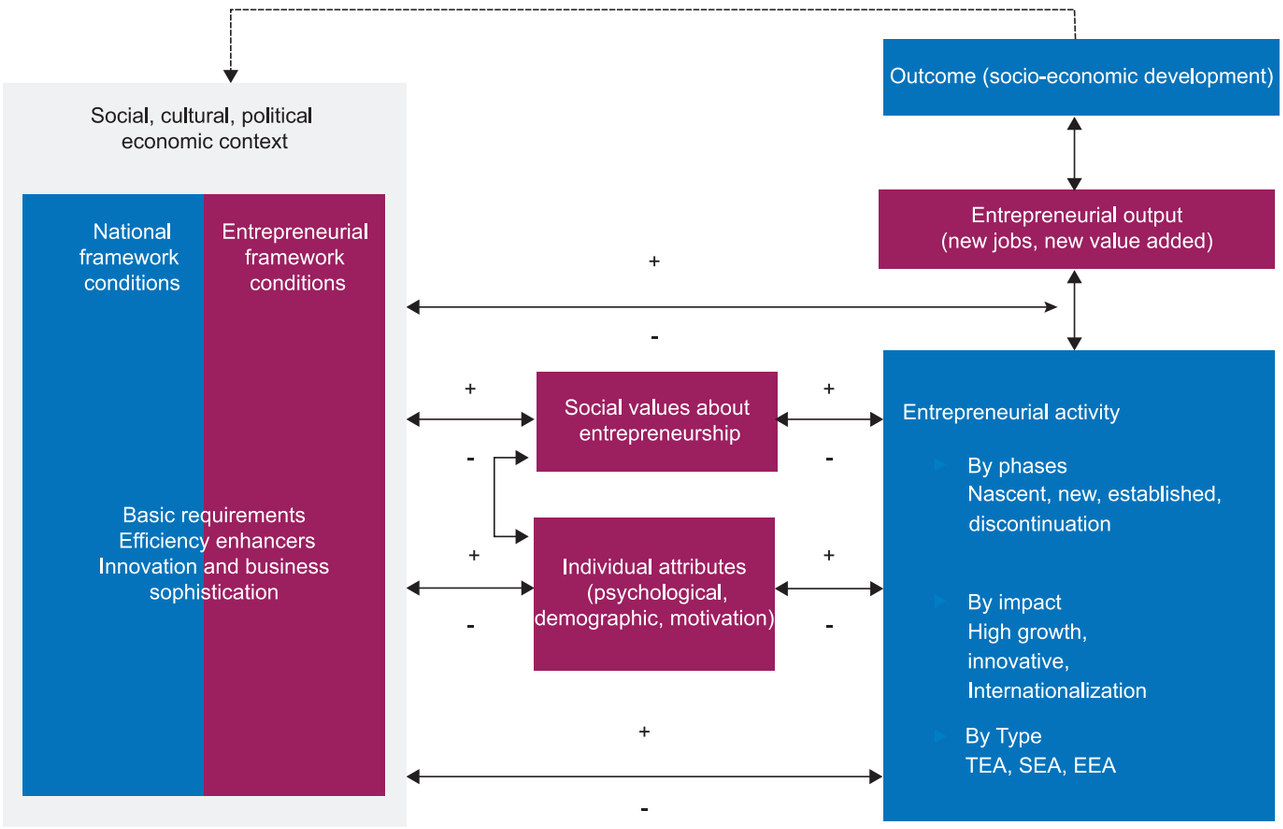
5.2 The GEM conceptual framework

Over the years, the GEM conceptual framework has evolved gradually. It now offers more clarity to the assumed relations among social values, personal attributes and various forms of entrepreneurial activity. However, the basic assumption behind the conceptual framework has remained unchanged, i.e., entrepreneurial activity is not a heroic act of an individual, regardless of the environment in which the activity is performed; instead, it is an output of the interaction of an individual's perception of an opportunity and capacity (motivation and skills) to act upon this and the distinct condition of the respective environment in which the individual is located.

The level of entrepreneurial activity in any country is the result of its population's assessment of entrepreneurial opportunities and their entrepreneurial potential (i.e., motivation and capacity). Recognition of opportunities and entrepreneurial potential is influenced by both specific entrepreneurial framework conditions and general national framework conditions. Although entrepreneurial framework conditions are also influenced by the general framework conditions within a nation, both of these are shaped by the social, cultural, political and economic factors. The national framework conditions reflect the phases of economic development (factor driven, efficiency driven and innovation driven). The entrepreneurial framework condition directly influences the entrepreneurial activities; it consists of the following factors:

- *Finance:* The availability of financial resources, equity debt for SMEs (including grants and subsidies) and the extent to which taxes or regulations are either size-neutral or encourage SMEs.
- *Government policies:* The presence and quality of direct programmes to assist new and growing firms at all levels of government (national, regional and municipal).
- *Entrepreneurial education and training:* The extent to which training in creating or managing SMEs is incorporated within the education and training systems at all levels (primary, secondary and post-school).
- *R&D transfer:* The extent to which national research and development will lead to new commercial opportunities and is available to SMEs.
- *Commercial and legal infrastructure:* The presence of property rights and commercial, accounting and other legal services and institutions that support or promote SMEs.
- *Entry regulation:* It contains two components: (1) market dynamics—the level of change

Figure 5.1: The GEM conceptual framework



Source: GEM Global Report 2016

in markets from year to year, and (2) market openness—the extent to which new firms are free to enter the existing markets.

- *Physical infrastructure and services:* Ease of access to physical resources, i.e., communication, utilities, transportation, land or space at a price that does not discriminate against SMEs.
- *Cultural and social norms:* The extent to which social and cultural norms encourage or allow actions leading to new business methods or activities that can potentially increase personal wealth and income.
- *Senior entrepreneurship:* The availability of policy interventions and social benefits for encouraging senior entrepreneurship.

5.3 Social values towards entrepreneurship

It includes how society values entrepreneurship as a good career choice; if entrepreneurs have a high social status; and how media attention to entrepreneurship is contributing (or not) to the development of a national entrepreneurial culture.

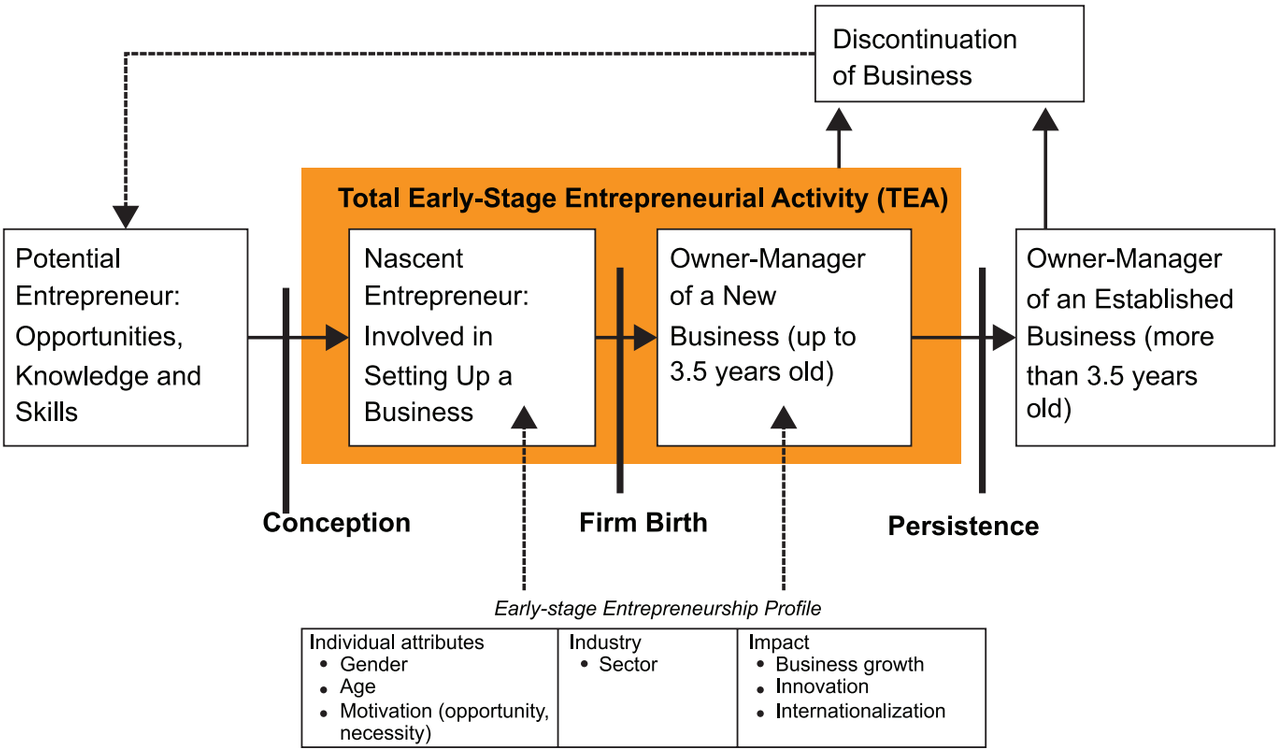
5.3.1 Individual attributes

It includes several demographic factors (gender, age and geography), psychological factors (perceived capabilities, perceived opportunities and fear of failure) and motivational aspects (necessity-based vs. opportunity-based venturing, improvement-driven venturing, etc.).

5.3.2 Entrepreneurial activity

Entrepreneurial activity is defined according to the ventures' lifecycle phases (nascent, new venture, established venture and discontinuation), the types of activity (high growth, innovation and internationalisation) and the sector of the activity (Total Early-stage Entrepreneurial Activity or TEA, Social Entrepreneurial Activity or SEA and Employee Entrepreneurial Activity or EEA).

Figure 5.2: GEM model of business phases and entrepreneurship characteristics



Source: GEM Global Report 2016

5.4 GEM operational definitions

- *TEA:* The percentage of individuals aged 18–64 years who are either a nascent entrepreneur or an owner–manager of a new business.
- *Nascent entrepreneurship rate:* The percentage of individuals aged 18–64 years who are currently a nascent entrepreneur, i.e., actively involved in setting up a business they will own or co-own; this business has no paid salaries, wages or any other payments to the owners for more than 3 months.
- *New business ownership rate:* The percentage of individuals aged 18–64 years who are currently an owner–manager of a new business, i.e., owning and managing a running business that has paid salaries, wages or any other payments to the owners for more than 3 months but not more than 42 months.

5.4.1 Characteristics of early stage entrepreneurial activity

- *Opportunity-based early stage entrepreneurial activity:* The percentage of individuals involved in early stage entrepreneurial activity (as defined above), who claim to be purely or partly driven by opportunity as opposed to finding no other option for work, includes taking advantage of a business opportunity or having a job but seeking a better opportunity.
- *Necessity-based early stage entrepreneurial activity:* The percentage of individuals involved in early stage entrepreneurial activity (as defined above), who claim to be driven by necessity (having no better choice for work) as opposed to opportunity.
- *Improvement-driven opportunity early stage entrepreneurial activity:* The percentage of individuals involved in early stage entrepreneurial activity (as defined above), who (1) claim to be driven by opportunity as opposed to finding no other option for work; and (2) who indicate that the main driver for being involved in this opportunity is being independent or increasing their income rather than just maintaining their income.
- *High-growth expectation early stage entrepreneurial activity (relative prevalence):* The

percentage of early stage entrepreneurs (as defined above) who expect to employ at least 20 people 5 years from now.

- *New product-market-oriented early stage entrepreneurial activity (relative prevalence):* The percentage of early stage entrepreneurs (as defined above) who report that their product or service is new to at least some customers and not many businesses offer the same product or service.
- *International-oriented early stage entrepreneurial activity (relative prevalence):* The percentage of early stage entrepreneurs (as defined above) who report that at least 25% of their customers are from foreign countries.
- *Established business ownership rate:* The percentage of individuals aged 18–64 years who are currently an owner–manager of an established business, i.e., owning and managing a running business that has paid salaries, wages or any other payments to the owners for more than 42 months.
- *Business discontinuation rate:* The percentage of individuals aged 18–64 years who in the past 12 months have discontinued a business, either by selling or shutting down or otherwise discontinuing an owner/management relationship with the business. It may be noted that it is *not* a measure of business failure rates.

5.4.2 Individual attributes of a potential entrepreneur

- *Perceived opportunities:* The percentage of individuals aged 18–64 years involved in any stage of entrepreneurial activity excluding those who see good opportunities to start a business in the area they live in.
- *Perceived capabilities:* The percentage of individuals aged 18–64 years involved in any stage of entrepreneurial activity excluding those who believe they have the required skills and knowledge to start a business.
- *Entrepreneurial intentions:* The percentage of individuals aged 18–64 years involved in any stage of entrepreneurial activity excluding those who are latent entrepreneurs and intend to start a business within 3 years.
- *Fear of failure rate:* The percentage of individuals aged 18–64 years involved in any stage of entrepreneurial activity excluding those who report that fear of failure would prevent them from setting up a business.

5.5 The GEM methodology

In the beginning, with six participant countries mostly from the G8 nations (Canada, Denmark, Finland, Germany, United Kingdom and United States), a global report was published in 1999 under the stewardship of Paul Reynolds.

The purpose of GEM is to find empirically based answers to the following questions:

1. Does the level of entrepreneurial activity vary between countries, and if so, to what extent?
2. Does the level of entrepreneurial activity affect a country's rate of economic growth and prosperity?
3. What makes a country entrepreneurial?
4. What kind of policies may enhance the national level of entrepreneurial activity?

To find the answer to the questions, GEM collects primary data from two main sources, namely APS of at least 2,000 adults randomly selected (18–64 years of age) in each country and NES to collect opinions from the experts.

5.5.1 APS in India

To investigate the level of entrepreneurial activity in the country, primary data were collected. A stratified random sampling method was used to select cities or villages across the country. Further, a city/village was divided into 4–5 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, a two-stage sampling method was used. Hence, after identification of the household, the eligible age-group was listed in the descending order by age and an eligible respondent was identified by the Next Birthday method. If a selected person was not available at that time of initial visit, at least three more visits were made before moving to another household. In all, 3,400 respondents aged between 18 and 64 years were included in the survey.

Apart from regional representation, an effort was also made to ensure appropriate representation both gender- and location-wise, i.e., male/female and urban/rural, respectively. For this purpose, appropriate weightage was decided based on various criteria.

Table 5.2: Regional distribution of APS

Region	Number	Percentage
East	957	28.1
West	656	19.3
North	1,034	30.4
South	753	22.2

Source: Based on GEM India Survey 2016–17

Table 5.3: Rural/urban distribution

Location	Unweighted sample	Percentage	Weighted sample	Percentage
Urban	2,188	64.4	1,141	33.5
Rural	1,212	35.6	2,259	66.5
Total	3,400	100	3,400	100

Source: Based on GEM India Survey 2016–17

Table 5.4: Gender distribution

Gender	Unweighted sample	Percentage	Weighted sample	Percentage
Male	1,717	50.5	1,738	51.1
Female	1,683	49.5	1,662	48.9
Total	3,400	100	3,400	100

Source: Based on GEM India Survey 2016-17

The Census 2011 data were used for developing the weightage system for various indices, i.e., male, female, urban and rural. During computation of the TEA, index is the major outcome of this part of the study; it has also led to the identification of several characteristics of entrepreneurial individuals and firms. However, the *GEM India Report 2016* is mainly a description of the level and nature of entrepreneurial activity among adult population of the country and the quality of entrepreneurial framework conditions. The APS data were used to estimate the level of participation in entrepreneurial activity as well as to gather the information on attitude towards entrepreneurship and other related entrepreneurial activities.

5.5.2 NES in India

The second source of the GEM data is the NES that conducted phone, email or in-person interviews on the state of entrepreneurship in the country with 72 national experts from public and private sectors. The interview was conducted with the help of a standardised questionnaire provided under the global GEM project. The local experts were selected for their expertise based on the 'entrepreneurial framework conditions'. They are equipped with rich perspectives not only about their respective profession but also entrepreneurship. The questionnaire presented a series of statements reflecting the GEM perspective on conditions supporting entrepreneurship. The experts were asked to estimate the degree to which each factor was applicable for India. The final section solicits open-ended responses that are coded to nine categories.

In total, 72 national experts were identified, approached and requested for data provision. Data were collected using e-mails and speed post, followed by face-to-face as well as telephonic interviews. The average age of experts was 40.7 years and the average work experience was 10.5 years. The profile of experts and their areas of specialisation are given in Tables 5.5 and 5.6, respectively.

Table 5.5: Experts' profile

Particulars	Mean	Standard deviation
Age	40.7	9.93
Experience	10.7	7.35

Source: Based on GEM India Survey 2016–17

Table 5.6: Experts' specialisation (table contains multiple responses)

S. no.	Specialisation	No.	Percentage
1	Entrepreneurs	27	38
2	Investors, financers, bankers	8	11
3	Policymakers	10	14
4	Business and support services providers	33	46
5	Educators, teachers and researchers on entrepreneurship	38	53

Source: Based on GEM India Survey 2016–17

CHAPTER 6

GEM INDIA STUDY

MEASURING ENTREPRENEURIAL ACTIVITY IN INDIA: ADULT POPULATION SURVEY (APS)

Entrepreneurial behaviour and attitude – GEM India snapshot

Self-perception	Value (%)	GEM 2016 rank/65
Perceived opportunity	44.3	27
Perceived capability	44	30
Fear of failure	37.5	30
Entrepreneurial intention rate	14.9	40

Societal values	Value (%)	GEM 2016 rank/65
High status to successful entrepreneurs	46.7	61
Entrepreneurship as a good career choice	44.4	57
Media attention to entrepreneurship	39.7	61

Entrepreneurial activity	Value (%)	GEM 2016 rank/65
TEA	10.6	31
Established business ownership rate	4.6	51
EEA	2.5	34

Gender equity	Value (%)	GEM 2016 rank/65
Female-to-male TEA ratio	0.56	44
Female-to-male opportunity-driven TEA ratio	1.02	19

Impact	Value (%)	GEM 2016 rank/65
High job creation expectation rate	5.2	62
Innovation rate	28	25
Business service sectors rate	7	51

Motivation	Value (%)	GEM 2016 rank/65
Motivational index	1.2	52

6.1 Societal values towards entrepreneurship in India

Entrepreneurial activity does not occur in a vacuum. Instead, it is deeply embedded in the cultural and social contexts. There is a significant influence of the society in shaping individual's attitude for starting a business (Reynold, 1992; Comeche & Loras, 2010; Kwon & Arenius, 2010). The image of an entrepreneur is linked to the cultural values and societal norms that affect business creation in which the social legitimacy of the entrepreneur becomes necessary (Valencia, 2005). In the GEM survey, societal values towards entrepreneurship are measured through the following three dimensions:

1. perceived desirability to choose an entrepreneurial career;
2. perceived level of status and respect that entrepreneurs enjoy in the society;
3. perceived level of media attention received by entrepreneurs in a society.

The survey finds an increase in perception regarding entrepreneurship as a desired career option (reported as 44.4% in 2016 against 39.3% in 2015). However, the perception of societal values, such as status and media attention given to entrepreneurs, increased marginally compared to the previous year.

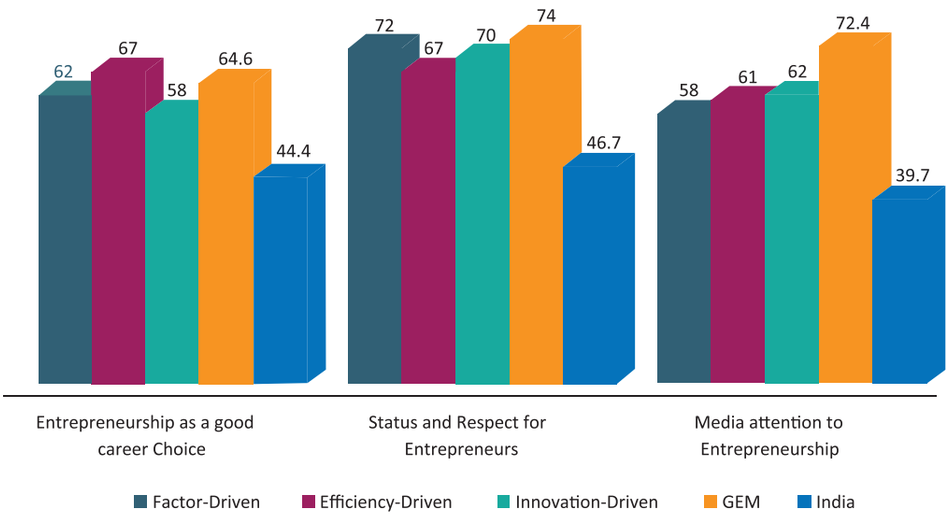
As highlighted in Figure 6.1, after doing a comparison among all the economies, India stood at bottom across all the parameters. The same is reflected when a comparison is made among the factor-driven economies and BRICS[1], highlighted in Figure 6.2 and Table 6.2.

Table 6.1: Perception of societal values regarding entrepreneurship in India in 2016

	Value % (2016)/rank/65*	Value % (2015)/rank/62*
High status to successful entrepreneurs	46.7 (61)	46.6 (53)
Entrepreneurship as a good career choice	44.4 (57)	39.3 (50)
Media attention to entrepreneurship	39.7 (61)	39.4 (52)

Source: GEM Global Report 2016–17 and 2015–16
**The value in parentheses denotes the number of countries participated in the GEM survey.*

Figure 6.1: Perception of societal values regarding entrepreneurship – A comparison of economies in 2016 (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

Table 6.2 Perception of societal values regarding entrepreneurship in the BRICS economies

Countries	Entrepreneurship as a good career choice	High status to successful entrepreneurs	Media attention to entrepreneurship
Brazil*	–	–	–
Russia	63.4	65.6	48.9
India	44.4	46.7	39.7
China	70.3	77.8	79.3
South Africa	72.6	78.1	74.2

Source: GEM Global Report 2016–17
*Data for Brazil were unavailable.

[1] BRICS is an acronym for Association of five major emerging economies including Brazil, Russia, India, China and South Africa.

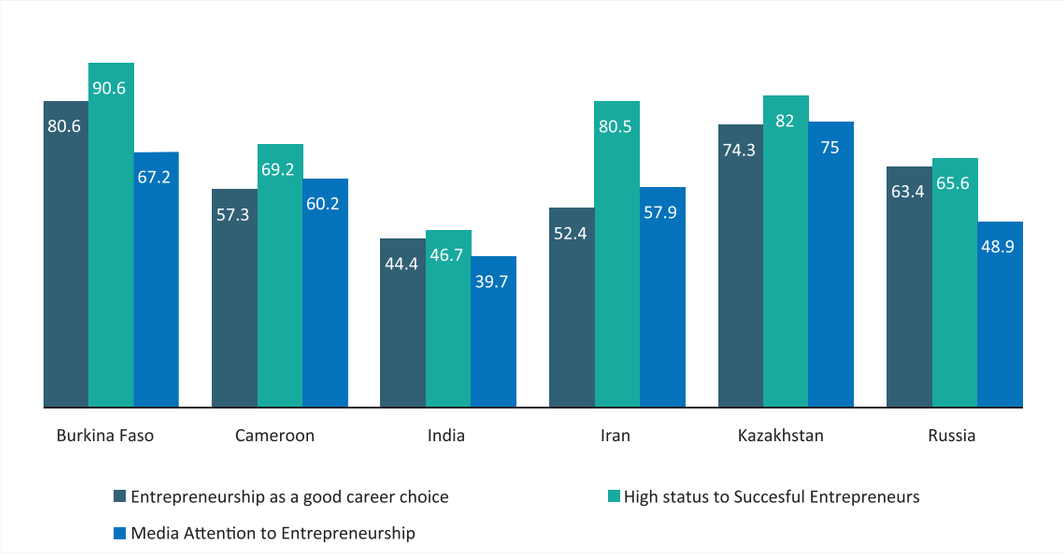
6.1.1 Regional comparison of societal values towards entrepreneurship

Regional diversity of India has a greater role to play in the entrepreneurship landscape. Hence, it is crucial to understand how societal values vary across regions and influence entrepreneurial activities.

Figure 6.3 suggests that societal values towards entrepreneurship are comparatively higher in the northern and southern regions than in the eastern and western states.

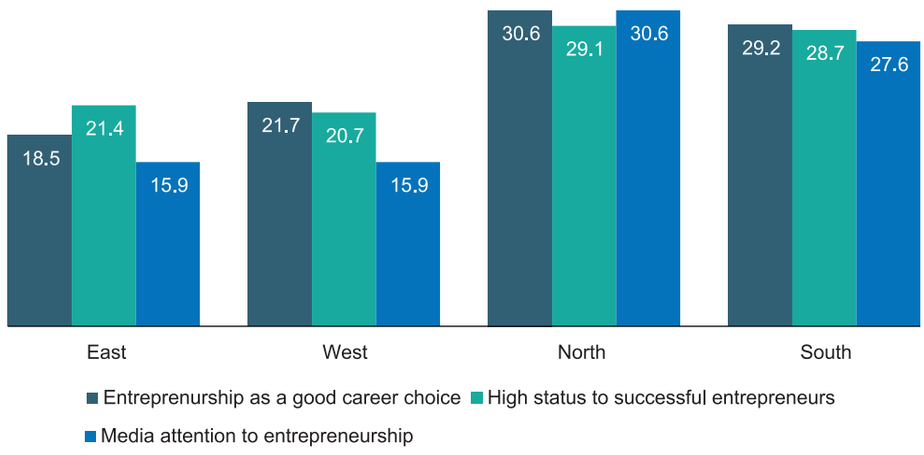
By taking the examples of four states – Gujarat, Madhya Pradesh, Chhattisgarh and Jammu & Kashmir – it was observed that in the state of Gujarat, society's perception regarding entrepreneurship is higher on various parameters namely entrepreneurship as a favoured career choice (55%), high status and respect given to entrepreneurs in society (63.2%) and media attention to entrepreneurship (57.1%). In contrast, the state of Jammu & Kashmir was reported to have the lowest recorded values for society's perception of entrepreneurship, as shown in Figure 6.4.

Figure 6.2: Perception of societal values regarding entrepreneurship in factor-driven economies in 2016 (the percentage of population aged 18–64 years)



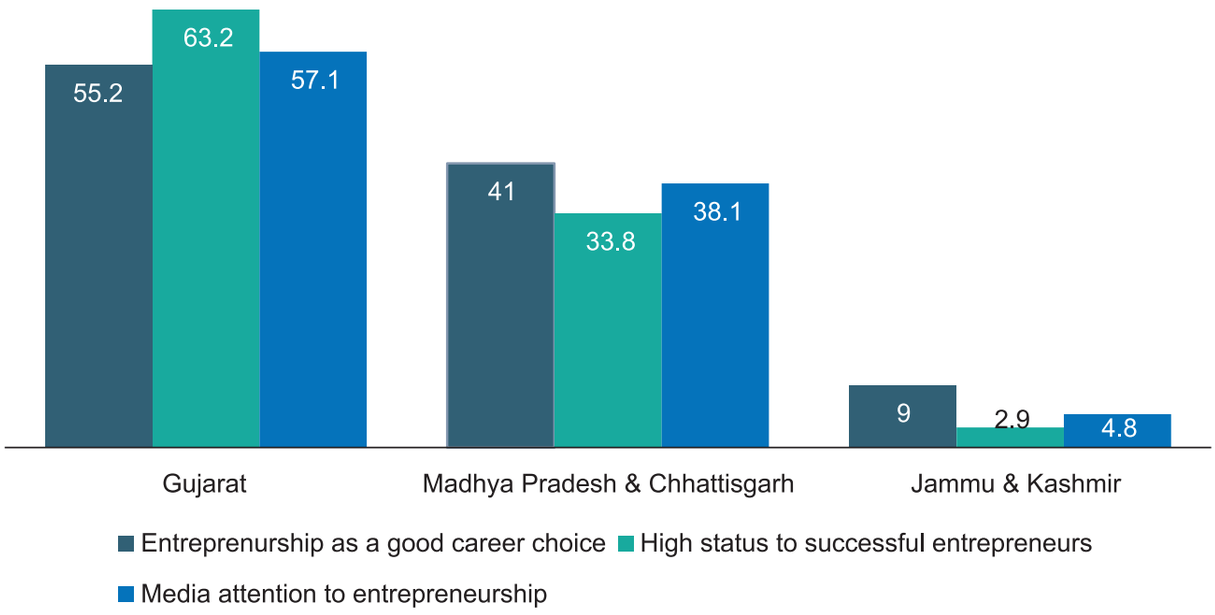
Source: GEM Global Report 2016–17

Figure 6.3: Perception of societal values regarding entrepreneurship (region-wise comparison in India)



Source: GEM India Survey 2016-17

Figure 6.4: Perception of societal values regarding entrepreneurship (comparison of selected states)



Source: GEM India Survey 2016–17

6.1.2 Gender and societal values towards entrepreneurship in India

To understand the societal perception from a gender perspective, the *GEM Survey 2016* reported that, in India, the perception of males is higher towards entrepreneurship compared to females. The survey also suggests a marginal increase in the perception of females towards entrepreneurship as a good career choice, i.e., 44.7% vs. 42.4% in 2015.

6.2 Entrepreneurial potential in India

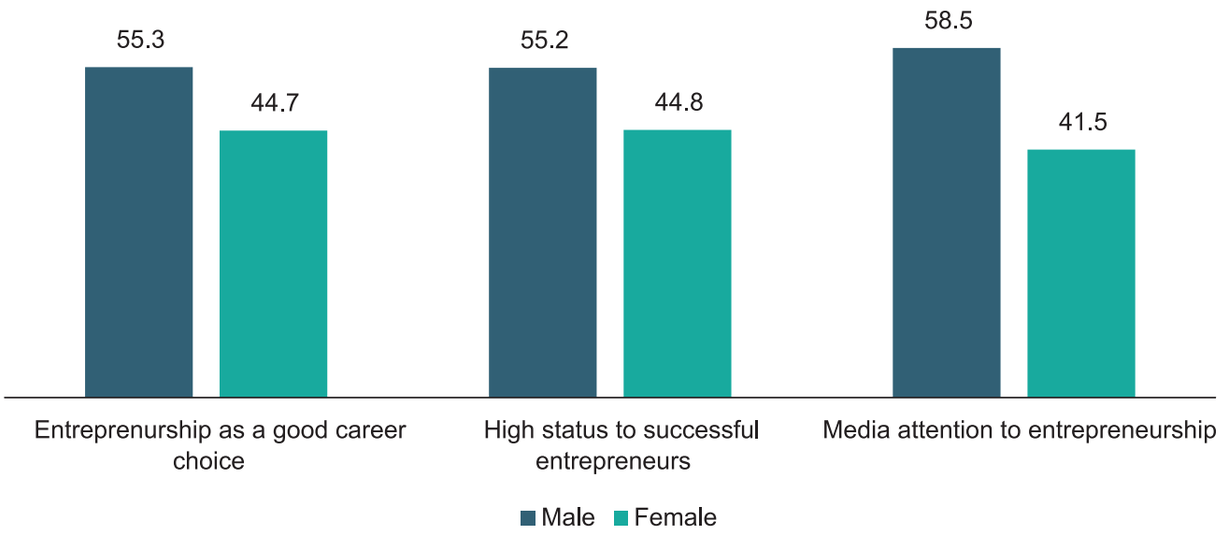
The entrepreneurial potential was measured by the GEM study, by highlighting the self-perception about entrepreneurship. It included perceived opportunity to start a business, perceived capabilities to start a business, fear of failure and entrepreneurial intention.

The GEM considers those who perceive good opportunities for starting a business as well as those who believe they have the required skills, as potential entrepreneurs in the society. Opportunities (or the perception of good opportunities) play an important role in determining whether an individual will even consider starting a business or not.

Another factor to be taken into account is the fear of failure. Fear of failure can be influenced by intrinsic personality traits as well as by societal norms and regulations. In some countries, the legal and social ramifications of business failure might act as a strong deterrent, thus reducing the pool of potential entrepreneurs.

Potential entrepreneurs see good opportunities for starting a business and believe they have the necessary skills, knowledge and experience to start a business. However, perceiving a good opportunity and having the skills to pursue it will not necessarily lead to the intent of starting a business. Individuals will assess the opportunity costs, risks and rewards of starting a business vs. other employment preferences and options, if available. In addition, the environment in which potential, intentional and active entrepreneurs exist needs to be sufficiently enabling and supportive. The GEM defines entrepreneurial intention as the percentage of the 18–64-year-old population (individuals already engaged in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and intend to start a business within the next 3 years.

Figure 6.5: Perception of societal values regarding entrepreneurship (gender-wise comparison)



Source: GEM India Survey 2016–17

Table 6.3 Self-perception to start a business in India

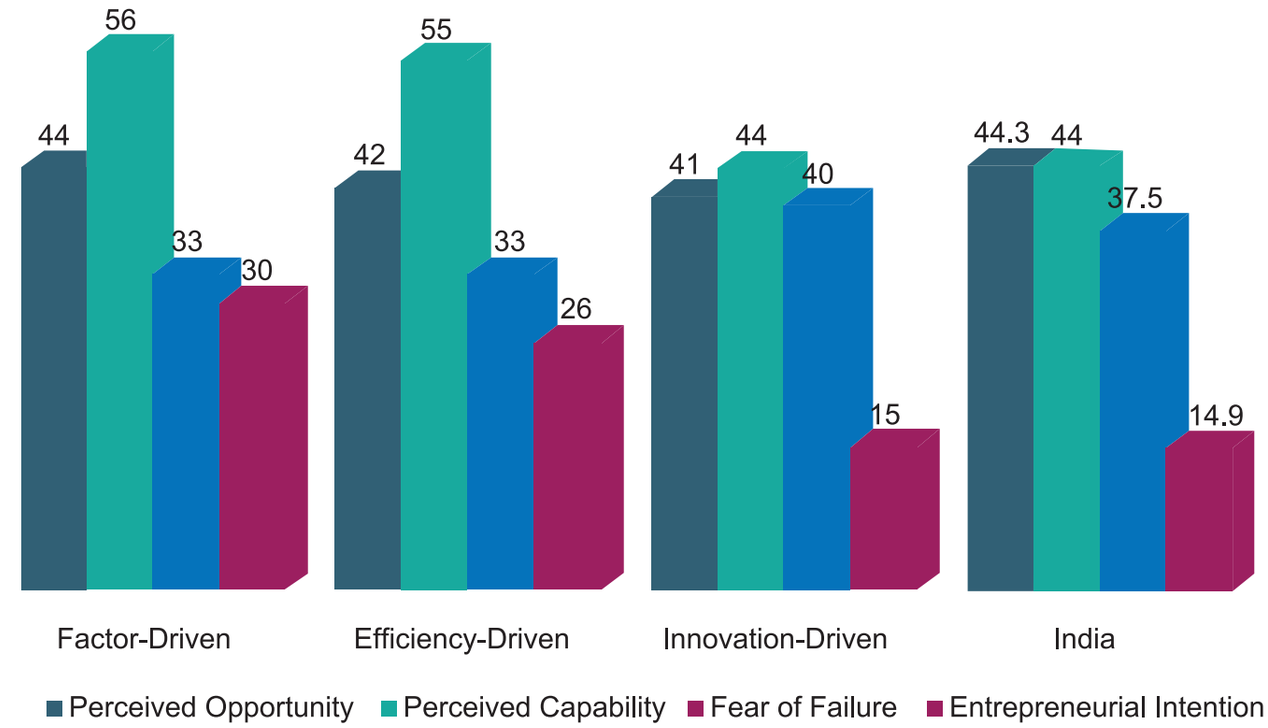
	GEM 2016 rank/65	Value % (2016)	Value % (2015)
Perceived opportunity	27	44.3	38
Perceived capability	30	44	38
Fear of failure	30	37.5	44
Entrepreneurial intention rate	40	14.9	9

Source: GEM India Survey 2015–16 and 2016–17

In the *GEM Survey 2016*, it is reported that there is an increase in self-perception about entrepreneurship opportunities as well as capabilities. It was also found that there is an increase in the rate of entrepreneurial intention (14.9% compared to 9% from last year), whereas simultaneously the fear of failure rate decreased from 44% to 37% in 2016.

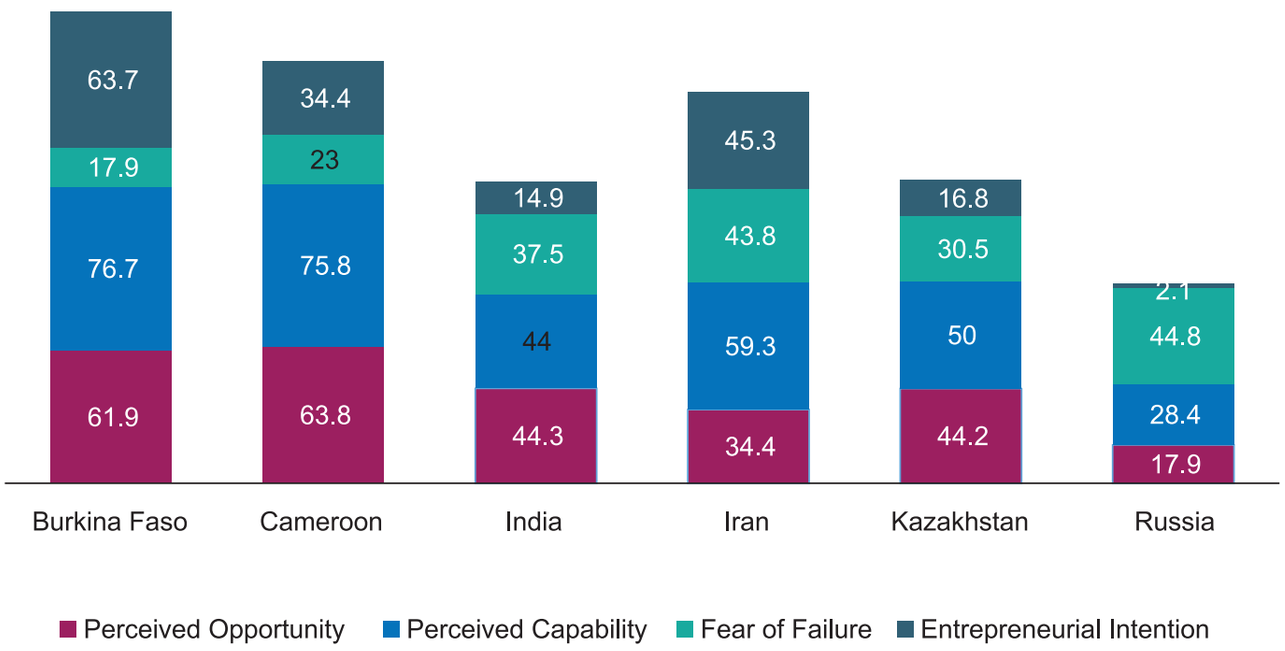
A macro comparison of all economies listed in Figure 6.6 suggests that the entrepreneurial intention rate of India is close to the rate for innovation-driven economies and much less than the factor-driven and efficiency-driven economies. It also suggests that the perceived capabilities are usually higher than the perceived opportunities across factor-driven, efficiency-driven and innovation-driven economies, whereas in India the perceived capabilities and opportunities are similar. The fear of failure rate in India (37.5%) is higher than its peers in factor-driven and efficiency-driven economies but less than that of the innovation-driven economies.

Figure 6.6: Self-perception about entrepreneurship – A comparison of economies



Source: GEM Global Report 2016–17

Figure 6.7: Self-perception about entrepreneurship in factor-driven economies



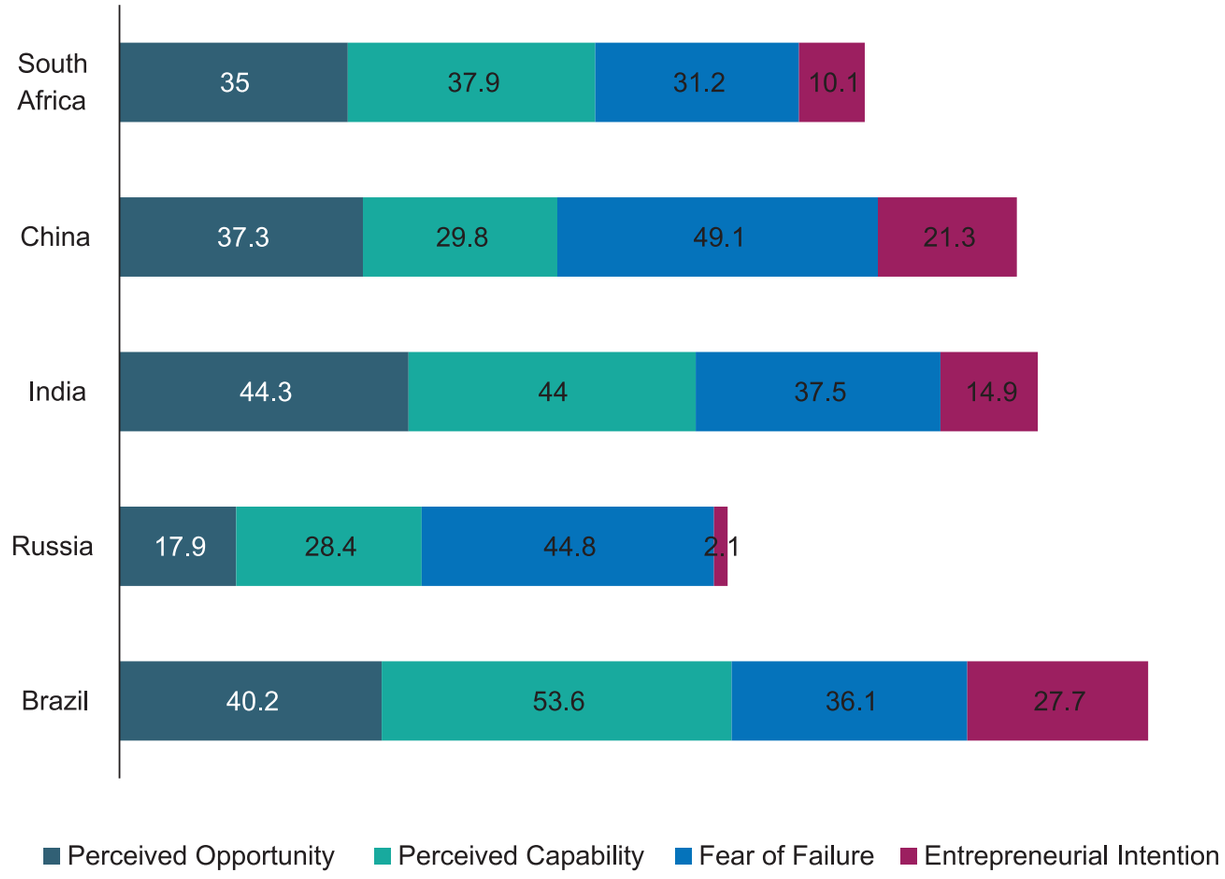
Source: GEM Global Report 2016–17

A comparison of India with its peers in BRICS economies suggests that perceived opportunity is the highest (44.3%) and perceived capability in India is the second highest (44%) among all. Looking at the rate of entrepreneurial intention in India (14.9%), it falls behind China (21.3%) and Brazil (27.7%).

Looking from a regional perspective in India, the northern region has the highest self-perception about opportunity, capability and the fear of failure, whereas the western region is leading in entrepreneurial intention, followed by the eastern region. The eastern and western regions have higher perceived capabilities than the perceived opportunities. Similarly, among the selected states of Gujarat, Madhya Pradesh, Chhattisgarh and Jammu & Kashmir, the state of Gujarat scores highest in perceived opportunities (72.5%), perceived capabilities (69%), fear of failure (69%) and entrepreneurial intention (90%). See Figure 6.9 for details.

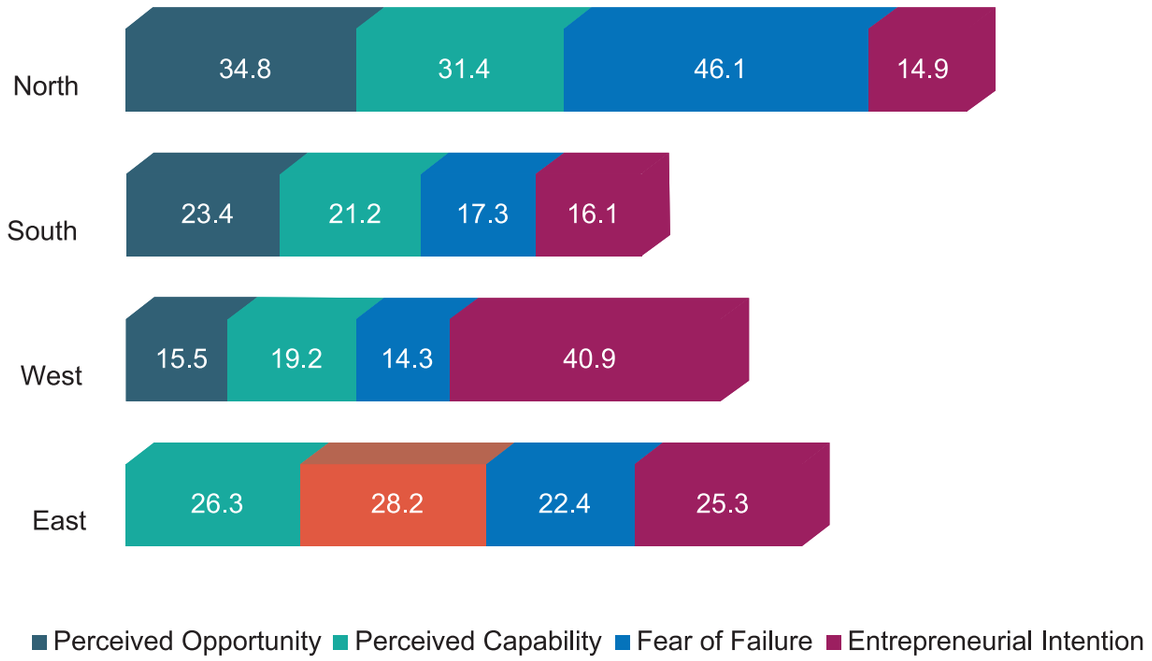
In comparison, Jammu & Kashmir has the lowest perceived opportunity (7.3%), perceived capability (6.7%), fear of failure (13.6%) and entrepreneurial intention (2.5%). See Figures 6.9 and 6.10 for details.

Figure 6.8: Individual attributes – Comparison of BRICS economies



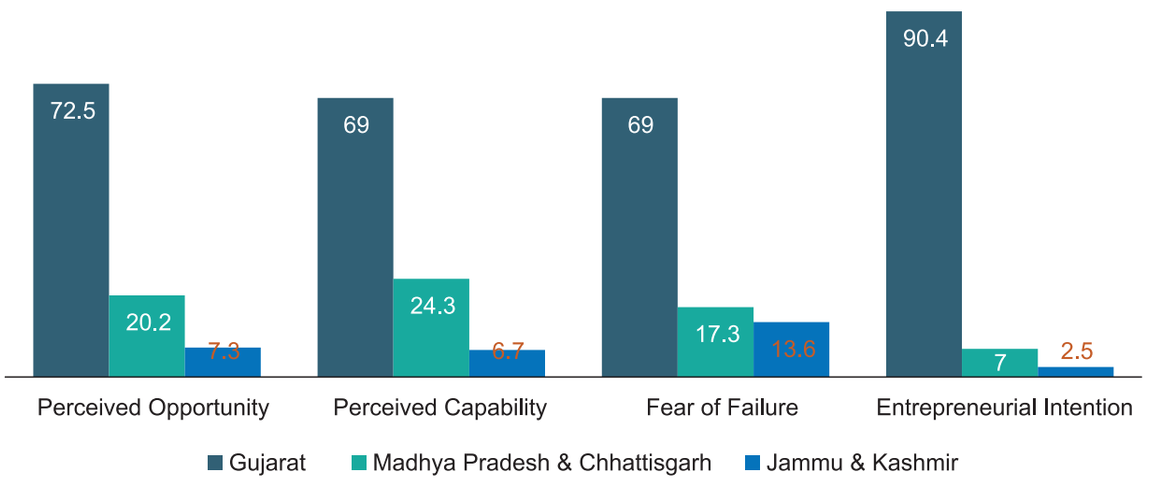
Source: GEM Global Report 2016–17

Figure 6.9: Regionwise self-perception about entrepreneurship in India



Source: GEM India Survey 2016–17

Figure 6.10: Self-perception about entrepreneurship in India (selected statewise comparison)



Source: GEM India Survey 2016–17

6.2.1 Gender and self-perception about entrepreneurship in India

In the *GEM Survey 2016*, it is reported that in comparison to females, the males have higher levels of perceived opportunities, capabilities, fear of failure and entrepreneurial intention. See Figure 6.11 for details.

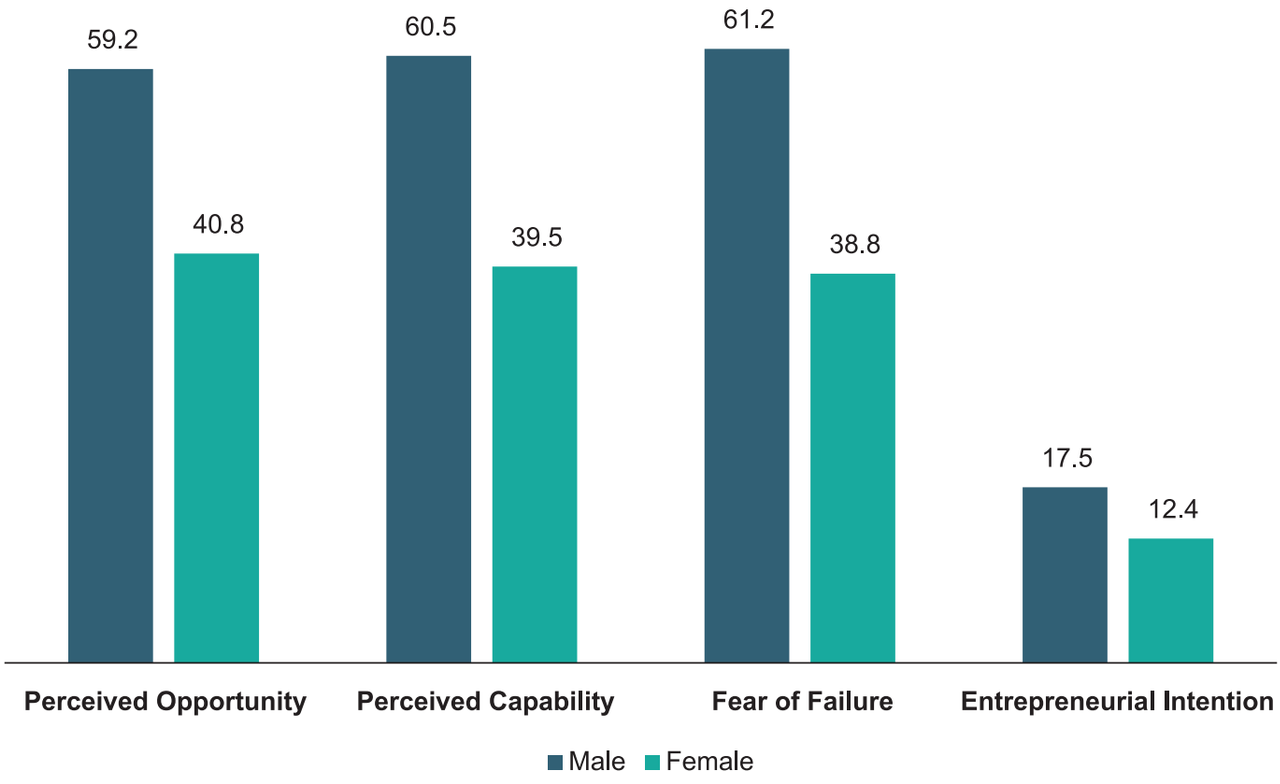
6.3 Phases/stages of entrepreneurial activity

The GEM survey monitors entrepreneurial activity by using three indicators: TEA, EEA and the rate of established businesses. Combining

all the three averages indicates the existence of different patterns of the entrepreneurial activity related to various development stages. The average TEA rate for the factor-driven economies in 2016 was almost double compared to that for the innovation-driven economies (17% compared to 9%), and the rate of established businesses was 11% compared to 6.7%, respectively. The entrepreneurial employee activity was significantly more intense in innovation-driven economies compared to the factor- and efficiency-driven economies. Although, in India, the TEA and established business ownership rate is lower than the factor-, efficiency- and innovation-driven economies, it is interesting to note that the EEA (2.5%) is higher than the factor- and efficiency-driven economies.

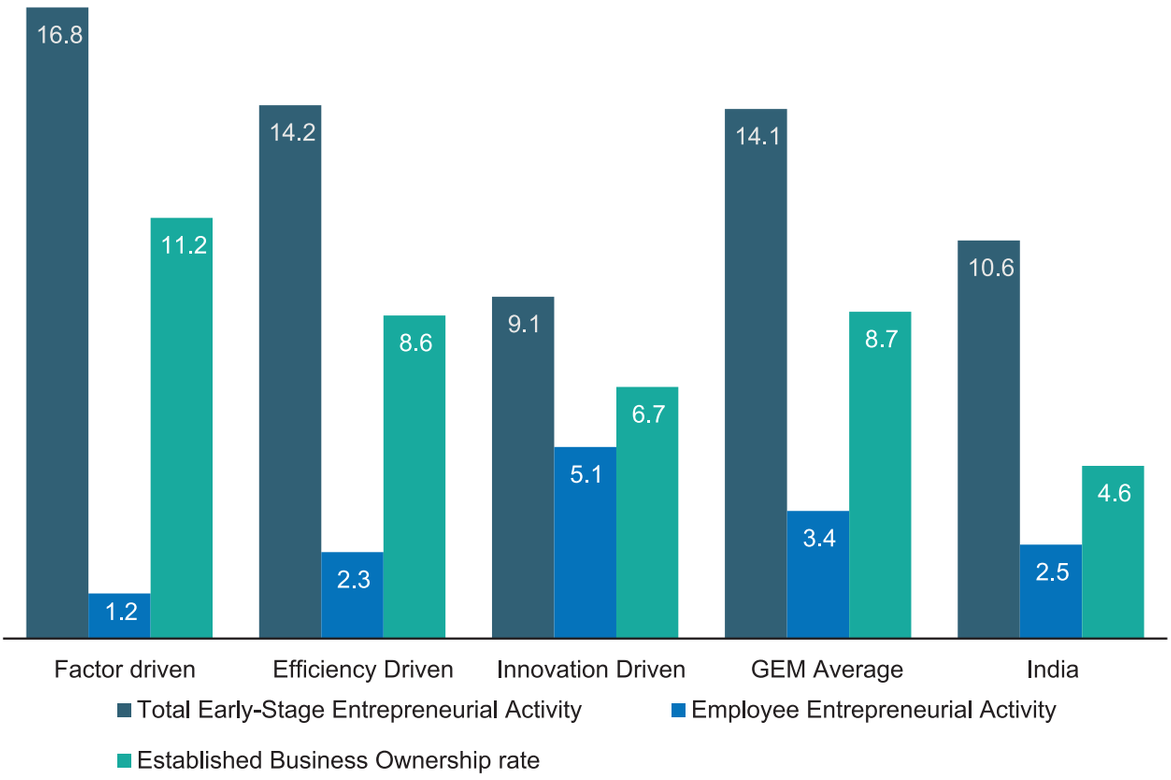
As Figure 6.13 suggests, a comparison of the entrepreneurial activity across the factor-driven economies participating in the *GEM Survey 2016* reveals that, in India, the EEA is the highest among all the participating factor-driven economies, whereas its TEA is relatively lower than those of Burkina Faso, Cameroon and Iran but higher than those of Russia and Kazakhstan. The same pattern is followed for the established business ownership in the factor-driven economies.

Figure 6.11: Genderwise self-perception about entrepreneurship in India (the percentage of population aged 18–64 years)



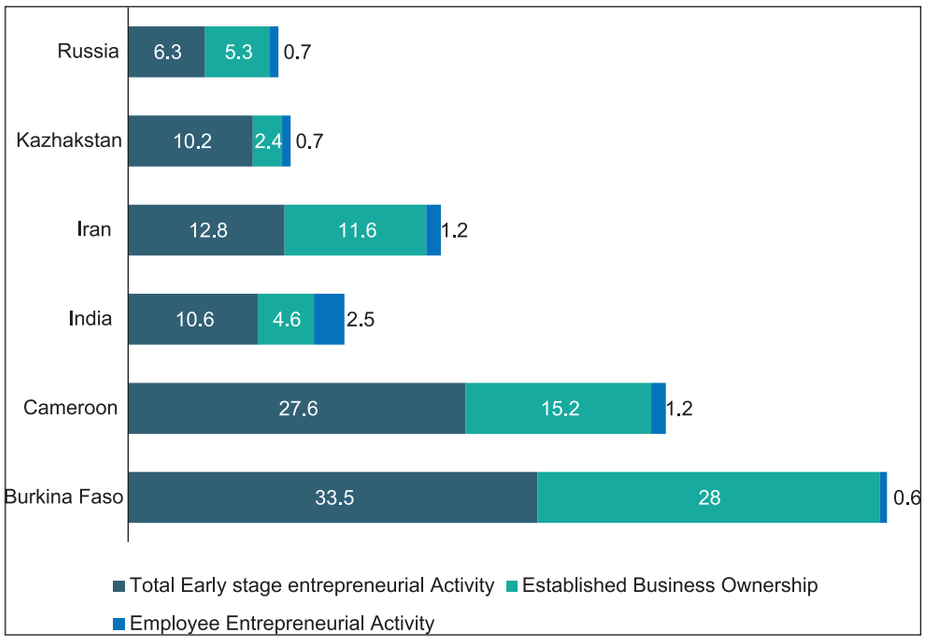
Source: GEM India Survey 2016–17

Figure 6.12: Development-phase averages for TEA, EEA and established business ownership in 64 economies, GEM 2016 (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

Figure 6.13: Entrepreneurial activity across factor-driven economies – A comparison



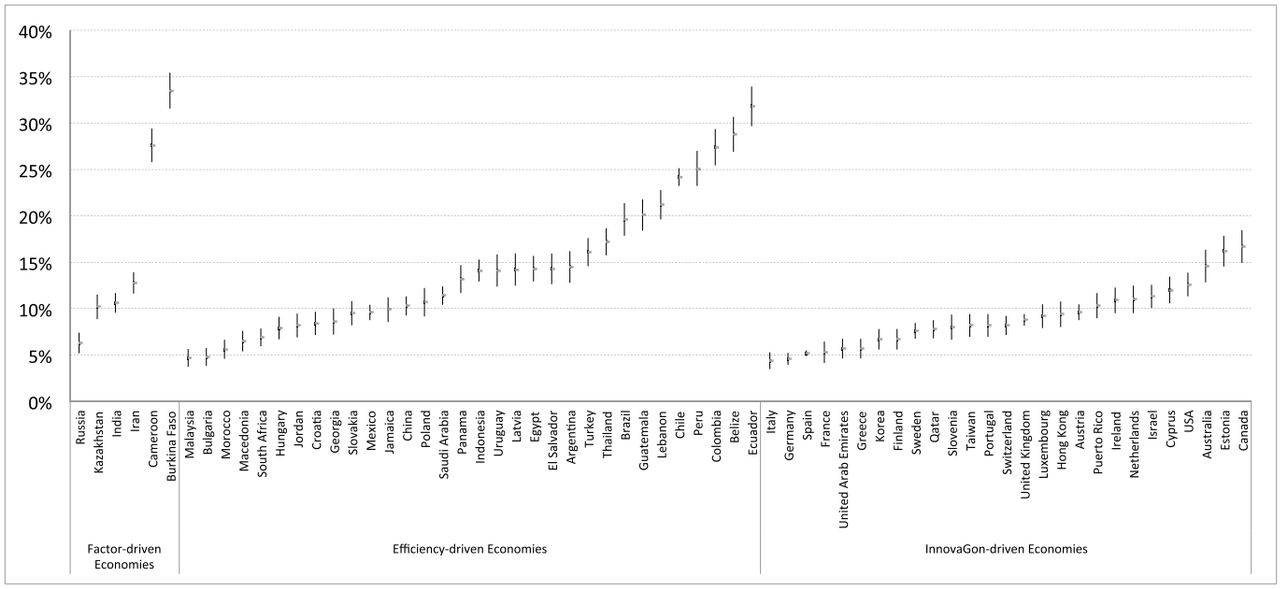
Source: GEM Global Report 2016–17

6.3.1 Total early stage entrepreneurial activity

The TEA is the main theme of the present research. The TEA consists of the percentage of individuals aged between 18 and 64 years who are in the process of either starting a new business or have recently started one. Thus, TEA has two dimensions: nascent entrepreneurs—individuals who are taking steps to start a business; and new entrepreneurs—owner–managers of businesses less than 3.5 years in existence (or baby businesses). It is important to mention here that the above-mentioned measurement of entrepreneurship includes an organisational lifecycle approach, i.e., nascent, new business, established business and discontinuation. Hence, this report also discusses established entrepreneurs—individuals who have been the owner–managers of a business for more than 3.5 years. In this context, gender and age descriptors are used to emphasise some distinctive patterns. The GEM data help in explaining the variations in the entrepreneurship rates of different countries, relative to the level of institutional development and demographic profile, especially age structure of the population, entrepreneurial culture and other developments. Having presented an overview of entrepreneurial participation in India, this section also tries to sketch the entrepreneurial profile and illustrate socio-demographic characteristics, to determine the effect of the entrepreneurial behaviour in the country.

6.3.2 TEA in GEM countries

Figure 6.14: TEA in 64 GEM economies, grouped by phases of economic development (% of population aged 18-64 years)



Source: GEM Global Report 2016–17

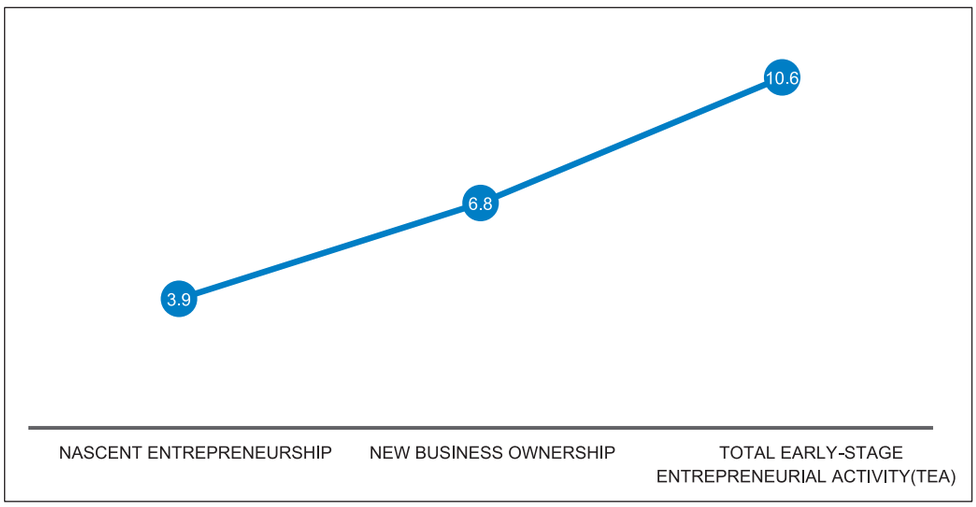
6.3.3 TEA in India

According to the *GEM Survey 2016*, in India, 4% of the adult population comprises of nascent entrepreneurs—the ones actively involved in setting up a business they will own or co-own; this business has no paid salaries, wages or any other payments to the owners for more than 3 months. An additional 7% is comprised of entrepreneurs—the owner–managers of businesses less than 3.5 years in existence. It collectively contributes 11% to the TEA. Incidentally, there is no change in the TEA rate of India when compared with the previous year.

6.3.4 Regionwise TEA in India

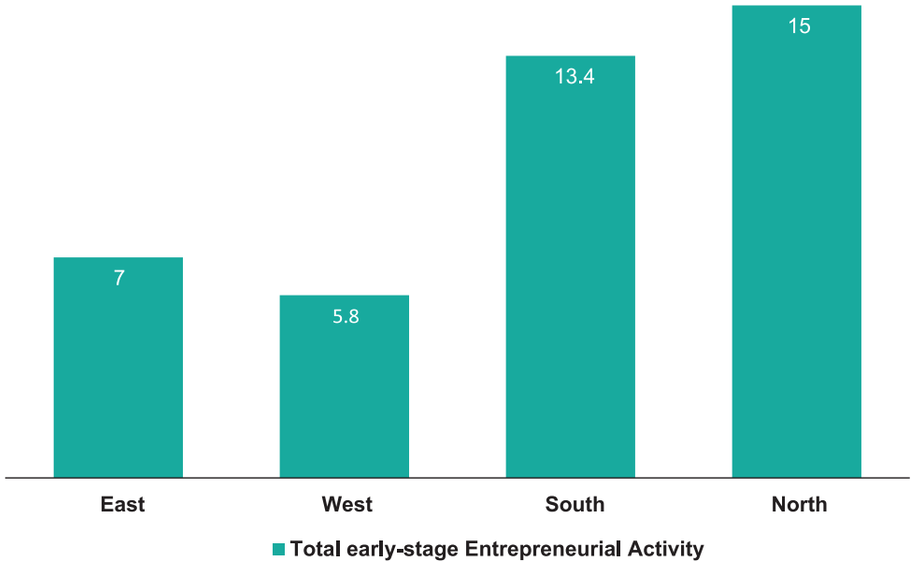
The TEA across regions varies to a great extent and is reflected in the *GEM Survey 2016*. As Figure 6.16 suggests, the TEA rate is the highest in the northern region, followed by the southern region. The TEA rate is lowest in the western region.

Figure 6.15: TEA in India



Source: GEM Global Report 2016–17

Figure 6.16: Regionwise TEA in India (the percentage of adult population aged 18–64 years)

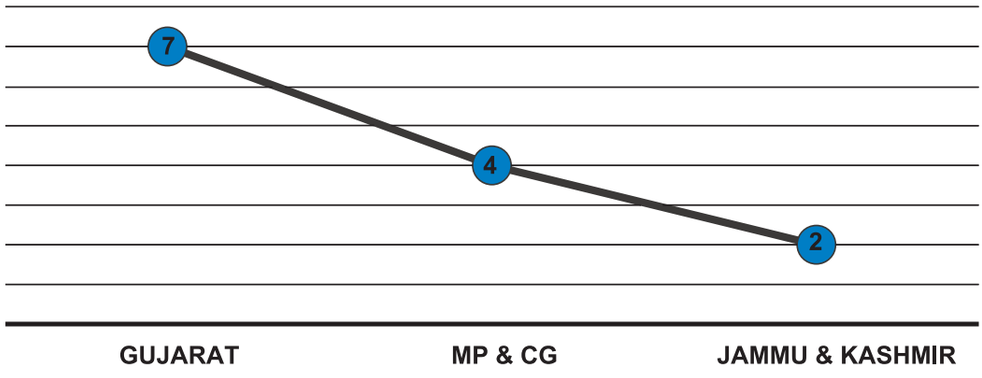


Source: GEM India Survey 2016–17

6.3.5 Genderwise TEA in India

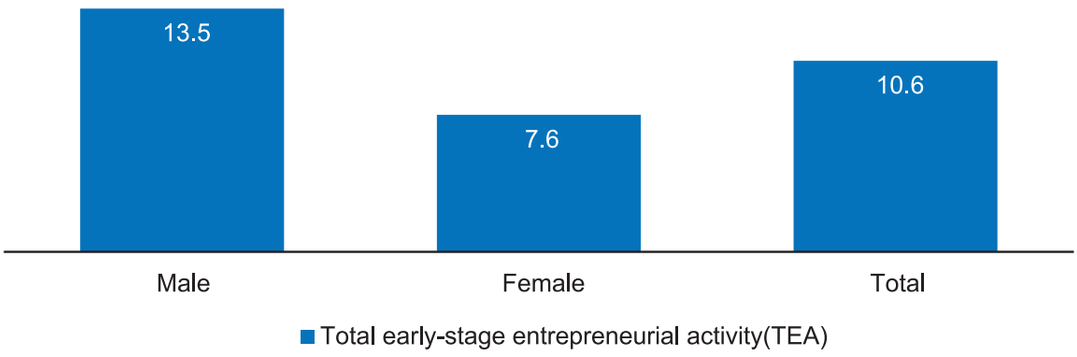
The *GEM Survey 2016* reports that the participation of female population in TEA in India varies significantly and is less than the participation of males in TEA. However, the lower rate of female participation is evident across economies participating in the *GEM Survey 2016*. The ratio of female-to-male TEA of India is 0.6, which is similar to the innovation-driven economies, whereas the factor-driven and efficiency-driven economies have a slightly higher ratio of 0.8. This finding is supporting the observation that said that the female-to-male ratio tends to be higher in countries with high overall levels of business activity. It is also reported that a regional difference exists in India in the participation of females in TEA. Although northern and western regions are more balanced, there is a significant difference in southern and eastern regions.

Figure 6.17: TEA in selected states in India



Source: GEM India Survey 2016–17

Figure 6.18: TEA in India, grouped by gender (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

Table 6.4: Ratio of female-to-male TEA – Comparison of GEM economies

Stage of economic development	TEA (Male)	TEA (Female)	Ratio
Factor driven	19	15	0.8
Efficiency driven	16	12	0.8
Innovation driven	11	7	0.6
India	13.5	7.6	0.6

Source: GEM Global Report 2016–17

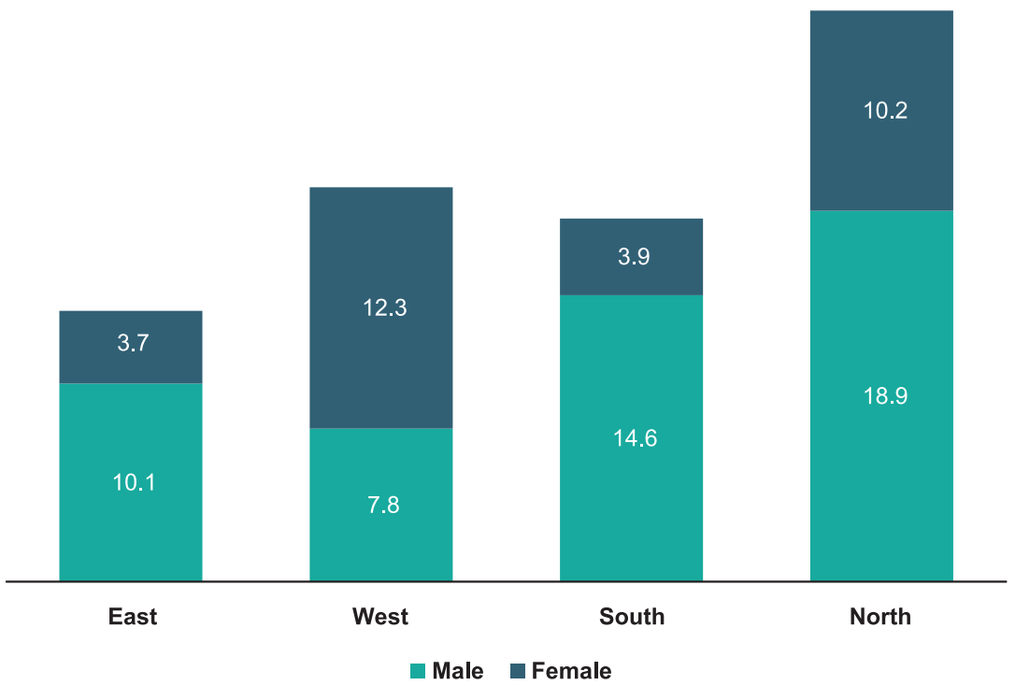
6.3.6 TEA grouped by age in India

The *GEM Survey 2016* reveals that, in India, the probability of being an early stage entrepreneur is the highest among individuals between three age groups: 25–34 years, 35–44 years and 45–54 years. The distribution of age groups within the TEA is in line with the global trends, where the highest prevalence rate is found in the 18–44 age range. High TEA rates among the young age groups of 18–44 years are indicative of positivity for a country like India, which is undergoing a demographic transition with an increase in the share of working age youths.

6.3.7 Established business rate in India

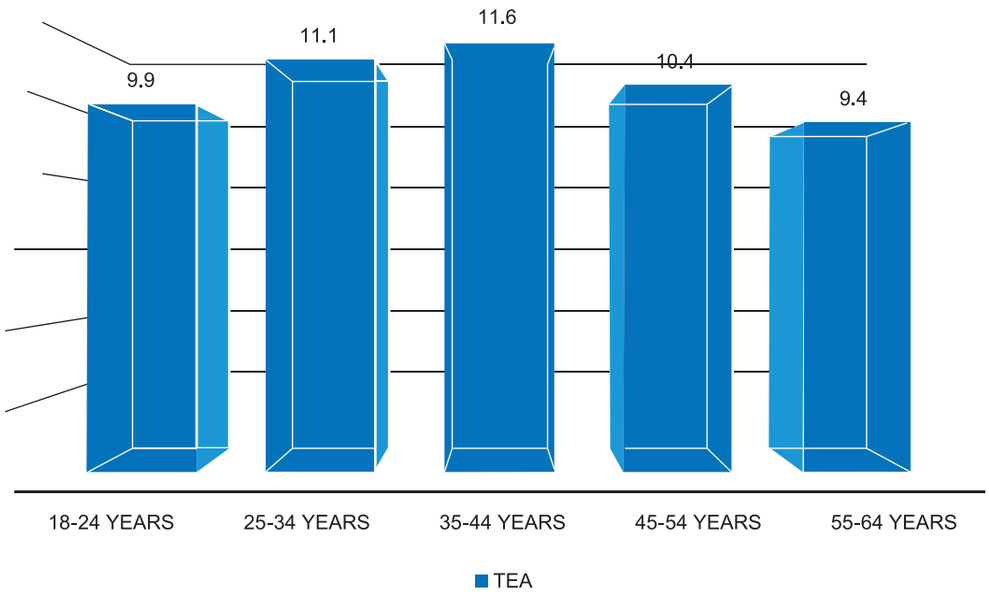
The established business rate is the percentage of the adult population that are owners/ managers of businesses that have been in operation for more than 42 months. Information on the level of established businesses is important as it provides some indication of the sustainability of entrepreneurship within an economy. These businesses have moved beyond the nascent and new business phases, and are able to contribute to a country's economy through the ongoing introduction of new products and processes, and a more stable base of employment. The *GEM Survey 2016* reports India's rate of established business at 5%, which is the lowest among all the economies (shown in Figure 6.21). A similar comparison among the BRICS economies suggests that Brazil has the highest rate of established business ownership (17%) and South Africa has the lowest (3%), whereas china has a slightly higher rate (8%), close to the average of efficiency-driven economies. The established business ownership rate in India and Russia, together stand at a rate of 5%, which is less than half of the average of factor-driven economies (shown in Figure 6.22).

Figure 6.19: TEA grouped by region and gender



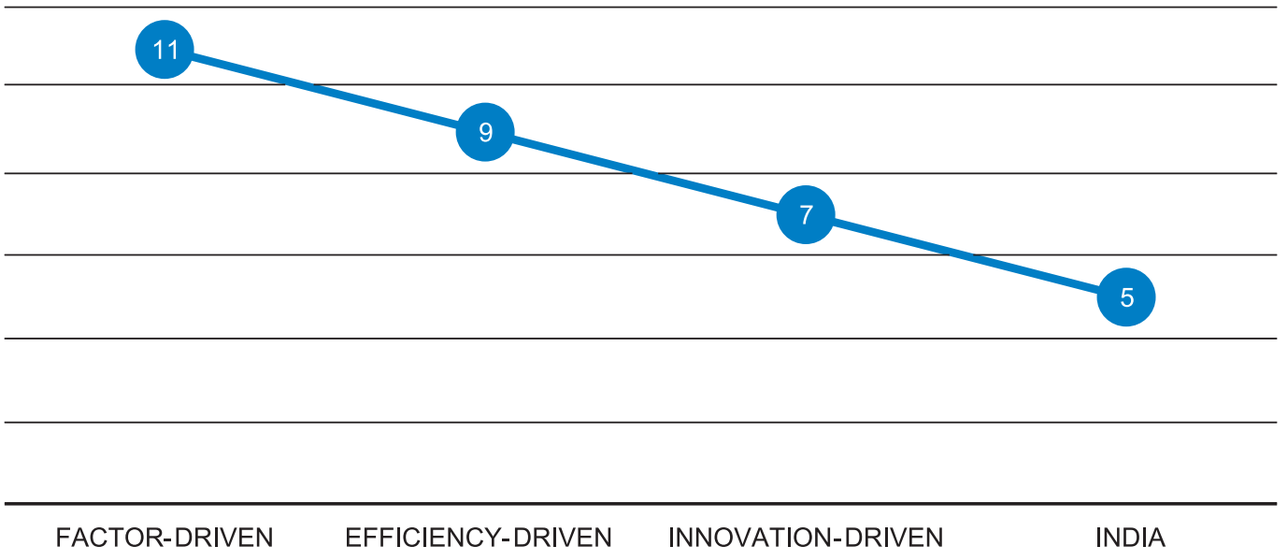
Source: *GEM India Survey 2016–17*

Figure 6.20: TEA grouped by age



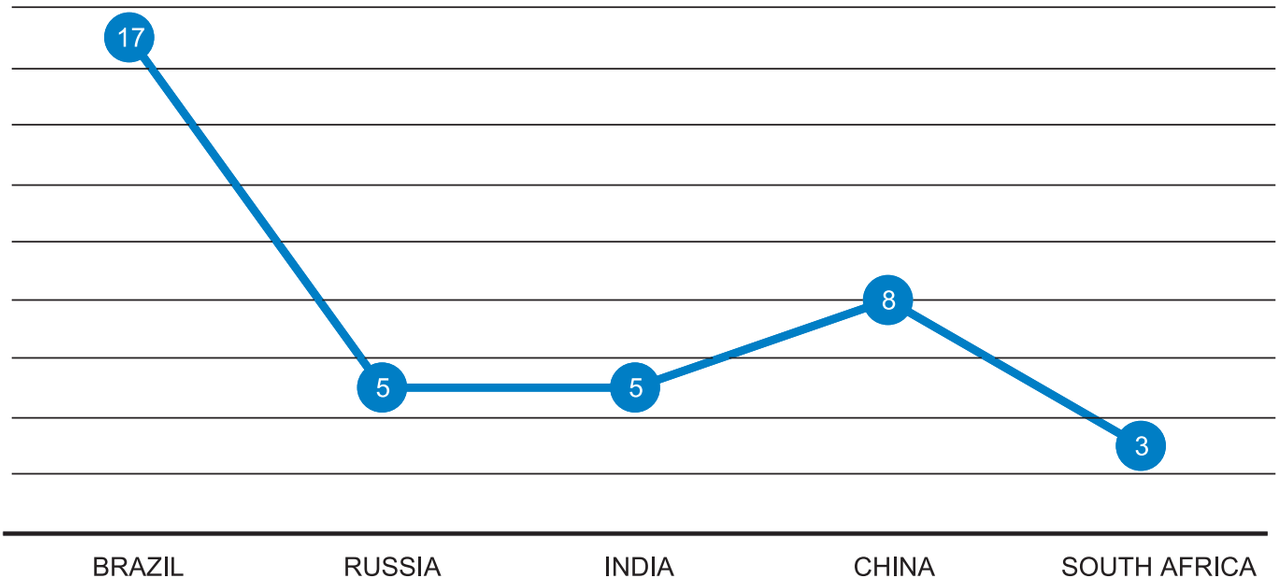
Source: GEM India Survey 2016–17

Figure 6.21: Established business rate – A comparison of GEM economies (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

Figure 6.22: Established business rate – A comparison of BRICS economies (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

6.3.8 Business discontinuation rate in India

The business discontinuation rate captures the percentage of the population aged 18–64 years (who are either a nascent entrepreneur or an owner–manager of a new business) and have, in the past 12 months, discontinued a business either by selling or shutting down or otherwise discontinuing an owner/management relationship with the business. Figure 6.23 suggests that the business discontinuation rate is the highest in India (26.4%) compared to all the economies participating in the *GEM Survey 2016*.

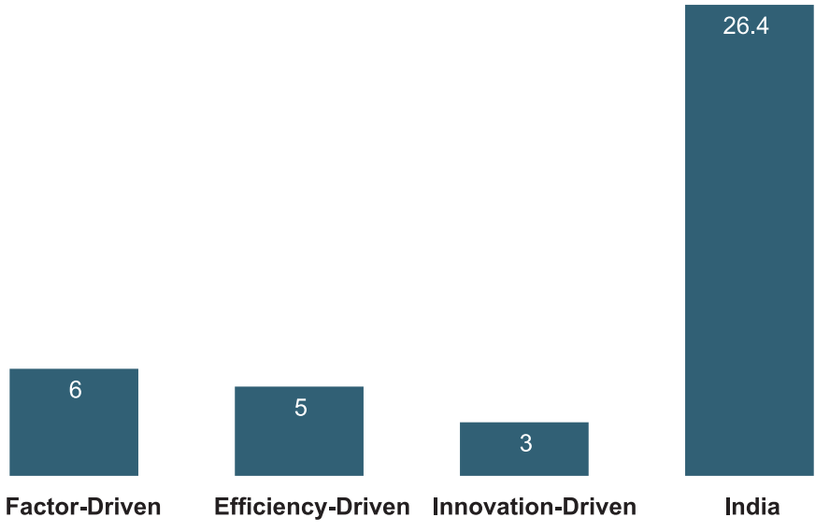
As highlighted in GEM Global Report 2016, the business discontinuation rate is often highly contextualised – a high rate could indicate low levels of preparations for venturing (capabilities, wrong perceptions about an opportunity, low level of motivation, etc.). A low rate, on the other hand, is not necessarily a positive indicator as entrepreneurs might be stuck in 'dead' ventures because of complicated exit regulations, taxation policy, etc. The reasons for business discontinuance are many and varied. Some reasons could be seen as positive, such as the opportunity to sell, pursuing another opportunity or planned retirement. On the other hand, discontinuation may happen due to lack of business profitability, problems with accessing finance and running out of working capital. Figure 6.24 highlights the reasons of business discontinuation in India.

6.3.9 Motivation for entrepreneurial activity in India

Entrepreneurial activity can be conceptualised as a function of opportunity structure and motivated entrepreneurs with access to resources (Aldrich & Zimmer, 1986). Further Shane et al. (2012) argue that keeping other factors constant, human motivation plays a critical role in the entrepreneurial process. Hence, a more realistic explanation is required to understand how motivation influences the entrepreneurial process? The GEM conceptual framework uses necessity vs. opportunity motives with the rate of TEA in the country.

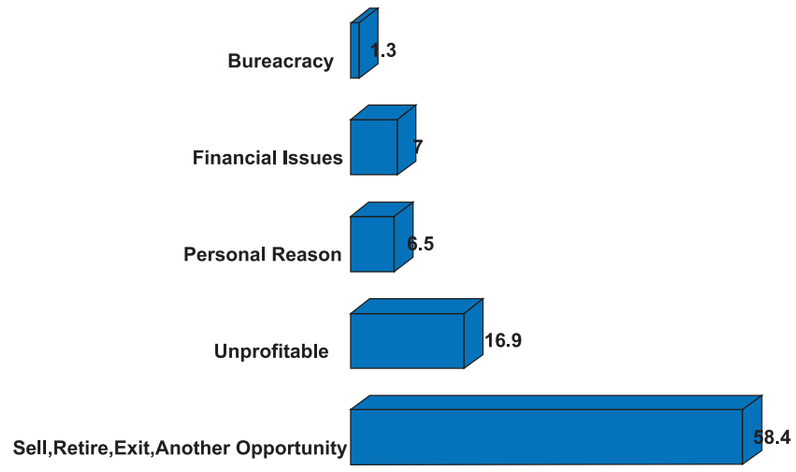
Bogenhold (1987) made an early attempt to classify entrepreneurs driven by economic need and those motivated by a desire for self-realisation. Adapting to it, a stream of thought emerged for bifurcating necessity- and opportunity-driven entrepreneurs. It is argued that necessity-driven entrepreneurs are pushed towards entrepreneurship because of the absence of alternate options of employment, whereas opportunity-driven entrepreneurs are doing it out of a desire to exploit a business opportunity (Williams, 2008; Bosma, 2007). Improvement-driven entrepreneurs are those who start a business either to earn money or to be independent.

Figure 6.23: Business discontinuation rate – A comparison of economies (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

Figure 6.24: Reasons for business discontinuation in India



Source: GEM Global Report 2016–17

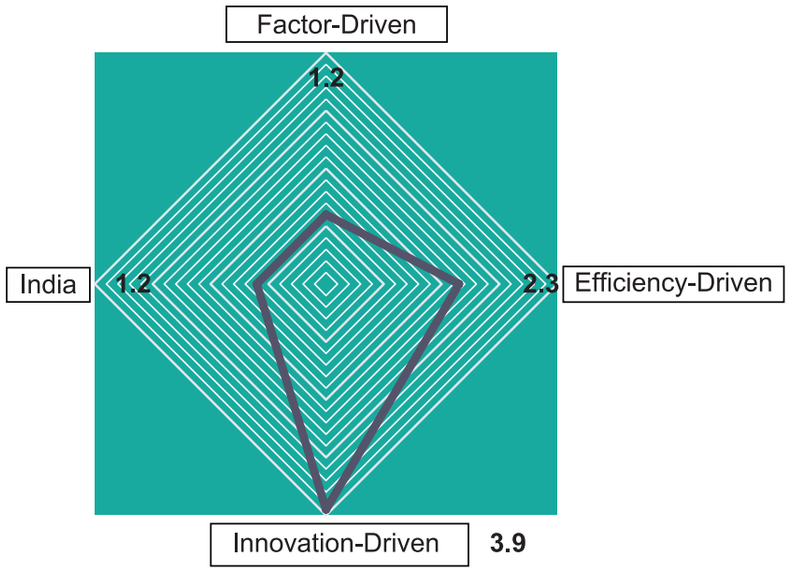
For understanding the entrepreneurial motives, the *GEM Survey 2016* calculated the motivational index (MI) – a ratio of necessity-driven and improvement-driven entrepreneurs. A higher index value reflects a high share of improvement-driven entrepreneurs. Figure 6.25 illustrates an average of MI of all economies participating in the survey.

Figure 6.26 shows a comparison of India along with other BRICS economies. It shows that India has the highest percentage of improvement-driven entrepreneurship (43%). The figures also suggest an upward shift in improvement-driven entrepreneurship compared to

the previous year. However, it also reported an increase in the necessity-driven entrepreneurs (35%) and decrease in the percentage of opportunity-driven entrepreneurs (61%) over the previous year.

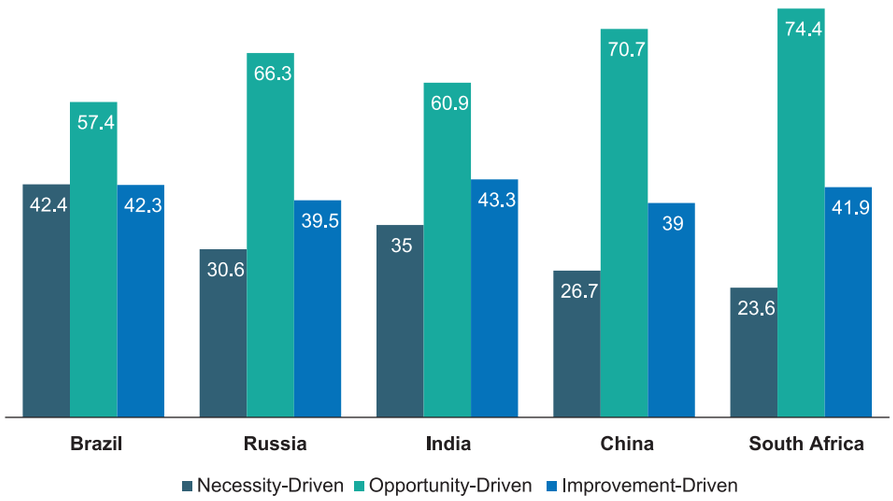
Although Table 6.5 reflects a marginal increase in the female participation of TEA, resulting from an opportunity motive than male (62% females to 60.5% males), there is a decrease in the number of necessity-driven female entrepreneurs than male counterparts.

Figure 6.25: Motivational index – A comparison of economies



Source: GEM Global Report 2016–17

Figure 6.26: Entrepreneurial motivation for TEA in BRICS economies (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

Table 6.5: Gender and entrepreneurial motive in India – A comparison with BRICS economies

	Male TEA (% of adult male)	Female TEA (% of adult female)	Male TEA necessity (% of adult male)	Female TEA necessity (% of adult female)	Male TEA opportunity (% of adult male)	Female TEA opportunity (% of adult female)
India	13.5	7.6	36.0	33.1	60.5	61.6
China	11.8	8.6	24	30	72.3	68.4
Brazil	19.2	19.9	36.8	47.7	63.2	51.9
South Africa	8	5.9	20.8	27.1	76.5	71.5
Russia	6.9	5.7	29.6	31.7	69.2	63.1

Source: GEM Global Report 2016–17

6.4 Entrepreneurial aspiration in India

Entrepreneurial aspiration refers to a state in which the entrepreneur is motivated to create firms of significant scale and thus employ a good number of workers. These high-growth aspiring entrepreneurial firms have a significant job creation potential and thus benefit the economy via raising the overall employment rate, correlated with innovation, technological advancement and investment. Although an individual's decision to become an entrepreneur is the most studied area, it is important to study the factors leading to such entrepreneurial aspirations. The GEM study also attempted to understand the entrepreneurial aspirations, the impact of entrepreneurial activity, growth expectation, innovation and internationalisation of profiles of entrepreneurs.

6.4.1 Innovation orientation in India

Innovation is a key driving force in the success of a business. Although the job-creation process has medium-term impact on businesses, innovative orientation has a long-term impact. Innovation is viewed in line with Schumpeter's view of innovative entrepreneurship from the perspective of market and industry. He 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, 1942). The degree and frequency of innovation always create a positive impact on economic development. Since innovation is a dynamic process and changes constantly, it is extremely difficult to measure the same. The GEM team has been using two different ways to assess innovation: (1) innovativeness of the product or service and (2) novelty of the technology used.

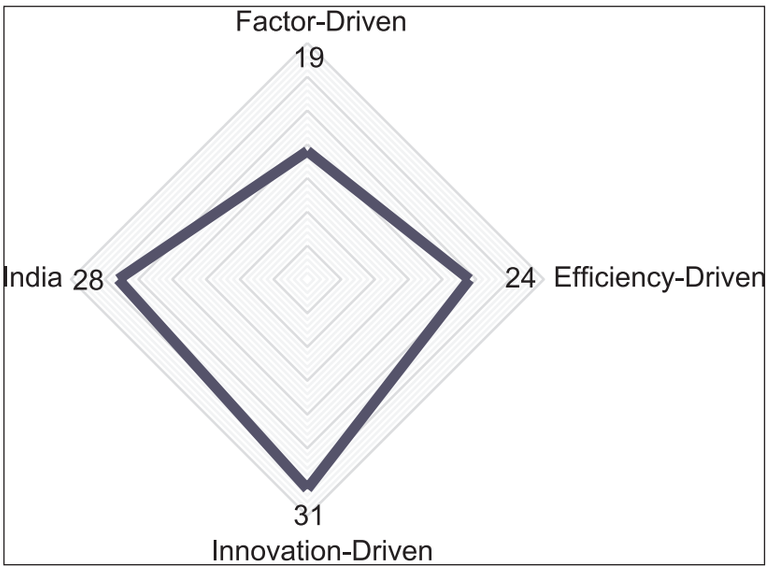
As far as the product innovation is concerned, it is measured in terms of the number of customers who consider the product or service as new or unfamiliar. Three levels of product innovation are distinguished: products/services that are unfamiliar to all (potential) customers, products/services that are unfamiliar to some (potential) customers and products/services that are unfamiliar to no (potential) customers.

The *GEM Survey 2016* shows that, in India, the rate of innovation is high and falls marginally with the innovation-driven economies. Similar comparison of the BRICS economies shows that India is on the top spot with China, in its innovation orientation. See Figures 6.27 and 6.28.

6.4.2 Growth expectation of TEA in India

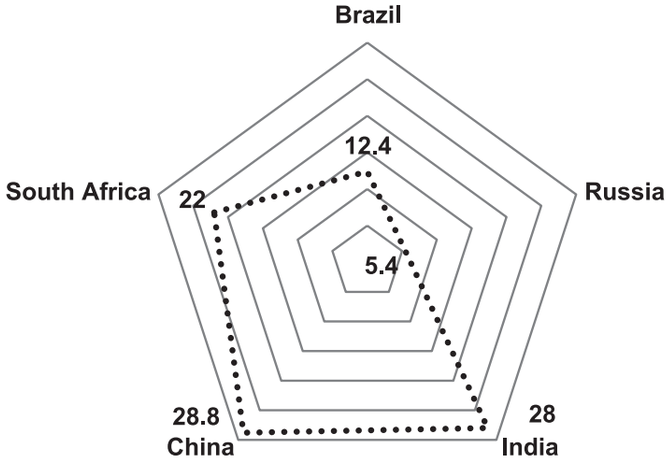
To measure the growth expectation of the TEA, the GEM team collected employment projection figures by asking how many employees (other than the owners) were employed or expected to be employ over the next 5 years. Figure 6.29 shows that 51% had a low growth expectation and did not intend to expand their employee base. However, the rate decreased in 2016 compared to the previous year. Similarly, 44% believed to hire 1–5 employees over the next 5 years and only 5% companies reported to hire six or more employees.

Figure 6.27: Innovation levels (the percentage of TEA with new product and no competitors) – A comparison of economies vis-à-vis India



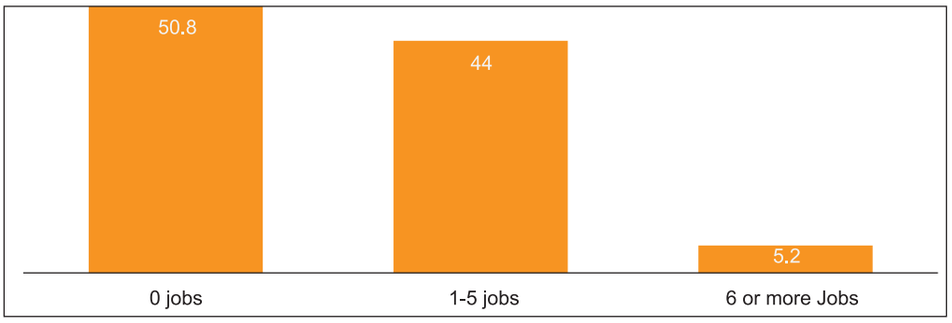
Source: GEM Global Report 2016–17

Figure 6.28: Innovation orientation for TEA – A comparison of BRICS economies



Source: GEM Global Report 2016–17

Figure 6.29: Employment projection for the next five years by TEA in India (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

6.4.3 Industry sector participation in India

Figure 6.30 illustrates a linear movement of entrepreneurial activity in India. The *GEM Survey 2016* reported the entrepreneurial intention (EI) rate in India at 15%. The TEA is at 11%, inclusive of nascent entrepreneurs and new entrepreneurs. The established business rate was reported to be 5%.

Subsequently, it also reports that around half of the entrepreneurs in factor- and efficiency-driven economies operate in the wholesale/retail sector, compared to a third of entrepreneurs in innovation-driven economies. In India, 71% of the early stage entrepreneurs are involved in wholesale/retail activities, in line with the findings. However, the figure demonstrates a sharp decrease in early stage entrepreneurial activity in agriculture, which used to be predominant in the previous year at 42%. The TEA participation in industry sector is shown in Figure 6.31.

Figure 6.30: Entrepreneurship pipeline in India

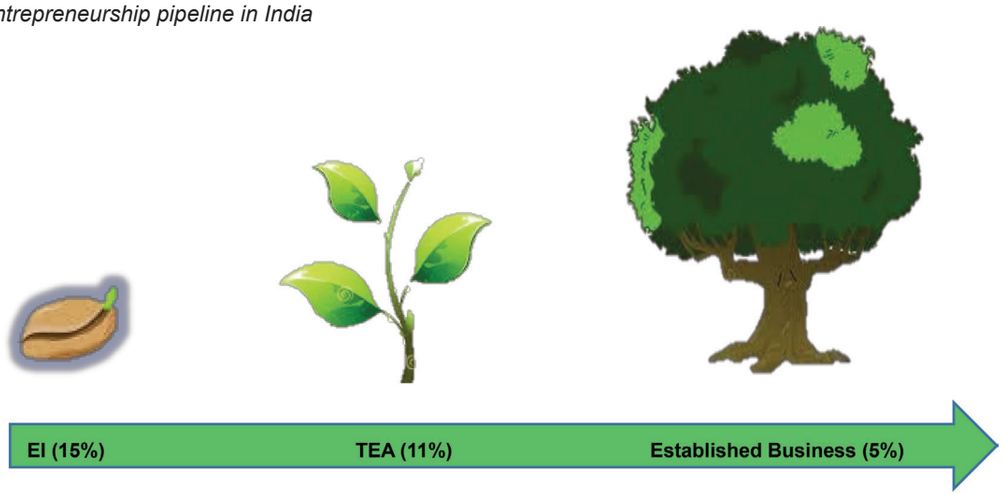
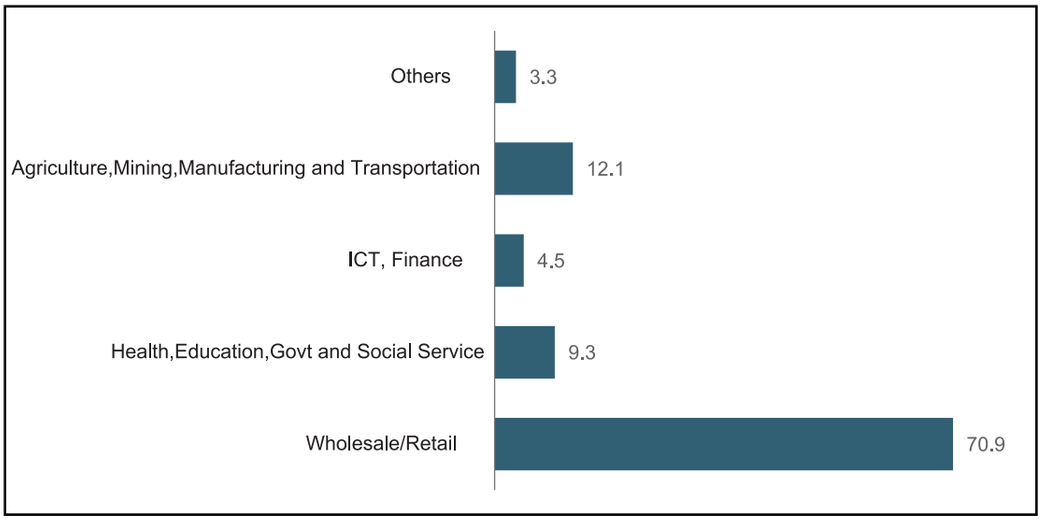


Figure 6.31: Industry sector participation % of TEA in India (the percentage of population aged 18–64 years)



Source: GEM Global Report 2016–17

CHAPTER 7

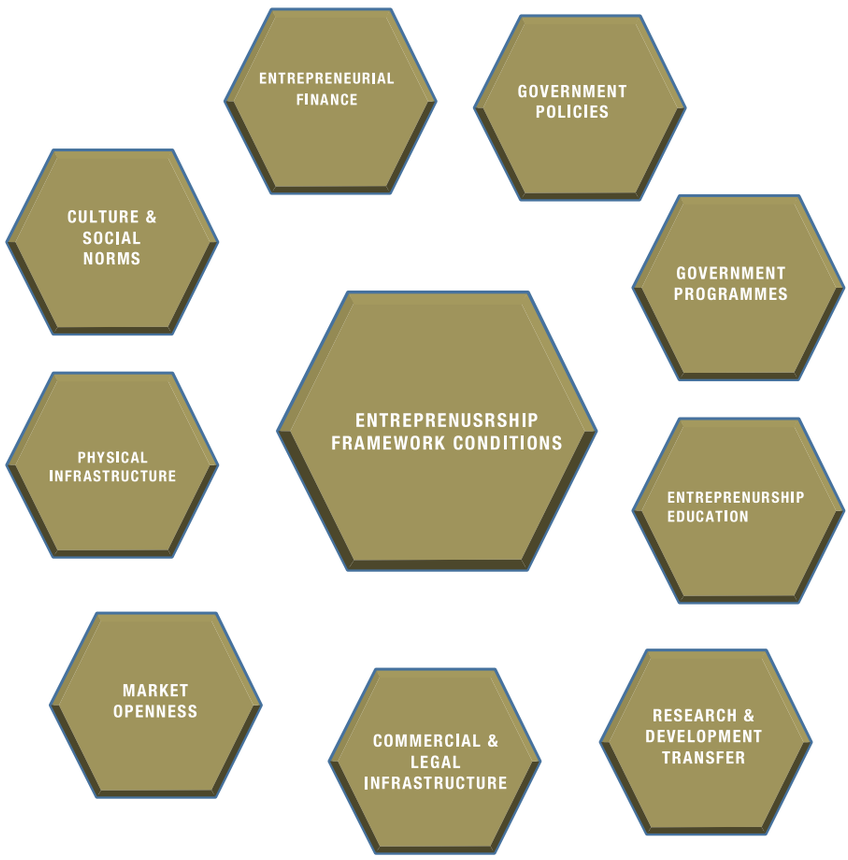
ENTREPRENEURSHIP FRAMEWORK CONDITIONS IN INDIA: NATIONAL EXPERT SURVEY (NES)

7.1 Introduction

Although many researchers tried to relate entrepreneurship with national economic development, GEM research affirms that the rate of entrepreneurship prevalent at national and regional levels within the nation drives its economic growth (Reynolds et al., 1999). Entrepreneurial activity introduces innovation, creates competition and enhances rivalry (Audretsch & Keilbach, 2004). Entrepreneurship in a nation is related to a combination of determinants such as the education level, existing business climate and legal and political conditions (Bowen & De Clercq, 2008; Grilo &Thurik, 2005). Although some of the determinants can explain the entrepreneurship rates and also the type of entrepreneurial activities between countries and regions, researchers have developed frameworks to explain some of the macro and micro determinants of entrepreneurship activities or entrepreneurial process (Reynolds et al., 1999, 2005; Sobel, 2008; Verheul et al., 2002; Wennekers and Thurik, 1999).

The GEM conceptual model depicts two mutually inclusive framework conditions – a general national framework condition (NFC) and a specific entrepreneurial framework condition (EFC) – for discussing the level of entrepreneurial activity in a country. In the GEM study, the NFC reflects the country's economic stages of development (factor driven, efficiency driven and innovation driven). In addition, GEM classifies the EFCs into nine different categories – financing, government policies and programmes, education and

Figure 7.1: Entrepreneurial framework conditions



Source: GEM Global Report 2016–17

training, R&D transfer, physical, commercial & legal infrastructure, market openness and cultural and social norms.

The GEM study measured the EFC of a nation by conducting the National Expert Survey (NES). In 2016, the NES provided data on these nine components of the entrepreneurship ecosystem using a Likert scale of 1 (highly insufficient) to 9 (highly sufficient). It is similar to other surveys that capture expert judgements to evaluate specific national conditions. However, the NES focuses only on the environmental features that are expected to have a significant impact on the entrepreneurial attitude and activities rather than on general economic factors. Experts were also asked to express their views about the most important conditions that can either foster or constrain entrepreneurial activity and development in their country. Figure 7.1 depicts the factors leading to EFC.

The emergence of the concept of an entrepreneurial ecosystem is the result of a shift in entrepreneurship studies in 1980s and 1990s, away from the individualistic, personality-based research towards a broader perspective that incorporated the role of social, cultural and economic forces in the process (Dodd & Anderson, 2007). The concept of entrepreneurial ecosystems has gained popularity in recent years due to mainstream business books such as Feld's (2012) Startup Communities and a work by Isenberg (2010) in the *Harvard Business Review*.

An entrepreneurial ecosystem is defined as a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular region (Stam & Spigel, 2016). The entrepreneurial ecosystem plays a crucial role in the entire entrepreneurship, starting from the ability and willingness of nascent entrepreneurs to start a firm to their ability to find venture capital and eventually structure an exit from the firm.

Start-ups remain at the centre of an entrepreneurial ecosystem. India is now the third largest start-up ecosystem in the world. As per the estimates of NASSCOM, India will have more than 10,000 start-ups by 2020. From a start-ups perspective, 2016 has not been a boom year. It witnessed a drop in the investments from private equity investors and venture capitalists. However, there was a growth in the number of merger and acquisition deals in 2016.

Among the many reasons for the challenges, policy uncertainty is a major pain point for start-ups. India still lacks in its policy framework for trade, creating an investor-friendly climate and providing an adequate infrastructure for supporting start-ups. According to NITI Aayog, there are about 280 incubators, accelerators and co-working space available, much lower when compared with the United States. The present government is proactive and is bringing bold reforms to ensure a favourable ecosystem, and has adopted the national entrepreneurship policy in the year 2015. The core objective of the entrepreneurship policy framework is to coordinate and strengthen factors essential for the growth of entrepreneurship across the country. This would include the following:

1. promoting entrepreneurial culture and making it aspirational;
2. encouraging entrepreneurship as a viable career option through advocacy;
3. enhancing support for potential entrepreneurs through mentorship and networks;
4. integrating entrepreneurship education in the formal education system;
5. fostering innovation-driven and social entrepreneurship to address the needs of the population at the bottom of the pyramid;
6. ensuring ease of doing business by reducing entry and exit barriers;
7. facilitating access to finance through credit and market linkages;
8. promoting entrepreneurship amongst women;
9. broadening the base of entrepreneurial supply by meeting specific needs of both socially and geographically disadvantaged sections of the society, including SC/STs, OBCs, minorities and differently abled persons.

7.2 Entrepreneurship financing in India

Entrepreneurship financing measures the availability of capital and its major sources for entrepreneurial activities. The *GEM Survey 2016–17* finds the status of entrepreneurial finance in India at the top (5.7), relatively higher than the average of factor-driven, efficiency-driven and innovation-driven economies. The NES further suggests an increase in the sources of funding, namely equity funding, professional business angel investors and crowdfunding compared to the previous year.

7.3 Government support and policies in India

The GEM study focuses on various policies formulated by the government to strengthen the entrepreneurship ecosystem in the country. In India, there is a positive shift towards promoting entrepreneurship through policy design. A separate ministry was created to look after the skill and entrepreneurship enhancement in the country at both the state and central levels. Budget 2016–17 was dedicated to empowering the entrepreneurial community at all levels, be it MSMEs or corporations. Several proposals announced by the finance minister suggest that the government is serious about unlocking India's entrepreneurial power by fuelling desperately needed jobs and economic growth.

The response recorded from NES finds improvement on government's initiatives for policy formation and support for new and growing firms, which was valued above midpoint at 5.6. This response specifies that the national-level government should be directed for policy implementation of support incentives to match the local administration level.

7.4 Taxes and bureaucracy in India

There is a visible transformation in the level of taxes and bureaucracy in India. The government is actively pursuing minimising procedural hurdles in taxes and bureaucracy. It also introduced several tax benefits for start-ups and the GST can be the biggest reform in the history of indirect taxes in India. At a bureaucratic level, the aim is to cut the number of days and procedures to obtain licenses and permits for starting businesses in India. In the NES 2016–17 report, the experts rated above the midpoint towards taxes and other government regulations applied to new and growing firms in a predictable and consistent way that was valued below midpoint as against the NES of GEM 2015.

7.5 Government programmes in India

The government of India has been trying to create a portfolio of initiatives, schemes and policies to boost the entry of new entrepreneurs. Also, it has been consistently realised that the youth are inclined towards choosing entrepreneurship as a career choice. The Startup India initiative was launched to provide a platform for kickstarting entrepreneurial activity. The Make in India initiative was launched to transform India into a global design and manufacturing hub. As per the GEM India Survey, the NES indicates that there are positive changes through government interventions to enhance single-window facilities for doing business, a wider network of government-sponsored business incubators and science parks to provide a launchpad for innovative ventures. Apart from this, several programmes are planned for supporting new and growing firms.

Table 7.1: Entrepreneurship financing in India

There is sufficient equity funding available for new and growing firms.	5.80
There is sufficient debt funding available for new and growing firms.	5.67
There are sufficient government subsidies available for new and growing firms.	5.55
There is sufficient funding available from informal investors, who are private individuals, for new and growing firms.	5.80
There is sufficient funding available from professional business angels for new and growing firms.	6.19
There is sufficient funding available from venture capitalists for new and growing firms.	5.86
There is sufficient funding available through initial public offerings (IPOs) for new and growing firms.	5.21
There is sufficient funding available through private lenders' funding (crowdfunding) for new and growing firms.	5.53

Source: GEM India Survey 2016–17

Table 7.2: Governmental support and policies in India

Government policies (such as public procurement) consistently favour new firms	5.43
Support for new and growing firms is a high priority for policy at the national level	6.01
Support for new and growing firms is a high priority for policy at the local government level	5.24

Source: GEM India Survey 2016–17

Table 7.3: Taxes and bureaucracy in India

New firms can get most of the required permits and licenses in about a week	3.43
The amount of taxes is *not* a burden for new and growing firms	4.50
Taxes and other government regulations are applied to new and growing firms in a predictable and consistent way	5.33
Coping with government bureaucracy, regulations and licensing requirements is not unduly difficult for new and growing firms	3.90

Source: GEM India Survey 2016–17

Table 7.4: Government programmes in India

A wide range of government assistance for new and growing firms can be obtained through contact with a single agency	3.92
Science parks and business incubators provide effective support for new, growing firms	5.65
There are an adequate number of government programmes for new and growing businesses	5.19
People working for government agencies are competent and effective in supporting new and growing firms	4.53
Almost anyone who needs help from a government programme for a new or growing business can find what they need	4.15
Government programmes aimed at supporting new and growing firms are effective	4.63

Source: GEM India Survey 2016–17

7.6 Education – Primary and secondary levels in India

The research indicates that education is important for the development of a knowledge economy. An entrepreneurial mindset at primary and secondary school levels is critical to the future of innovative India. The government of India is in the process of estimating the need of bringing entrepreneurship education to the secondary level, with module-based entrepreneurial traits input like leadership, creativity, innovation, risk-taking appetite and others for students at the primary level, which will promote holistic growth among school-going children. It is high time to bring in such integration at the school level.

NES of GEM 2016–17 (Table 7.5) indicates that the level of entrepreneurial traits like creativity, self-sufficiency and the personal initiative has decreased, which was very close to the average in NES of previous year.

Moreover, inputs related to market understanding and technical know-how of enterprise creation are also decreased, reflecting the lack in many primary- and secondary-level education systems in India.

7.7 Education – Post-secondary level in India

Entrepreneurship education plays an extremely important role in the choice of entrepreneurship as a career option (Edelman et al., 2008; Karimi et al., 2010; Menzies & Paradi, 2003). Therefore, entrepreneurship is considered to be the most important factor for economic and entrepreneurial growth. It is also positively related to the quality and availability of entrepreneurship education. Entrepreneurship education has been regarded as a key instrument in influencing entrepreneurial attitude of potential as well as nascent entrepreneurs.

A majority of the educational courses in India are reflecting the trend of including entrepreneurship, be it technical education, pure sciences or social sciences, into their curricula. The importance of entrepreneurship has been recognised as a catalyst in creating entrepreneurial populace in that particular stream of knowledge. Several institutions are working towards the formalisation of entrepreneurship education. Educational institutions like Entrepreneurship Development Institute of India (EDII), Indian Institute of Technology (IIT), and Indian Institute of Management (IIM) and National Entrepreneurship Network (NEN) are visible players in the field of shaping entrepreneurship education in India.

According to the NES of *GEM Survey 2016–17*, despite the incubation support at college and university levels, the rate of start-ups is lower. A similar finding was reported in the NES of *GEM Survey 2015*. However, the level of entrepreneurship orientation stands neither very positive nor

very negative, hanging close to the average score, which is also similar to previous year's rating. There is a need to improve the education system at the post-secondary level using creative teaching pedagogies and practical skill interventions in India.

7.8 Commercial and professional infrastructure in India

In India, the Ministry of Corporate Affairs, Ministry of MSME and DIPP work together in a synchronised manner. India follows a common accounting and governance mechanism, standard for systematic business operations.

According to the feedback of the NES of *GEM Survey 2016–17*, commercial and professional infrastructure scored above midpoint. Financial instruments like availability of banking facilities have the highest score of 5.83, followed by the availability of facilities like subcontractor, suppliers and consultants, professional firms for the support of new venture creation as well as growth, which are above midpoint. However, the ease of assessing these support mechanisms for a new entrant is comparatively low as indicated in Table 7.7.

7.9 Internal market dynamics in India

India's economic environment is passing through a paradigm shift. It has undertaken several reforms to support economic reforms, infrastructural development, technological upgradation and the like. However, it is dynamic in nature and is greatly affected by the global environment. Global securities, commodities, currency, technology and job market, all influence the Indian market. Along with these external market opportunities and challenges, India has its own issues of internal dynamics. Rich demographic dynamics is promising for India, and by the year 2020, India is expected to become the world's youngest emerging economy.

The NES of GEM 2016-17 (Table 7.8) states that the market for consumer goods and services underwent significant change (NES score 6.44) as against 5.85 observed in the NES 2015. The market for business-to-business goods and services has also improved significantly from the NES score 5.58 to 6.12 this year. The main region might be government support for e-commerce platform in selling goods and flexible policies under Digital India and Make in India programmes.

Table 7.5: Education – Primary and secondary levels in India

Teaching at primary and secondary levels encourages creativity, self-sufficiency and personal initiative	4.63
Teaching at primary and secondary levels provides adequate instruction in market economic principles	3.79
Teaching at primary and secondary levels of education provides adequate attention to entrepreneurship and new firm creation	3.47

Source: GEM India Survey 2016–17

Table 7.6: Education – Post-secondary level in India

Colleges and universities provide good, adequate preparation for start-ups and growing new firms	*4.40*
Level of business and management education provide good, adequate preparation for start-ups and growing new firms	*5.34*
Vocational, professional and continuing education systems provide good, adequate preparation for start-ups and growing new firms	*5.47*

Source: GEM India Survey 2016–17

Table 7.7: Commercial and professional infrastructure in India

There are enough subcontractors, suppliers and consultants to support new, growing firms	5.44
New, growing firms can afford the cost of using subcontractors, suppliers and consultants	4.76
It is easy for new, growing firms to get good subcontractors, suppliers and consultants	4.73
It is easy for new, growing firms to get good professional legal and accounting services	5.25
It is easy for new and growing firms to find good banking services (checking accounts, foreign exchange transactions, letters of credit and the like)	5.83

Source: GEM India Survey 2016–17

7.10 Internal market openness in India

India adopted policies of liberalisation, privatisation and globalisation as a historic reform in 1991. There is significant evidence that different countries benefitted from it while many faced challenges too. As per *GEM India Survey 2016–17* (Table 7.9), experts' opinion reflects several significant changes in results when compared with the *GEM India Survey 2015* results. The government worked towards market openness and ease of entry for new and growing firms, it was just above midpoint (4.81) in 2015 that has increased to NES Score 5.25, which shows a positive impact in internal market openness. The cost of market entry has been identified as another factor affecting the entry of new and growing firms into the market (4.80). However, governance seems encouraging with context to effectiveness and efficiency of anti-trust legislation. The results show the decline in anti-trust legislation effectiveness and efficiency to 4.78 points, which was reported to be 5.08 points last year.

7.11 Physical infrastructure in India

Despite being a factor-driven economy, India is demonstrating significant positive points above average. According to the NES GEM 2016–17 data (Table 7.10), the availability of physical infrastructure like roads, utilities, communication, water and others stands at 5.48 points and experts indicate that communication and connection infrastructure related to the internet, phone, gas, water, electricity and others has improved compared to the NES GEM 2015–16 and easily available at affordable costs (Table 7.10).

7.12 R&D transfer in India

Technology transfer and commercialisation is one of the most important factors that indicates the potential of any nation with respect to entrepreneurship. India is dedicated to the development of R&D through indigenous sources, but the pace of technology development happening across the world seamlessly affects the Indian market as well. Interdisciplinary and interdepartmental interaction is crucial for technology commercialisation and development through a long-term R&D process. According to the NES GEM 2016–17, there is an observable change

Table 7.8: Internal market dynamics in India

Markets for consumer goods and services changed dramatically from year to year	6.44
Markets for business-to-business goods and services changed dramatically from year to year	6.12

Source: GEM India Survey 2016–17

Table 7.9: Internal market openness in India

New and growing firms can easily enter new markets	5.25
New and growing firms can afford the cost of market entry	4.80
New and growing firms can enter the markets without being unfairly blocked by established firms	4.96
The anti-trust legislation is effective and well enforced	4.78

Source: GEM India Survey 2016–17

Table 7.10: Physical infrastructure in India

Physical infrastructure (roads, utilities, communications and water disposal) provides good support for new and growing firms	5.48
It is not very expensive for a new or growing firm to get good access to communications (phone, internet and others)	6.92
A new or growing firm can get good access to communications (telephone, internet and others) in about a week	6.82
New and growing firms can afford the cost of basic utilities (gas, water, electricity and sewer)	6.65
New or growing firms can get good access to utilities (gas, water, electricity, and sewer) in about a month	6.58

Source: GEM India Survey 2016–17

in R&D transfer in India compared to the NES GEM 2015. The ease of technology transfer and the capacity, affordability of transferring technology from university or public R&D labs (4.81) as well as acquiring new technology by new and growing firms (4.37) is far below average. However, experts indicate that support mechanisms like subsidies (4.88), incentives for commercialisation of technology-based venture creation (5.37), student idea realisation and start-up development support (4.81) have encouraging figures.

7.13 Cultural and social norms in India

Cultural value is one of the most important factors that influences individuals' choice of being an entrepreneur, by affecting their behaviour and perception. All the items indicating prevailing cultural and social norms in India are rated close to and above midpoint – the perception towards individual importance related to success and strategy adoption for success is closely associated with cultural belongingness. National culture regarding the encouragement of entrepreneurial risk-taking is 4.91, indicating that there is room for improvement. According to the NES GEM 2016–17 data, the score of national culture emphasising upon self-sufficiency, autonomy and perception initiative with encouragement related to creativity and innovativeness is above average (Table 7.12).

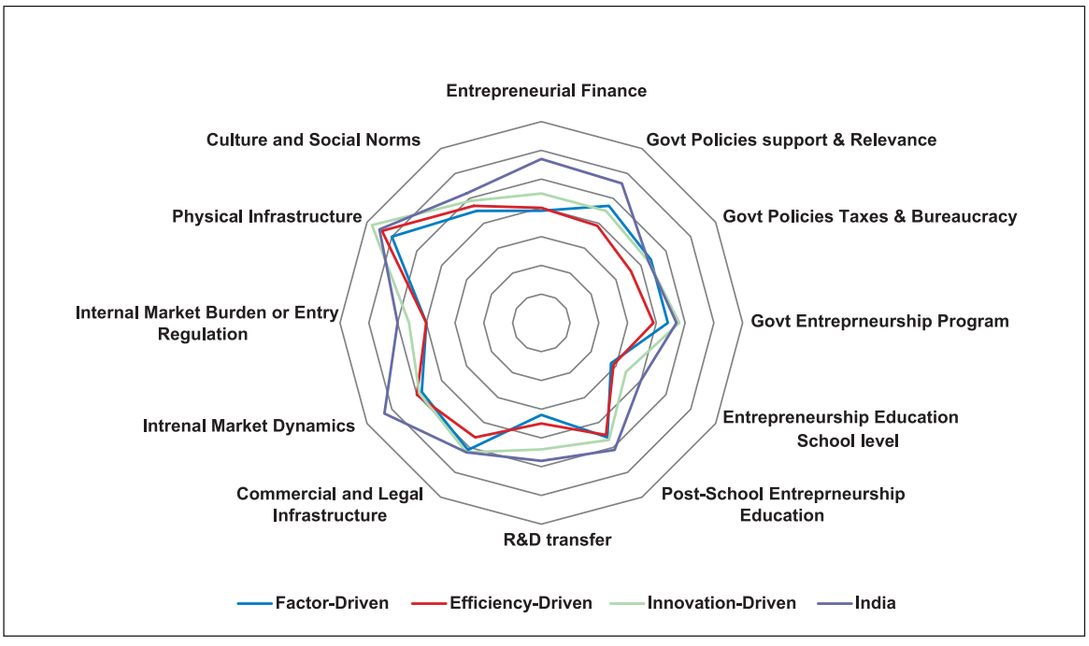
7.14 EFC's comparison across economies (factor-, efficiency- and innovation-driven) participated in *GEM Survey 2016*

According to the World Economic Forum's *Global Competitiveness Report*, countries are classified into three different stages:

- Stage 1 'Factor'-driven (FD) economies, where countries compete primarily on the use of unskilled labour and natural resources, and companies compete on the basis of price as they buy and sell basic products or commodities.
- Stage 2 'Efficiency'-driven (ED) economies, where growth is based on the development of more efficient production processes and increased product quality.
- Stage 3 'Innovation'-driven (ID) economies, where companies compete by producing and delivering new, different products and services by using the most sophisticated processes.

The *GEM Survey 2016* study consists of 65 economies belonging to the three stages. Although India remains a factor-driven economy, it is showing significant improvements at par with and occasionally better than the economies at efficiency- or innovation-driven stages. Figure 7.13 illustrates a comparison of India vis-à-vis other economies.

Figure 7.13: EFC's comparison across economies 2016–17



Source: GEM India Survey 2016–17

Table 7.11: R&D transfer in India

New technology, science and other knowledge is efficiently transferred from universities and public research centres to new, growing firms	4.81
New, growing firms have just as much access to new research and technology as large, established firms	4.52
New and growing firms can afford the latest technology	4.37
There are adequate government subsidies for new and growing firms to acquire new technologies	4.88
The science and technology base efficiently supports the creation of world-class new, technology-based ventures in at least one area.	5.37
There is good support available for engineers and scientists to have their ideas commercialised through new, growing firms	4.81

Source: GEM India Survey 2016–17

Table 7.12: Cultural and social norms in India

National culture is highly supportive of individual success achieved through own personal efforts	5.61
National culture emphasises upon self-sufficiency, autonomy and personal initiative	5.20
National culture encourages entrepreneurial risk-taking	4.91
National culture encourages creativity and innovativeness	5.04
National culture emphasises upon the responsibility that the individual (rather than the collective) has in managing his or her own life	5.33

Source: GEM India Survey 2016–17

Table 7.13: EFC's comparison across economies

Parameters	Factor driven	Efficiency driven	Innovation driven	India
Entrepreneurial finance	3.9	4	4.5	5.7
Government policies and relevance	4.7	3.9	4.5	5.6
Government policy taxes and bureaucracy	4.4	3.6	4.3	4.3
Government entrepreneurship programmes	4.4	3.9	4.8	4.7
Entrepreneurship education at school level	2.8	2.9	3.4	4
Post-school entrepreneurship education	4.6	4.5	4.7	5.1
R&D transfer	3.2	3.5	4.4	4.8
Commercial and legal infrastructure	5.1	4.6	5.2	5.2
Internal market dynamics	4.8	5	4.9	6.3
Internal market burden or entry regulation	4	4	4.6	5
Physical infrastructure	6	6.4	6.8	6.5
Culture and social norms	4.5	4.7	4.9	5.2

Entrepreneurship financing in India is the highest among all the economies at a mean score of 5.7 (ID=4.5; ED=4; FD=3.9). The score for government support and policies is also highest at 5.6 compared to other economies (ID=4.5; ED=3.9; FD=4.7). For parameters of entrepreneurship education at the school level (4) and the post-school level (5.1), the mean score is higher than the mean scores for innovation driven (3.4 and 4.7), efficiency driven (2.9 and 3.4) and factor driven (2.8 and 4.6). The mean scores of India for parameters like internal market dynamics and openness (6.3 and

5) are also higher than the average scores for innovation driven (4.9 and 4.6), efficiency driven (5 and 4) and factor driven (4.8 and 4). There is a consistency in the rate of R&D transfer to new and growing firms over the past 2 years. The mean score of India is higher (4.8) compared to all economies (FD=3.2; ED=3.5 and ID=4.5). For taxes and bureaucracy parameter, India's mean score is 4.3, which is at par with the innovation-driven economies (4.3) and higher than the average of efficiency-driven economies (3.6) but less than the average score of factor-driven economies (4.4). For commercial and legal infrastructure, India's mean score (5.2) is at par with the innovation-driven economies and higher than efficiency-driven (4.6) and factor-driven (5.1) economies.

7.15 Senior entrepreneurship in India

Senior entrepreneurs or olderpreneur are a significant group as they possess significant advantages when starting a business relative to the younger generations. The advantages include more developed networks, a higher technical and managerial skills level, more work and industry experience and a stronger financial position. The reason for seniors entering entrepreneurship is twofold: one is either through necessity, whereas the other is driven by an opportunity. According to a study by the Kauffmann Foundation and GEM, contrary to the traditional perception that entrepreneurship is a young person's endeavour, seniors are the most entrepreneurial age group (Amoros & Bosma, 2013). According to GEM data, seniors own businesses of a higher rate and are mostly opportunity driven (Kelley et al., 2013).

In India, according to the APS, GEM 2016–17, 9.4% of TEA is started by seniors in the age group of 55–64 years. Table 7.14 illustrates the mean scores obtained for senior entrepreneurship in India through the NES.

7.16 Constraints, fostering factors and recommendations to strengthen entrepreneurship in India

The NES GEM 2016–17 has identified financial support, education and training, and cultural and social norms as major constraining factors to entrepreneurship in India, followed by R&D transfer (Table 7.15). Apart from these constraints, the factors fostering the entrepreneurial activities in India are government entrepreneurship programmes, which are clearly visible with India's position in the ranking of start-up ecosystem reports, development of information and increase in knowledge, technology-based enterprises. Students are not only strengthening the workforce but are also aspiring to be self-employed or lead start-ups by using their skill education. India is in the factor-driven stage of economic development, but a large chunk of Indians is aspiring to lead innovation-based start-ups. The education and training system of India acts as a fostering factor for the initiation and growth of these start-ups. The government of India realised the importance of policy interventions long time ago and various holistic strategic moves through policy interventions have been taken by it at various levels. These strategic moves enhanced the confidence of experts in government policies' potential to serve the nation as entrepreneurship booster (Table 7.16).

Table 7.14: Senior entrepreneurship in India

In India, it is more difficult for people aged 50 years or above to find a job than for people aged less than 50 years	6.54
In India, people aged 50 years and above are living longer, healthier and more active lives than before	6.14
In India, there are programmes and tax benefits to encourage people aged 50 years and above to start their own business	5.07
In India, the experience and accumulated knowledge of people aged 50 years or above increases, in general, their chances of successfully starting a business	5.87
In India, entrepreneurs aged 50 years or above are more interested in supplementing their income than growing their business	5.81
In India, most people think that people aged 50 years or above should be planning for retirement rather than starting businesses	6.32

Source: GEM India Survey 2016–17

The NES GEM 2016–17 recommended a series of interventions to improve and emphasise upon improving the entrepreneurial activity in India. The recommendations frequency indicate that there is much need for improvement in government policies (44.2), followed by financial support and cultural and social norms (Table 7.17).

Table 7.15: Constraints to entrepreneurship

Rank	Constraining factors	%
1	Financial support	54.6
2	Culture and social norm	49.1
3	Education and training	33.6
4	R&D transfer	20.6

Source: GEM India Survey 2016–17

Table 7.16: Fostering factors for entrepreneurial activity in India

Rank	Major supporting factors	%
1	Government entrepreneurship programmes	69.1
2	Education and training	34.6
3	Government policies	29.1

Source: GEM India Survey 2016–17

Table 7.17: Recommendations to improve entrepreneurial activity in India

Rank	Recommendations	%
1	Education and training	69.8
2	Culture and social norms	39.2
3	Government policies	44.2
4	Financial support	32.4

Source: GEM India Survey 2016–17

CHAPTER 8

CONCLUSION AND POLICY SUGGESTIONS

8.1 Introduction

The *GEM India Report 2016–17* attempts to unveil the entrepreneurial dynamics in the country. It provides data and analyses that can help academicians, researchers, policymakers and professionals to take appropriate actions for enhancing economic growth, with focus on broad-basing entrepreneurship development. It further helps in assessing the changes in entrepreneurial activity and profiles with political and socio-economic development over a period of time.

The report examines key aspects of entrepreneurship among Indians by measuring their attitude, activities and aspirations. The findings of the report can provide policymakers with a foundation for reviewing the current and prospective policies to enhance and highlight the vital role and need for entrepreneurship in India. The major findings and appropriate recommendations for policymaking are highlighted in this chapter. The findings are based on a sample survey of 3,400 adults from across the country. To ensure national representation of population and generalisation of findings, appropriate weights were used for age groups, gender and urban–rural classifications. In the 2016–17 report, an attempt has been made to highlight the entrepreneurial activities in four Indian states of Gujarat, Madhya Pradesh, Chhattisgarh and Jammu & Kashmir.

8.1.1 Key points from Adult Population Survey (APS)

- In India, adults are generally positive when it comes to entrepreneurship as an attractive career option and whether entrepreneurs receive high status. The *GEM India Survey 2016* showed that 44% Indian adults in the age group of 18–64 years consider entrepreneurship as a desirable career choice, whereas close to 47% adults think that entrepreneurs enjoy high self-esteem and status in the society. Also, about 40% believe that there is enough media attention towards entrepreneurship. However, on these measures, India ranks below its peers in the factor-driven economies as well as among the BRICS nations except Brazil, as the data for Brazil was unavailable.
- Among the four Indian states, Gujarat ranked high in entrepreneurship as a preferred career choice (54%), whereas Madhya Pradesh, Chhattisgarh (combined) and Jammu & Kashmir follow with 41% and 9%, respectively.
- The survey found that, in India, 7% adults are new-firm entrepreneurs and another 4% are nascent entrepreneurs who are actively trying to start a business. It means that 11% of the adult population is engaged in some aspect of the TEA. However, although the Indian TEA rate is considerably lower than the average of factor-driven and efficiency-driven economies, it is higher than the average of the innovation-driven economies. Among the factor-driven economies, the TEA is relatively lower than Burkina Faso, Cameroon and Iran but higher than Russia and Kazakhstan.
- For the states, Gujarat has the highest rate of TEA at 7%, followed by Madhya Pradesh and Chhattisgarh both having TEA at 4%. The rate of TEA in Jammu & Kashmir is 2%.
- Nearly, 44% of the adults in India see good opportunities to start a business, whereas 44% perceive that they have capabilities to start a business, and 37% of the adult population would be prevented from doing so by fear of failure.
- The survey reports the entrepreneurial intention rate in India at 15%, higher than the previous year.
- The survey reveals that 7.6% of Indian women are involved in early stage entrepreneurship compared to 13.5% men. Hence, the likelihood that an individual engages in early stage entrepreneurial activity is influenced by gender. Indian men are close to twice more likely to be involved in early stage entrepreneurship compared to their female counterparts. The ratio of female-to-male participation in TEA is 0.6. The figure is similar to the ratio of female-to-male participation in innovation-driven economies. The survey also reports the female participation in opportunity-driven TEA to be higher than their male counterparts. Similarly, there is also a drop in the number of females in necessity-driven TEA when compared with the male population.
- In India, entrepreneurship motivated by necessity (no other option for work) was reported to be 35%, whereas 61% respondents said they were motivated to start enterprises out of opportunity. India also has the highest percentage

of improvement-driven entrepreneurship compared to BRICS economies.

8.1.2 Key points from National Experts Survey (NES): Enablers and constraints

According to the survey, the major constraints for entrepreneurship development in India include the following:

- Financial support
- Culture and social norms
- R&D transfer
- Education and training.

Simultaneously, the major enablers are as follows:

- Government entrepreneurship programmes to support entrepreneurship development such as Startup India, Stand Up India, Skill India and Make in India are aimed at creating a favourable entrepreneurial ecosystem.
- Government regulations and policy reforms.
- With a visible transformation in entrepreneurship education among universities and higher educational institutions and the role of university-led incubators, the youth are motivated to choose entrepreneurship as a preferred career.

8.2 Entrepreneurship policy: A background

A shift from the managed economy to an entrepreneurial economy (Audretsch & Thurik, 2001) views small and young businesses at the epicentre. It is the pervasive socio-economic mindset of thinking in terms of opportunities rather than resources. In an entrepreneurial economy, entrepreneurship is viewed as an engine for economic growth and employment creation. Hence, it becomes a bonafide focus of public policy across economies (Carree & Thurik, 2003). Although, in the West, the shift happened in favour of an entrepreneurship policy in the early 1990s for the promotion of start-ups, due to a failure of traditional policy instruments corresponding to the Solow model or those based on instruments promoting investment in physical capital, to adequately maintain economic growth and employment in globalised markets, on the other hand, the other reason can be attributed to the failure of the new policy instruments corresponding to the Romer model or those promoting investment into knowledge capital, to adequately generate economic growth and employment.

Although the distinction between small business policy and entrepreneurship policy is a subject of discussion, the entrepreneurship policy has a much broader focus than small business policy. As noted by Stevenson and Lundstorm (2001, p. 19), entrepreneurship policy consists of measures taken to stimulate more entrepreneurial behaviour in a region or country. It uses a wide variety of instruments such as changing regulations, taxes, education or provisions for finance.

Governments active in entrepreneurship policy state their overall objective in one of the three ways: to foster a stronger entrepreneurial culture and climate leading to a more entrepreneurial society; to increase the level of entrepreneurial activity in the country; and to produce an increase in the number of new businesses, the stock of firms and the number of entrepreneurs (Stevenson & Lundstorm, 2002). A comprehensive list of 24 policy areas affecting entrepreneurship is shown in Table 8.1.

Table 8.1: Policy areas affecting entrepreneurial performance

Policy areas affecting entrepreneurial performance	Entry barriers/deregulation, access to foreign markets, technology transfer, private demand condition, procurement legislation
	Loans, wealth and bequest tax, angel investment, venture capital, capital taxes, equity markets
	Entrepreneurship education and training, restart possibility, public entrepreneurship infrastructure and private entrepreneurship infrastructure
	Personal income tax, business tax, social security discrimination, administrative hurdles, labour market regulation, bankruptcy legislation
	Entrepreneurial motivation, initiatives towards specific groups, communications about entrepreneur

Source: Hoffman (2007, p. 152)

8.4 Policy recommendations for India

Entrepreneurship in the emerging market economies is crucial and the entrepreneurs can take charge as agents of change in the process of economic development, innovation and competitiveness. Reynolds (2004) mentions over 400 million as owner–managers of new firms and existence of 200 million of such enterprises in China and India.

The journey of the Indian economy since independence had many ups and downs. Although after independence, it was imperative to have rapid industrialisation for job creation and economic growth, the first industrial policy in India was announced in the year 1956. The policy followed the objective of a democratic socialism and advocated for a mixed market structure. It had classified industries into three categories, on the basis of the control exercised by the state either exclusively or majorly. The private sector is allowed in selected industries. The criticism came as the scope of expansion for private sector was restricted. Simultaneously, with strong government interventions, it led to complex bureaucracy and redtapism, leading to affect the productivity of the public-sector enterprises, with the restrictions levied; it also posed challenges for entrepreneurial activities in the country.

While realising the downside of the earlier policy and its negative effect, a new liberalised industrial policy was announced in the year 1991. Its objective was to push Indian economy towards globalisation and open the market for foreign investments and companies. The new policy had contrasted in many ways from the previous one: it scrapped the asset limit for companies and abolished industrial licensing of all projects. It raised the limit for foreign equity holdings, thereby demanding a greater participation of foreign capital in the country's industrial landscape. The new policy came as a boon for the business landscape and for new entrepreneurs.

Since then, the Indian economy is in an acceleration mode and is currently the seventh largest economy and one among the fastest growing ones in FY 2016–17 at 7.1. It has the third largest start-up ecosystem in the world and the number of start-ups is poised to grow 2.2 times, to reach 10,500 by 2020. In hindsight, there are multiple challenges for start-ups in the form of finance, facing regulatory hurdles and become more competitive. As a young country, it has more than 50% of its population below the age of 25 years and more than 65% below the age of 35 years. Hence, India needs to create opportunities for employment for its youth, women and other disadvantaged groups. The unemployment rate has been the highest in the past 2 years. Entrepreneurial activities can thus help in addressing the issues with job creation. Despite the presence of the Industrial and SME Policy, entrepreneurship policies so far have become an extension to these with a belief that these policies can adequately address the concerns of start-ups or new business as they are also small in size.

Although there are many influences on the government's entrepreneurship policy, a country's context matters greatly in the formulation of entrepreneurship policy. A context could embrace a broad range of economic, social, cultural, attitudinal and structural aspects that vary from one country to the other.

In India, over the past 2 years, there has been a visible trend in bringing policies to address the concerns of entrepreneurs and new businesses. With the launch of Startup India Policy, Make in India Policy and the recently launched Skill & Entrepreneurship Policy, there has been an attempt to integrate these policies with the existing ones.

The entrepreneurship policy can fulfil three objectives: one, it can stimulate the start-up ecosystem by creating more number of entrepreneurs; two, it can improve the job market scenario and lead to higher income generation; and three, it can promote innovation. The policy design must give a thrust on entrepreneurship education by including it in the curriculum at all levels. Moreover, the universities and higher educational institutions need to work collaboratively to promote innovative start-ups through investment in R&D, and subsequently help in transferring research from the laboratory to commercialise it by creating a business opportunity. The policy also needs to identify potential areas to promote entrepreneurship in India such as agriculture and biotechnology. It also needs to emphasise on creating a conducive culture for entrepreneurship activities and also ensure a greater visibility of entrepreneurs in the society. It must outline the steps to encourage entrepreneurial risk-taking, creativity and innovativeness among the youths. The policy must include a roadmap for a failed entrepreneur in order to help him start over again. The policy also needs to ensure that funds do

not become a constraint for new entrepreneurs in different phases of setting up their enterprises. The policy framework must address the concerns posed by regulatory constraints and create a level playing field for business angels and VCs as well as foreign investors to invest in Indian start-ups. The policy must focus on easing the administrative and legislative procedures for starting and doing business as well as exiting from business in India through appropriate bankruptcy legislation.

Building an entrepreneurial society is a complex process and its momentum can be reinforced only through a far-sighted policy. The GEM India team, in collaboration with GEM global team, has embarked on an important initiative that could play a key role in Indian socio-economic development. The team can potentially undertake a more detailed study that could provide added insights to the same. However, this requires expansion of GEM India partnerships and significant support from all stakeholders.

APPENDIX

Table 1: Ranking of Societal Values of Entrepreneurship by Economy, GEM 2016 – Percentage of Population Aged 18-64

Economy	country_name	Entrepreneurship as a good career choice		High status to successful entrepreneurs		Media attention for entrepreneurship	
		Rank/62	Score	Rank/62	Score	Rank/62	Score
1. Factor-driven	Burkina Faso	6	80.6	1	90.6	22	67.2
	Cameroon	40	57.3	32	69.2	33	60.2
	India	57	44.4	61	46.7	61	39.7
	Iran	52	52.4	10	80.5	37	57.9
	Kazakhstan	10	74.3	9	82.0	10	75.0
	Russia	31	63.4	39	65.6	52	48.9
	Total (unweighted)		**62.1**		**72.4**		**58.2**
2. Efficiency-driven	Argentina	36	61.7	58	50.4	35	58.5
	Belize	24T	65.6	26	71.3	48	51.3
	Brazil	-	-	-	-	-	-
	Bulgaria	50	52.9	35	66.9	59	40.7
	Chile	24T	65.6	40	63.8	32	60.3
	China	19	70.3	18	77.8	4	79.3
	Colombia	23	67.2	20	76.2	44	54.2
	Croatia	34	62.2	62	45.6	53	47.2
	Ecuador	37	59.5	45	61.1	19	69.5
	Egypt	3	83.4	2	87.1	26	62.1
	El Salvador	16	71.5	55	52.6	50T	49.6
	Georgia	17	71.4	12	79.7	39	57.6
	Guatemala	1	95.2	16	78.3	25	63.7
	Hungary	51	52.8	27	71.0	60	40.6
	Indonesia	20	69.0	13	79.3	7	77.1
	Jamaica	2	85.2	4	84.5	1	87.2
	Jordan	12	73.5	7T	82.3	11	74.7
	Latvia	45	55.2	52	57.8	42	56.3
	Lebanon	-	-	-	-	-	-
	Macedonia	27	64.8	51	58.5	30T	60.7
	Malaysia	58	44.1	59	50.3	41	56.4
	Mexico	56	44.5	60	47.2	58	41.0
	Morocco	7	79.3	50	58.7	30T	60.7
	Panama	33	63.2	49	59.7	54	46.8
	Peru	22	68.1	28	70.8	9	75.2
	Poland	35	61.9	53	56.2	38	57.7
	Saudi Arabia	4	81.3	15	78.7	8	75.9
	Slovakia	54	50.6	48	60.1	29	60.9
	South Africa	15	72.6	17	78.1	13	74.2
	Thailand	11	73.7	22	73.6	5	78.3
	Turkey	5	80.8	24	72.1	43	55.8
	Uruguay	39	58.7	54	55.8	34	58.8
	Total (unweighted)		**66.9**		**66.9**		**61.1**

Economy	country_name	Entrepreneurship as a good career choice		High status to successful entrepreneurs		Media attention for entrepreneurship	
		Rank/62	Score	Rank/62	Score	Rank/62	Score
3. Innovation-driven	Australia	46	54.2	25	71.5	12	74.3
	Austria	-	-	-	-	-	-
	Canada	26	65.5	23	73.5	14	72.6
	Cyprus	14	72.7	38	65.7	57	42.4
	Estonia	49	53.2	41	63.6	46	52.7
	Finland	60	40.3	6	83.0	17	71.4
	France	41	57.1	33T	69.0	56	45.2
	Germany	53	51.8	14	78.9	49	50.5
	Greece	30	63.6	37	65.9	62	38.5
	Hong Kong	44	55.4	42T	63.4	18	70.8
	Ireland	43	56.3	5	83.1	16	72.2
	Israel	28	64.2	3	85.5	45	53.8
	Italy	32	63.3	30	69.7	47	52.3
	Korea	55	45.3	46T	60.2	21	67.8
	Luxembourg	59	42.1	31	69.6	55	45.9
	Netherlands	8	77.9	46T	60.2	40	57.3
	Portugal	21	68.8	42T	63.4	20	68.8
	Puerto Rico	62	21.5	57	50.5	6	77.5
	Qatar	18	71.2	11	80.4	23	66.7
	Slovenia	42	56.8	33T	69.0	24	65.9
	Spain	47	53.7	56	50.7	50T	49.6
	Sweden	48	53.6	29	69.9	27	62.0
	Switzerland	61	38.9	36	66.0	36	58.3
	Taiwan	13	73.2	44	62.2	2	83.9
	United Arab Emirates	9	75.1	7T	82.3	3	83.8
	United Kingdom	38	58.8	19	77.2	28	61.1
	USA	29	63.7	21	74.4	15	72.4
	Total (unweighted)		**57.6**		**69.6**		**62.2**

Table 2: Ranking of Self-perceived Entrepreneurial Opportunities, Capabilities, Fear of Failure and Intentions by Economy, GEM 2016

Economy	country_name	Perceived opportunities (% of 18-64)		Perceived capabilities (% of 18-64)		Fear of failure (% of 18-64)		Entrepreneurial intentions (% of 18-64)	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
1. Factor-driven	Burkina Faso	6	61.9	3	76.7	65	17.9	2	63.7
	Cameroon	5	63.8	4	75.8	61	23.0	15	34.4
	India	27T	44.3	41T	44.0	30	37.5	40	14.9
	Iran	46	34.4	15	59.3	12	43.8	5	45.3
	Kazakhstan	29	44.2	30	50.0	48T	30.5	33	16.8
	Russia	64	17.9	63	28.4	10	44.8	65	2.1
	Total (unweighted)		**44.4**		**55.7**		**32.9**		**29.5**
2. Efficiency-driven	Argentina	27T	44.3	12T	61.2	58	25.8	18	28.0
	Belize	3	71.8	1	84.6	55T	26.1	8	42.9
	Brazil	35	40.2	24	53.6	34	36.1	19	27.7
	Bulgaria	63	21.0	53	39.7	59	25.1	61	7.1
	Chile	17	50.4	12T	61.2	55T	26.1	6	44.7
	China	42	37.3	62	29.8	6	49.1	27	21.3
	Colombia	16	51.4	10	67.9	63	21.0	3	49.6
	Croatia	61	24.6	29	50.2	35	35.8	32	18.2
	Ecuador	24	45.5	5	71.3	57	25.9	13	36.7
	Egypt	14	53.5	38	46.4	51.0	27.6	1	63.8
	El Salvador	38	38.9	7	70.6	47	30.8	16	33.4
	Georgia	50T	29.5	48	41.6	53T	26.5	44	12.8
	Guatemala	23	48.2	11	61.6	39	34.1	12	37.0
	Hungary	49	30.1	54	38.4	13	43.2	39	15.1
	Indonesia	30	43.1	19	55.1	26	38.8	25	23.2
	Jamaica	4	64.4	2	83.5	60	24.5	11	37.9
	Jordan	48	30.5	33	48.4	11	44.3	35T	16.4
	Latvia	47	31.9	31	49.9	16	41.1	31	18.9
	Lebanon	7	59.6	9	68.0	62	22.5	9	40.5
	Macedonia	39	38.4	21	54.5	38	34.4	23	24.9
	Malaysia	58	25.4	64	28.3	33	36.7	64	4.9
	Mexico	37	39.4	52	40.7	53T	26.5	49	11.1
	Morocco	26	45.0	16	56.1	42	32.9	14	36.2
	Panama	31	42.4	34T	48.0	52	27.4	54	9.7
	Peru	11	56.6	8	69.0	48T	30.5	7	43.5
	Poland	36	39.5	14	60.2	8	47.6	28	20.8
	Saudi Arabia	1	81.5	6	70.7	23	39.4	24	23.9
	Slovakia	62	23.0	41T	44.0	21	39.7	58	8.0
	South Africa	45	35.0	55	37.9	44T	31.2	52T	10.1
	Thailand	40	37.7	44	43.5	3	52.1	26	22.6
	Turkey	19	49.6	22	54.2	46	30.9	17	30.3

Economy	country_name	Perceived opportunities (% of 18-64)		Perceived capabilities (% of 18-64)		Fear of failure (% of 18-64)		Entrepreneurial intentions (% of 18-64)	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
	Uruguay	52T	28.6	17	55.6	50	29.7	22	25.5
	Total (unweighted)		**42.4**		**54.5**		**33.2**		**26.4**
3. Innovation-driven	Australia	20	49.3	26	52.3	14	42.9	45	12.3
	Austria	33	42.2	32	49.6	32	37.1	50T	10.4
	Canada	8	59.0	23	54.1	24	39.0	41	14.0
	Cyprus	43	35.9	25	52.4	4	50.2	34	16.7
	Estonia	15	52.3	43	43.7	15	41.2	35T	16.4
	Finland	21	49.1	58	35.8	29	37.6	50T	10.4
	France	52T	28.6	57	36.3	20	40.3	38	15.7
	Germany	41	37.6	56	37.4	17T	41.0	62	6.2
	Greece	65	13.0	47	41.7	2	52.7	57	8.1
	Hong Kong	10	56.8	60	32.4	31	37.3	37	16.3
	Ireland	25	45.2	40	44.9	22	39.6	43	12.9
	Israel	13	53.7	50	41.1	7	48.7	29	20.6
	Italy	52T	28.6	61	31.2	5	49.4	52T	10.1
	Korea	44	35.3	39	45.1	43	31.5	20	27.5
	Luxembourg	18	49.8	51	40.8	9	45.8	46	11.9
	Netherlands	12	54.3	49	41.2	28	37.9	60	7.4
	Portugal	50T	29.5	46	42.4	27	38.1	42	13.3
	Puerto Rico	60	25.1	36	47.9	64	20.1	30	19.4
	Qatar	22	48.4	28	50.6	36	35.4	10	38.9
	Slovenia	59	25.3	27	51.8	40	33.8	48	11.4
	Spain	57	25.6	37	46.7	25	38.9	63	5.1
	Sweden	2	78.5	59	35.5	19	40.8	56	8.4
	Switzerland	34	41.4	45	43.3	44T	31.2	59	7.9
	Taiwan	55	26.5	65	25.2	17T	41.0	21	25.8
	United Arab Emirates	56	25.8	18	55.2	1	54.4	4	48.3
	United Kingdom	32	42.3	34T	48.0	37	35.2	55	9.1
	USA	9	57.3	20	55.0	41	33.3	47	11.7
	Total (unweighted)		**41.3**		**43.8**		**39.8**		**15.4**

Table 3: Ranking of Types of Entrepreneurial Activity by Region, GEM 2016 – Percentage of Population Aged 18-64

REGION	country_ name	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepreneurial activity (TEA)		EEA		Established business ownership rate	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
Africa	Burkina Faso	2	21.2	2	13.5	1	33.5	61	0.6	1	28.0
	Cameroon	5	17.8	7	10.9	4	27.6	47T	1.2	6	15.2
	Egypt	20	8.2	17	6.6	17T	14.3	40	2.0	41T	6.1
	Morocco	64T	1.3	36T	4.3	59	5.6	62T	0.5	27T	7.5
	South Africa	49T	3.9	46	3.3	52	6.9	55T	0.7	61	2.5
	Total		**10.5**		**7.7**		**17.6**		**1.0**		**11.9**
Asia & Oceania	Australia	17	8.8	18T	6.2	15	14.6	1	9.0	11	11.3
	China	44	4.5	20T	6.1	32T	10.3	47T	1.2	27T	7.5
	Georgia	42T	4.6	36T	4.3	42	8.6	62T	0.5	20	8.6
	Hong Kong	39	5.0	28T	4.7	39	9.4	26	4.1	41T	6.1
	India	49T	3.9	15	6.8	31	10.6	34	2.5	51	4.6
	Indonesia	49T	3.9	9	10.4	20T	14.1	55T	0.7	5	15.3
	Iran	25T	6.9	18T	6.2	23	12.8	47T	1.2	9	11.6
	Israel	23T	7.0	32T	4.5	27	11.3	4T	7.3	57	4.0
	Jordan	47T	4.1	31	4.6	44T	8.2	43T	1.5	60	2.7
	Kazakhstan	25T	6.9	45	3.4	34	10.2	55T	0.7	62	2.4
	Korea	52T	3.7	52T	3.0	53T	6.7	36	2.3	38	6.6
	Lebanon	13	9.5	4	12.1	8	21.2	32T	2.6	3	20.1
	Malaysia	63	2.0	56	2.8	63	4.7	64	0.3	50	4.7
	Qatar	45T	4.3	43T	3.6	50	7.8	9	6.4	59	3.0
	Saudi Arabia	52T	3.7	12	7.7	26	11.4	23T	4.7	63	2.3
	Taiwan	54	3.6	28T	4.7	44T	8.2	15	5.7	26	7.7
	Thailand	35T	5.2	3	12.6	11	17.2	51T	1.0	2	27.5
	Turkey	14T	8.9	13	7.6	14	16.1	27T	3.6	15	9.4
	United Arab Emirates	64T	1.3	34T	4.4	57T	5.7	37T	2.2	64	1.9
	Total		**5.1**		**6.1**		**11.0**		**3.0**		**8.3**
Latin America & Caribbean	Argentina	14T	8.9	23T	5.7	16	14.5	29	3.1	24	7.9
	Belize	4	18.7	8	10.7	3	28.8	2	8.0	47T	5.3
	Brazil	29	6.2	1	14.0	10	19.6	43T	1.5	4	16.9
	Chile	7	15.6	10	9.3	7	24.2	18	5.4	23	8.0
	Colombia	6	16.3	5	11.3	5	27.4	47T	1.2	18	8.9
	Ecuador	1	22.4	6	11.0	2	31.8	55T	0.7	7	14.3
	El Salvador	21	8.0	16	6.7	17T	14.3	51T	1.0	10	11.5
	Guatemala	8	12.2	11	8.6	9	20.1	42	1.7	17	9.1
	Jamaica	47T	4.1	22	5.8	35	9.9	55T	0.7	21T	8.2
	Mexico	30T	6.1	43T	3.6	36T	9.6	22	4.8	27T	7.5

REGION	country_ name	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepreneurial activity (TEA)		EEA		Established business ownership rate	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
	Panama	18	8.6	28T	4.7	22	13.2	65	0.2	53T	4.4
	Peru	3	19.9	23T	5.7	6	25.1	54	0.8	41T	6.1
	Puerto Rico	19	8.5	63	2.0	32T	10.3	41	1.8	65	1.6
	Uruguay	10	10.1	38	4.2	20T	14.1	32T	2.6	30	7.4
	Total		**11.8**		**7.4**		**18.8**		**2.4**		**8.4**
Europe	Austria	32	6.0	40T	3.7	36T	9.6	4T	7.3	19	8.8
	Bulgaria	60	2.6	61T	2.2	62	4.8	53	0.9	39T	6.2
	Croatia	30T	6.1	59	2.5	43	8.4	19	5.3	56	4.2
	Cyprus	22	7.6	32T	4.5	25	12.0	16T	5.6	21T	8.2
	Estonia	9	11.7	27	4.8	13	16.2	10	6.3	25	7.8
	Finland	45T	4.3	57	2.7	53T	6.7	16T	5.6	31	7.3
	France	58	3.1	60	2.3	60	5.3	27T	3.6	55	4.3
	Germany	59	2.9	65	1.7	64	4.6	21	5.1	35	7.0
	Greece	56T	3.2	58	2.6	57T	5.7	45T	1.4	8	14.1
	Hungary	40	4.8	47T	3.2	49	7.9	30	3.0	46	5.5
	Ireland	23T	7.0	34T	4.4	29	10.9	11	6.2	53T	4.4
	Italy	61T	2.3	61T	2.2	65	4.4	39	2.1	49	5.2
	Latvia	12	9.7	26	4.9	19	14.2	25	4.5	14	9.5
	Luxembourg	27T	6.4	54T	2.9	40	9.2	6	7.2	58	3.2
	Macedonia	55	3.4	50T	3.1	55	6.5	45T	1.4	32	7.2
	Netherlands	34	5.7	25	5.4	28	11.0	3	7.6	13	10.2
	Poland	42T	4.6	20T	6.1	30	10.7	20	5.2	33T	7.1
	Portugal	41	4.7	40T	3.7	44T	8.2	35	2.4	33T	7.1
	Russia	56T	3.2	52T	3.0	56	6.3	55T	0.7	47T	5.3
	Slovakia	27T	6.4	47T	3.2	38	9.5	37T	2.2	41T	6.1
	Slovenia	37T	5.1	50T	3.1	48	8.0	23T	4.7	37	6.7
	Spain	61T	2.3	54T	2.9	61	5.2	31	2.7	39T	6.2
	Sweden	33	5.8	64	1.8	51	7.6	12T	6.1	52	4.5
	Switzerland	37T	5.1	47T	3.2	44T	8.2	12T	6.1	12	11.1
	United Kingdom	35T	5.2	40T	3.7	41	8.8	7T	7.0	41T	6.1
	Total		**5.2**		**3.4**		**8.4**		**4.4**		**6.9**
North America	Canada	11	10.0	14	6.9	12	16.7	14	5.9	36	6.8
	USA	14T	8.9	39	4.0	24	12.6	7T	7.0	16	9.2
	Total		**9.5**		**5.5**		**14.7**		**6.5**		**8.0**

Table 4: Ranking of Entrepreneurial Motivation for TEA by Economy, GEM 2016

Economy	country_ name	Early-stage entrepreneurial activity (TEA)		Necessity-driven (% of TEA)		Opportunity-driven (% of TEA)		Improvement-driven opportunity (% of TEA)		Motivational index*	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
1. Factor-driven	Burkina Faso	1	33.5	19	29.9	44T	68.8	41T	42.9	45T	1.4
	Cameroon	4	27.6	12	32.3	59	60.5	62	31.1	58T	1.0
	India	31	10.6	9	35.0	58	60.9	40	43.3	52T	1.2
	Iran	23	12.8	11	33.9	54	63.5	32	49.3	43T	1.5
	Kazakhstan	34	10.2	28	25.4	43	68.9	65	21.4	62T	0.8
	Russia	56	6.3	17	30.6	49T	66.3	52	39.5	48T	1.3
	Total (unweighted)		**16.8**		**31.2**		**64.8**		**37.9**		**1.2**
2. Efficiency-driven	Argentina	16	14.5	14	31.0	47	66.8	30	49.7	42	1.6
	Belize	3	28.8	62	8.3	3	88.1	27	51.8	5	6.2
	Brazil	10	19.6	3	42.4	60	57.4	43	42.3	58T	1.0
	Bulgaria	62	4.8	15	30.9	46	68.0	57T	35.0	54T	1.1
	Chile	7	24.2	32	22.7	31	75.8	11	63.1	26	2.8
	China	32T	10.3	24	26.7	41	70.7	54	39.0	43T	1.5
	Colombia	5	27.4	55	13.0	6	86.0	21	54.6	12	4.2
	Croatia	43	8.4	18	30.5	49T	66.3	51	39.8	48T	1.3
	Ecuador	2	31.8	22	28.0	51	65.4	59	34.0	52T	1.2
	Egypt	17T	14.3	13	31.3	56	61.2	63	30.8	58T	1.0
	El Salvador	17T	14.3	8	36.2	53	63.8	37	47.2	48T	1.3
	Georgia	42	8.6	1	51.1	64	48.9	57T	35.0	64T	0.7
	Guatemala	9	20.1	7	38.4	57	61.1	41T	42.9	54T	1.1
	Hungary	49	7.9	38	20.1	29	77.4	25	52.6	32T	2.6
	Indonesia	20T	14.1	50	14.5	12	82.9	60	33.3	34	2.3
	Jamaica	35	9.9	2	44.7	65	46.7	55	37.7	62T	0.8
	Jordan	44T	8.2	26	26.4	44T	68.8	33	49.0	37T	1.9
	Latvia	19	14.2	53	13.9	13	82.8	20	55.2	13	4.0
	Lebanon	8	21.2	5	39.4	61	57.3	39	43.6	54T	1.1
	Macedonia	55	6.5	6	38.9	62	55.3	64	25.4	64T	0.7
	Malaysia	63	4.7	45	16.1	11	83.0	14	59.4	17T	3.7
	Mexico	36T	9.6	40	18.1	25	79.1	22	54.4	24T	3.0
	Morocco	59	5.6	23	27.4	38	72.6	29	50.3	40T	1.8
	Panama	22	13.2	49	15.0	14T	82.7	16	58.3	14T	3.9
	Peru	6	25.1	56	12.8	18	81.8	5	68.8	7T	5.4
	Poland	30	10.7	25	26.6	39	71.1	26	52.0	35T	2.0
	Saudi Arabia	26	11.4	63	7.5	1	92.3	47T	40.8	7T	5.4
	Slovakia	38	9.5	4	40.2	63	55.0	45	41.8	58T	1.0
	South Africa	52	6.9	31	23.6	36	74.4	44	41.9	40T	1.8

Economy	country_ name	Early-stage entrepreneurial activity (TEA)		Necessity-driven (% of TEA)		Opportunity-driven (% of TEA)		Improvement-driven opportunity (% of TEA)		Motivational index*	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
	Thailand	11	17.2	39	19.5	26	77.9	6	68.7	19	3.5
	Turkey	14	16.1	42	17.6	35	74.7	61	32.8	37T	1.9
	Uruguay	20T	14.1	21	28.2	40	70.9	50	40.2	45T	1.4
	Total (unweighted)		**14.2**		**26.3**		**70.8**		**46.0**		**2.3**
3. Innovation-driven	Australia	15	14.6	44	16.5	20	80.2	10	64.6	14T	3.9
	Austria	36T	9.6	46T	15.6	24	79.4	38	46.4	24T	3.0
	Canada	12	16.7	51	14.3	22	79.9	35	48.5	20	3.4
	Cyprus	25	12.0	29	24.2	37	73.5	36	48.0	35T	2.0
	Estonia	13	16.2	41	17.7	23	79.6	15	59.1	21	3.3
	Finland	53T	6.7	64	7.1	5	86.3	7	68.6	2	9.7
	France	60	5.3	59	11.1	8	85.5	4	69.6	4	6.3
	Germany	64	4.6	34T	21.8	33	75.6	17T	58.1	27T	2.7
	Greece	57T	5.7	10	34.0	52	65.2	56	36.1	54T	1.1
	Hong Kong	39	9.4	43	17.0	19	81.7	1	74.3	11	4.4
	Ireland	29	10.9	46T	15.6	16T	82.6	31	49.4	22T	3.2
	Israel	27	11.3	48	15.2	21	80.0	53	39.2	32T	2.6
	Italy	65	4.4	60	10.9	7	85.7	49	40.3	17T	3.7
	Korea	53T	6.7	30	23.9	34	75.3	9	65.7	27T	2.7
	Luxembourg	40	9.2	58	11.2	9	84.3	23	54.1	10	4.8
	Netherlands	28	11.0	36	21.1	28	77.6	8	67.5	22T	3.2
	Portugal	44T	8.2	37	20.8	27	77.7	19	55.8	27T	2.7
	Puerto Rico	32T	10.3	16	30.8	48	66.6	46	41.2	48T	1.3
	Qatar	50	7.8	61	10.5	14T	82.7	12	62.8	6	6.0
	Slovenia	48	8.0	34T	21.8	32	75.7	17T	58.1	27T	2.7
	Spain	61	5.2	27	26.0	42	70.2	34	48.6	37T	1.9
	Sweden	51	7.6	65	4.5	2	89.0	24	53.5	1	11.8
	Switzerland	44T	8.2	52	14.1	16T	82.6	3	72.1	9	5.1
	Taiwan	44T	8.2	33	22.3	30	76.0	13	60.3	27T	2.7
	United Arab Emirates	57T	5.7	20	29.2	55	61.8	47T	40.8	45T	1.4
	United Kingdom	41	8.8	54	13.5	10	83.2	28	50.8	16	3.8
	USA	24	12.6	57	11.4	4	87.5	2	73.6	3	6.4
	Total (unweighted)		**9.1**		**17.9**		**78.7**		**55.8**		**3.9**
	USA	14T	8.9	39	4.0	24	12.6	7T	7.0	16	9.2
	Total		**9.5**		**5.5**		**14.7**		**6.5**		**8.0**

Table 5: Ranking of Gender Distribution of TEA, Opportunity TEA & Necessity TEA by Economy, GEM 2016

Economy	country_ name	MALE TEA (% of adult male population)		FEMALE TEA (% of adult female population)		MALE TEA Opportunity (% of TEA males)		FEMALE TEA Opportunity (% of TEA females)		MALE TEA Necessity (% of TEA males)		FEMALE TEA Necessity (% of TEA females)	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
1. Factor-driven	Burkina Faso	1	37.6	1T	30.2	38	74.3	46	63.3	22	24.6	17	35.2
	Cameroon	5	28.7	4	26.5	55	64.0	55	57.0	16	28.4	15	36.2
	India	26	13.5	34T	7.6	59T	60.5	50	61.6	7	36.0	18	33.1
	Iran	20	16.6	27	8.9	58	61.7	42	66.8	6	36.6	27	29.0
	Kazakhstan	43T	10.9	25	9.5	46T	71.3	44	66.5	30	22.6	29T	28.3
	Russia	57	6.9	46	5.7	49	69.2	47T	63.1	14	29.6	21	31.7
	Total (unweighted)		**19.0**		**14.7**		**66.8**		**63.1**		**29.6**		**32.3**
2. Efficiency-driven	Argentina	21	16.0	15	13.1	39	74.2	54	58.3	29	23.3	9	40.1
	Belize	3	30.5	3	27.3	5	88.8	6	87.3	62	8.0	60	8.6
	Brazil	14	19.2	7	19.9	56	63.2	62	51.9	5	36.8	3	47.7
	Bulgaria	64	5.4	59	4.3	52	66.6	38	69.8	11T	31.5	24	30.2
	Chile	6	28.6	8	19.8	23	79.7	37	70.2	37	18.7	28	28.4
	China	36	11.8	29T	8.6	42	72.3	39	68.4	25	24.3	23	30.3
	Colombia	4	30.2	5	24.7	4	89.7	16	81.7	59T	9.4	48	17.1
	Croatia	40T	11.2	47T	5.6	43T	71.7	59T	55.5	20T	25.6	8	40.3
	Ecuador	2	33.6	1T	30.2	50T	68.5	49	61.9	20T	25.6	22	30.6
	Egypt	11	20.9	36	7.5	59T	60.5	47T	63.1	10	32.9	32	26.7
	El Salvador	22	15.0	13	13.6	43T	71.7	56	56.4	17	28.3	6	43.6
	Georgia	43T	10.9	40T	6.5	64	51.6	65	44.6	1	48.4	1	55.4
	Guatemala	9	24.2	9	16.4	53	66.3	61	54.4	9	33.3	5	45.1
	Hungary	43T	10.9	54	5.0	27T	78.8	29	74.5	36	19.4	39T	21.5
	Indonesia	34	12.6	12	15.6	22	79.9	10	85.3	41T	17.0	53	12.5
	Jamaica	43T	10.9	28	8.8	65	47.7	64	45.6	2	42.2	2	47.8
	Jordan	33	12.8	63T	3.3	43T	71.7	57	56.2	27	24.0	14	36.8
	Latvia	15T	18.9	24	9.6	14T	83.7	18	81.3	52	12.8	49	16.2
	Lebanon	8	26.2	10	16.1	62	55.7	52	59.8	3	40.7	13	37.2
	Macedonia	49T	9.3	60T	3.7	63	55.3	59T	55.5	4	39.2	11	38.2
	Malaysia	65	4.9	57T	4.5	30	77.8	4	88.9	34	20.6	59	11.1
	Mexico	49T	9.3	20T	10.0	25	79.3	23	79.0	41T	17.0	42	19.1
	Morocco	58	6.7	57T	4.5	46T	71.3	28	74.6	15	28.7	33	25.4
	Panama	25	14.2	16	12.3	6	88.4	25	76.6	59T	9.4	41	21.1
	Peru	7	26.3	6	24.0	20	81.1	14	82.6	53	12.4	52	13.2
	Poland	27T	13.3	31T	8.1	40	73.8	43	66.7	28	23.4	20	31.8
	Saudi Arabia	32	12.9	23	9.7	2	91.2	2	94.1	61	8.5	62T	5.9
	Slovakia	38T	11.3	34T	7.6	61	60.2	63	47.4	8	35.4	4	47.4
	South Africa	53T	8.0	45	5.9	31	76.5	33	71.6	33	20.8	31	27.1

Economy	country_ name	MALE TEA (% of adult male population)		FEMALE TEA (% of adult female population)		MALE TEA Opportunity (% of TEA males)		FEMALE TEA Opportunity (% of TEA females)		MALE TEA Necessity (% of TEA males)		FEMALE TEA Necessity (% of TEA females)	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
	Thailand	15T	18.9	11	15.7	18	81.6	30	73.5	43	16.4	35T	23.1
	Turkey	10	22.3	20T	10.0	33	75.5	31	72.9	44	15.5	37	22.5
	Uruguay	17	18.7	22	9.9	35	75.2	45	63.5	26	24.1	16	35.3
	Total (unweighted)		**16.4**		**11.9**		**72.8**		**67.9**		**24.2**		**29.3**
3. Innovation-driven	Australia	18	17.7	18	11.5	9	85.4	32	72.3	50T	13.2	39T	21.5
	Austria	40T	11.2	31T	8.1	19	81.4	26	76.5	49	13.3	43	18.8
	Canada	13	20.3	14	13.3	27T	78.8	17	81.5	47	14.4	50	14.2
	Cyprus	19	17.0	37T	7.3	36	74.9	36	70.5	31	22.4	29T	28.3
	Estonia	12	20.8	17	11.7	26	79.0	20	80.7	39	17.8	45T	17.5
	Finland	55	7.8	47T	5.6	8	87.8	13	84.2	64	7.3	61	6.9
	France	56	7.3	62	3.4	11T	84.1	5	88.3	58	10.8	56T	11.7
	Germany	61	6.0	65	3.1	37	74.7	24	77.6	32	21.8	38	21.9
	Greece	59T	6.6	55	4.8	50T	68.5	51	60.7	11T	31.5	12	37.4
	Hong Kong	31	13.1	40T	6.5	24	79.6	11	85.1	35	20.4	58	11.4
	Ireland	24	14.5	37T	7.3	16	82.7	15	82.5	46	14.7	45	17.5
	Israel	27T	13.3	26	9.4	34	75.4	9	86.5	40	17.1	53	12.5
	Italy	63	5.6	63T	3.3	17	82.4	3	91.3	48	13.9	62T	5.9
	Korea	53T	8.0	50T	5.3	32	75.6	27	74.9	24	24.4	35T	23.1
	Luxembourg	37	11.7	40T	6.5	11T	84.1	12	84.7	57	10.9	56T	11.7
	Netherlands	27T	13.3	29T	8.6	1	91.5	58	55.9	63	7.8	7	41.7
	Portugal	48	10.4	44	6.1	13	84.0	41	67.5	45	15.2	25	29.9
	Puerto Rico	30	13.2	33	7.7	54	65.6	40	68.1	13	30.1	19	31.9
	Qatar	52	8.1	39	6.8	21	80.4	1	94.4	55	11.5	64	5.6
	Slovenia	47	10.8	53	5.1	29	78.0	35	70.6	38	18.4	26	29.4
	Spain	62	5.8	56	4.7	48	69.8	34	70.7	19	26.7	34	25.1
	Sweden	51	8.8	43	6.3	3	90.6	8	86.7	65	6.1	65	2.3
	Switzerland	42	11.0	50T	5.3	14T	83.7	22	80.1	54	12.1	44	18.3
	Taiwan	38T	11.3	52	5.2	41	73.7	19	80.9	23	24.5	47	17.2
	United Arab Emirates	59T	6.6	60T	3.7	57	62.4	53	59.4	18	26.8	10	38.5
	United Kingdom	35	12.0	47T	5.6	10	84.5	21	80.6	50T	13.2	51	14.1
	USA	23	14.8	19	10.5	7	87.9	7	86.9	56	11.0	55	12.0
	Total (unweighted)		**11.4**		**6.8**		**79.5**		**77.7**		**16.9**		**19.5**

Table 6: Ranking of TEA by Age Group by Economy, GEM 2016 - Percentage of Population Aged 18-64

Economy	country_ name	TEA - 18 - 24 years		TEA - 25 - 34 years		TEA - 35 - 44 years		TEA - 45 - 54 years		TEA - 55 - 64 years	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
1. Factor-driven	Burkina Faso	1	32.9	1	38.7	2	34.6	3	27.9	2	23.6
	Cameroon	7	22.4	3	33.1	7	29.0	4	26.6	4	21.5
	India	28T	9.9	42T	11.1	32T	11.5	28T	10.4	19T	9.4
	Iran	23	11.3	19	18.3	28	13.0	45T	7.8	34T	6.1
	Kazakhstan	30	9.6	24	15.8	54T	7.0	41T	8.5	31	6.8
	Russia	45	6.5	48	9.6	57T	6.3	53	6.5	64	1.5
	Total (unweighted)		**15.4**		**21.1**		**16.9**		**14.6**		**11.5**
2. Efficiency-driven	Argentina	33	8.9	15	20.7	15	17.5	15	13.7	22	7.9
	Belize	4	25.3	5	31.1	3	33.1	2	28.1	3	22.2
	Brazil	8	20.1	11	22.9	11	19.7	9	17.5	8	15.0
	Bulgaria	51T	4.4	52	8.6	65	5.0	65	3.6	59T	2.5
	Chile	14	16.0	6	29.0	6	30.2	6	24.7	7	16.9
	China	35	8.5	26	15.3	36	11.2	34T	9.6	37T	5.7
	Colombia	3	26.0	4	32.4	5	31.7	5	25.3	5	18.1
	Croatia	34	8.6	35T	12.9	32T	11.5	52	6.6	57T	2.9
	Ecuador	2	26.4	2	36.6	1	35.7	1	29.4	1	27.1
	Egypt	13	16.2	20T	17.7	22	15.4	37	9.3	40T	5.5
	El Salvador	20	11.9	22	17.0	24T	14.3	14	14.7	9	12.5
	Georgia	46T	6.3	44	10.6	54T	7.0	20	12.1	36	5.9
	Guatemala	10	19.2	14	22.0	9	23.1	8	19.2	16	10.6
	Hungary	38	8.1	42T	11.1	47	9.2	40	8.7	57T	2.9
	Indonesia	18T	12.0	23	15.9	18	16.6	19	12.6	13	11.3
	Jamaica	40T	7.6	38	12.8	23	14.6	41T	8.5	40T	5.5
	Jordan	48	6.0	50	9.0	42T	10.3	43	8.4	30	7.0
	Latvia	5	24.8	18	18.4	20	16.3	32T	9.7	37T	5.7
	Lebanon	12	18.7	8	27.6	8	28.2	12T	14.8	10	12.0
	Macedonia	42T	6.9	57	7.5	41	10.4	59T	4.9	62	2.2
	Malaysia	60	2.9	59	6.0	60	6.2	57	5.8	65	0.7
	Mexico	39	7.7	40	12.1	31	12.0	51	7.2	34T	6.1
	Morocco	59	3.2	53	8.4	53	7.1	64	4.5	52	3.5
	Panama	24	10.8	29	14.6	21	15.6	16T	13.4	21	9.3
	Peru	9	19.4	7	28.1	4	31.9	7	23.6	6	17.7
	Poland	21T	11.7	17	18.7	48	8.9	55T	6.0	25T	7.4
	Saudi Arabia	21T	11.7	30	14.3	44	10.0	32T	9.7	47	4.9
	Slovakia	65	0.4	61	5.4	24T	14.3	18	13.2	14T	10.7
	South Africa	44	6.7	58	6.3	52	8.4	34T	9.6	56	3.1
	Thailand	25T	10.7	12	22.4	10	21.4	12T	14.8	11	11.6
	Turkey	16	14.2	10	23.4	16	17.0	21	11.9	19T	9.4

Economy	country_ name	TEA - 18 - 24 years		TEA - 25 - 34 years		TEA - 35 - 44 years		TEA - 45 - 54 years		TEA - 55 - 64 years	
		Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score	Rank/65	Score
	Uruguay	18T	12.0	16	19.8	14	18.5	23	11.5	39	5.6
	Total (unweighted)		**12.3**		**17.5**		**16.6**		**12.9**		**9.0**
3. Innovation-driven	Australia	31T	9.4	27	15.1	13	18.7	11	16.1	12	11.5
	Austria	27	10.6	39	12.6	34T	11.3	39	8.8	46	5.0
	Canada	15	14.6	13	22.3	12	19.4	10	16.2	14T	10.7
	Cyprus	28T	9.9	20T	17.7	29	12.6	30T	10.0	32	6.6
	Estonia	6	24.6	9	27.0	19	16.5	26	10.7	48	4.2
	Finland	50	5.2	51	8.7	37	11.0	59T	4.9	51	3.6
	France	56	3.9	47	9.7	63	5.5	61T	4.8	61	2.4
	Germany	55	4.2	62	5.0	62	5.7	61T	4.8	54T	3.2
	Greece	64	1.3	60	5.7	56	6.5	28T	10.4	53	3.3
	Hong Kong	42T	6.9	35T	12.9	27	13.1	48	7.7	43	5.4
	Ireland	31T	9.4	41	11.9	34T	11.3	25	10.8	18	9.7
	Israel	40T	7.6	45	10.4	24T	14.3	16T	13.4	17	10.4
	Italy	57	3.8	65	4.5	64	5.2	58	5.5	59T	2.5
	Korea	63	1.8	63	4.7	57T	6.3	27	10.6	24	7.6
	Luxembourg	49	5.3	32T	13.3	40	10.5	38	9.1	44	5.2
	Netherlands	11	18.8	32T	13.3	38	10.9	45T	7.8	25T	7.4
	Portugal	51T	4.4	31	13.4	46	9.6	49T	7.4	50	4.0
	Puerto Rico	36	8.4	28	14.9	30	12.2	30T	10.0	45	5.1
	Qatar	46T	6.3	54	8.3	49	8.8	55T	6.0	25T	7.4
	Slovenia	17	12.8	34	13.2	50T	8.6	54	6.2	63	2.0
	Spain	61T	2.6	56	7.8	61	6.1	63	4.7	54T	3.2
	Sweden	51T	4.4	49	9.4	50T	8.6	45T	7.8	33	6.5
	Switzerland	58	3.4	55	8.2	42T	10.3	36	9.5	25T	7.4
	Taiwan	51T	4.4	35T	12.9	39	10.6	49T	7.4	49	4.1
	United Arab Emirates	61T	2.6	64	4.6	57T	6.3	24	11.4	40T	5.5
	United Kingdom	37	8.2	46	9.8	45	9.9	44	8.1	23	7.7
	USA	25T	10.7	25	15.6	17	16.8	22	11.7	29	7.3
	Total (unweighted)		**7.6**		**11.6**		**10.6**		**9.0**		**5.9**

Table 7: Ranking of Job Creation Expectations for TEA by Economy, GEM 2016

Economy	ECONOMY	0 jobs in 5 years (% TEA)		1 – 5 jobs in 5 years (% TEA)		6 or more jobs in 5 years (% TEA)	
		Rank/65	Score	Rank/65	Score	Rank/65	Score
1. Factor-driven	Burkina Faso	65	9.6	1	74.2	45	16.3
	Cameroon	13	55.9	44T	28.7	47	15.3
	India	24	50.8	12	44.0	62	5.2
	Iran	36	44.4	49	26.9	14	28.7
	Kazakhstan	28T	47.9	61	19.1	10	33.1
	Russia	19T	52.5	43	28.8	40	18.7
	Total (unweighted)		**43.5**		**37.0**		**19.6**
2. Efficiency-driven	Argentina	40	41.1	23	35.9	26	23.0
	Belize	57	28.2	11	46.8	23T	24.9
	Brazil	7	61.8	27	33.8	63	4.4
	Bulgaria	6	65.9	59	20.7	48	13.4
	Chile	61	22.9	13	42.9	8T	34.2
	China	25	50.7	57	22.5	19	26.7
	Colombia	64	12.2	9	49.9	4	37.9
	Croatia	47	36.0	28	33.6	13	30.4
	Ecuador	35	44.9	10	48.8	59T	6.3
	Egypt	14	55.3	60	19.3	21	25.4
	El Salvador	53	29.5	7	50.7	38	19.8
	Georgia	10	60.5	62	19.0	36	20.6
	Guatemala	3	71.0	56	22.7	59T	6.3
	Hungary	50	32.8	32	31.4	6	35.8
	Indonesia	5	67.9	39	29.7	64	2.4
	Jamaica	1	87.9	64	11.6	65	0.5
	Jordan	43	39.1	6	50.9	52	10.0
	Latvia	37	42.9	51	25.9	11	31.3
	Lebanon	21	52.4	18	39.9	57	7.7
	Macedonia	55	28.9	4	52.1	39	19.0
	Malaysia	42	40.3	5	51.5	56	8.2
	Mexico	33	45.7	15	42.5	51	11.8
	Morocco	39	41.5	17	40.8	42T	17.7
	Panama	17	53.0	19	39.8	58	7.1
	Peru	51	32.3	14	42.8	23T	24.9
	Poland	41	40.5	33T	31.2	16	28.3
	Saudi Arabia	2	85.8	65	8.9	61	5.3
	Slovakia	15	54.0	55	23.8	28	22.2
	South Africa	63	13.8	2	58.7	17	27.6
	Thailand	4	69.1	58	21.4	55	9.5
	Turkey	59	26.4	53	25.5	2	48.1
	Uruguay	48	35.3	16	42.4	27	22.3
	Total (unweighted)		**45.9**		**34.9**		**19.2**

Economy	ECONOMY	0 jobs in 5 years (% TEA)		1 – 5 jobs in 5 years (% TEA)		6 or more jobs in 5 years (% TEA)	
		Rank/65	Score	Rank/65	Score	Rank/65	Score
3. Innovation-driven	Australia	45	37.3	20	38.9	25	23.8
	Austria	16	53.9	29	33.1	49	13.0
	Canada	22	52.3	31	31.8	46	15.9
	Cyprus	28T	47.9	33T	31.2	35	20.9
	Estonia	44	37.4	24	35.6	18	27.0
	Finland	28T	47.9	25	34.4	42T	17.7
	France	26	50.2	44T	28.7	33	21.2
	Germany	31	47.5	36	31.0	32	21.5
	Greece	8	61.7	46	28.6	53T	9.7
	Hong Kong	45	37.3	47	28.1	7	34.6
	Ireland	54	29.1	26	34.2	5	36.7
	Israel	23	51.5	50	26.4	29	22.1
	Italy	19T	52.5	42	29.1	41	18.4
	Korea	56	28.4	8	50.0	31	21.6
	Luxembourg	32	47.1	33T	31.2	30	21.7
	Netherlands	11	59.0	54	23.9	44	17.2
	Portugal	27	49.2	38	29.8	34	21.0
	Puerto Rico	60	24.0	3	55.7	37	20.3
	Qatar	62	22.8	52	25.7	1	51.5
	Slovenia	49	35.1	21	38.5	20	26.4
	Spain	12	57.3	30	33.0	53T	9.7
	Sweden	9	60.8	48	27.0	50	12.2
	Switzerland	34	45.6	41	29.3	22	25.1
	Taiwan	58	27.0	37	30.2	3	42.8
	United Arab Emirates	18	52.9	63	16.4	12	30.7
	United Kingdom	38	42.1	40	29.5	15	28.4
	USA	52	29.6	22	36.2	8T	34.2
	Total (unweighted)		**44.0**		**32.1**		**23.9**

Table 8: Entrepreneurial Framework Conditions(EFC), by region,GEM 2016-17 (Weighted average: 1 = highly insufficient, 9 = highly sufficient)

Country	Stage	1	2a	2b	3	4a	4b	5	6	7a	7b	8	9
Burkina Faso	1	2.8	5.0	5.4	4.8	2.1	4.9	2.6	4.3	4.6	3.4	4.9	5.0
Cameroon	1	4.0	4.6	3.9	4.6	3.1	5.4	3.8	5.1	4.7	4.2	5.4	5.2
Egypt	2	3.9	3.6	3.1	3.3	1.7	3.1	2.8	3.9	5.1	4.0	6.5	4.1
Morocco	2	3.6	4.2	4.1	3.7	1.9	4.0	2.8	4.7	4.5	3.4	6.6	4.1
Senegal	1	3.1	4.5	5.5	4.9	1.4	3.4	2.1	5.9	2.9	4.1	7.9	3.0
South Africa	2	4.3	4.8	2.7	3.0	2.9	3.8	3.3	5.1	5.2	3.3	5.8	4.0
Africa		3.6	4.4	4.1	4.0	2.2	4.1	2.9	4.8	4.5	3.7	6.2	4.2
Australia	3	4.6	4.5	4.4	4.2	3.5	3.7	3.7	5.1	4.9	5.0	6.7	4.5
China	2	5.5	5.2	4.7	4.4	3.3	5.3	4.1	4.2	7.0	4.4	7.3	5.8
Georgia	2	4.0	5.6	6.6	5.3	3.6	4.8	3.5	4.7	5.2	5.1	7.1	5.6
Hong Kong	3	4.9	5.4	7.1	5.2	3.0	4.7	4.1	5.1	4.9	4.7	8.3	4.8
India	1	5.7	5.6	4.3	4.7	4.0	5.1	4.8	5.2	6.3	5.0	6.5	5.2
Indonesia	2	4.5	4.6	3.7	4.1	4.1	5.7	4.1	3.9	6.5	3.9	5.2	5.5
Iran	2	2.9	3.4	2.6	2.2	2.5	3.2	3.1	3.2	5.0	2.8	6.3	3.6
Israel	3	4.6	3.5	3.0	3.9	3.1	4.8	4.3	5.3	4.0	3.4	6.2	7.2
Jordan	2	4.1	3.6	3.4	3.7	2.2	3.0	3.8	4.8	5.3	3.8	6.3	4.2
Kazakhstan	1	4.9	5.3	4.3	4.6	3.0	4.2	3.1	5.2	4.7	4.1	6.0	5.1
Korea	3	4.1	5.9	4.7	5.3	3.3	4.0	4.2	4.4	7.1	3.8	6.7	4.9
Lebanon	2	5.0	3.6	3.8	3.9	4.3	5.1	3.9	5.4	4.4	3.8	3.7	6.2
Malaysia	2	5.3	4.9	4.2	4.9	4.0	5.1	4.7	5.1	6.3	4.6	6.5	5.3
Qatar	3	4.5	5.5	4.7	5.4	4.6	5.8	4.3	5.2	4.5	4.0	6.6	5.4
Saudi Arabia	2	3.9	3.9	4.0	3.4	2.1	3.7	3.0	3.9	4.8	4.0	6.8	4.6
Taiwan	3	4.8	4.3	4.4	4.9	3.8	4.4	4.6	4.6	6.1	4.8	6.5	5.1
Thailand	2	4.7	4.1	3.8	3.6	3.1	4.7	3.9	4.9	6.1	4.2	6.7	5.2
Turkey	2	4.7	4.5	2.9	3.7	2.6	4.8	4.4	5.4	6.3	4.0	5.9	4.8
United Arab Emirates	3	4.4	5.8	5.5	5.6	4.5	4.7	4.2	5.6	5.6	5.0	7.3	6.2
Asia & Oceania		4.6	4.7	4.3	4.4	3.4	4.6	4.0	4.8	5.5	4.2	6.5	5.2
Argentina	2	2.9	5.4	2.0	4.9	2.8	5.1	4.0	4.5	5.4	3.5	5.3	5.1
Belize	2	2.8	4.0	3.3	3.9	3.4	3.8	2.2	4.1	4.1	4.1	5.8	4.1
Brazil	2	4.4	3.5	2.2	3.4	2.2	4.1	3.0	4.5	5.7	3.7	4.7	3.9
Chile	2	3.5	4.2	4.7	5.1	2.4	4.8	4.0	4.9	3.7	4.0	7.4	5.1
Colombia	2	3.6	4.2	3.6	4.5	2.9	5.4	3.5	4.2	4.7	3.9	6.1	5.8
Ecuador	2	2.9	3.4	2.7	3.4	3.1	5.3	3.2	4.6	4.5	4.2	6.7	5.4
El Salvador	2	2.8	3.2	3.4	3.3	2.3	4.7	3.3	4.7	4.1	4.6	7.2	4.6
Guatemala	2	2.8	2.9	3.4	3.0	2.9	5.4	3.3	5.0	3.9	3.7	6.2	5.1
Jamaica	2	4.5	3.8	2.8	3.9	3.4	4.9	2.8	4.7	4.7	3.5	5.9	6.0
Mexico	2	4.0	4.3	3.8	4.9	3.2	5.2	4.1	4.7	4.7	4.2	6.6	5.2
Panama	2	3.0	3.3	5.0	3.9	1.9	4.2	3.4	4.2	4.0	4.1	7.2	5.1
Peru	2	3.8	3.5	3.1	4.1	3.2	4.9	3.2	3.7	4.3	4.0	5.8	5.0
Puerto Rico	3	3.6	3.9	2.7	3.6	2.8	4.7	3.5	4.7	4.3	3.2	5.1	4.3
Uruguay	2	3.3	3.2	3.6	5.0	1.9	5.2	3.7	4.8	3.4	3.9	6.5	3.4

Country	Stage	1	2a	2b	3	4a	4b	5	6	7a	7b	8	9
Latin America & Caribbean		3.4	3.8	3.3	4.0	2.7	4.8	3.4	4.5	4.4	3.9	6.2	4.9
Austria	3	4.6	4.2	3.6	6.3	2.2	4.9	4.7	5.8	4.4	5.4	7.7	3.7
Bulgaria	2	4.4	2.6	4.8	3.1	2.5	3.7	3.2	5.1	4.9	3.8	6.9	3.7
Croatia	2	3.8	2.8	2.2	3.5	2.5	3.8	2.7	4.2	5.5	3.3	6.2	3.0
Cyprus	3	3.3	3.8	4.1	3.3	2.9	4.6	3.7	5.1	4.6	4.3	6.2	4.0
Estonia	3	4.8	5.0	6.3	5.3	4.6	5.5	4.7	5.7	4.8	5.6	8.0	6.4
Finland	3	5.3	5.4	5.3	4.8	3.9	5.0	4.6	5.6	4.7	5.0	7.8	4.5
France	3	4.8	5.9	5.3	5.5	2.8	5.6	5.3	5.4	4.7	4.3	7.4	3.7
Georgia	2	4.0	5.6	6.6	5.3	3.6	4.8	3.5	4.7	5.2	5.1	7.1	5.6
Germany	3	5.0	3.9	4.1	5.7	2.8	4.3	4.1	5.6	5.2	5.2	6.3	4.2
Greece	3	3.5	2.8	2.3	2.9	2.9	4.3	4.1	4.7	5.6	4.1	6.2	3.8
Hungary	2	4.5	3.0	2.8	3.4	2.2	4.3	3.8	4.9	5.2	4.2	6.9	3.4
Ireland	3	4.7	4.6	4.7	5.5	3.5	4.5	4.6	5.1	4.2	4.8	5.5	5.0
Italy	3	4.3	3.3	2.8	3.2	3.1	4.9	4.0	4.3	4.5	4.1	5.1	3.9
Latvia	2	4.6	3.9	3.2	4.1	3.8	4.8	3.6	6.1	4.5	4.1	7.2	4.6
Luxembourg	3	4.0	4.8	4.7	5.7	3.3	5.2	5.1	5.8	3.8	5.4	6.8	4.1
Macedonia	2	3.6	3.4	4.4	4.0	3.8	4.5	3.5	5.1	5.6	3.5	6.2	3.7
Netherlands	3	5.5	5.3	5.6	5.6	5.4	5.9	5.3	5.8	5.7	6.2	8.0	6.2
Poland	2	4.7	4.3	3.2	4.0	2.6	3.3	3.6	4.6	6.3	4.5	7.0	3.9
Portugal	3	4.9	4.7	2.9	5.1	3.5	5.1	4.6	5.4	3.6	4.1	7.5	4.1
Russia	1	3.1	3.3	3.0	2.9	3.1	4.7	2.7	4.9	5.8	3.3	5.6	3.4
Slovakia	2	4.9	2.9	3.1	3.3	3.4	4.6	3.3	4.8	4.5	4.1	6.9	3.7
Slovenia	3	3.9	4.1	3.0	4.3	2.7	4.4	3.8	5.0	5.3	4.1	7.0	3.2
Spain	3	4.0	3.0	3.2	5.1	2.7	3.5	4.4	5.4	4.5	4.6	5.7	4.5
Sweden	3	4.5	3.8	3.9	4.7	4.1	4.2	4.2	5.0	5.7	4.5	6.8	5.1
Switzerland	3	5.2	5.3	5.3	5.8	4.1	5.8	5.7	5.8	4.8	5.3	7.9	5.7
United Kingdom	3	4.5	3.6	4.8	3.8	2.8	4.1	3.8	4.8	4.2	5.1	6.0	4.6
Europe													
Canada													
USA	3	5.1	4.1	4.1	4.5	3.2	4.5	4.1	5.5	5.2	4.7	7.0	6.9
North America		4.8	4.4	4.3	4.6	3.3	4.6	4.2	5.6	5.1	4.4	6.8	6.1
GEM		4.2	4.2	4.0	4.3	3.1	4.6	3.8	4.9	4.9	4.2	6.5	4.7

1 Entrepreneurial finance 2a Government Policies:support and relevance 2b Government Policies: taxes and bureacracy 3 Government Entrepreneurship Programs 4a Entrepreneurship education at school level 4b Entrepreneurial education at post school level 5 R&D transfer 6 Commercial and legal infrastructure 7a Internal market dynamics 7b Internal market burdens or entry regulation 8 physical infrastructure 9 Cultural and Social Norms Development Stages: 1 = Factor-Driven & Transition to Efficiency Driven 2 = Efficiency-Driven & Transition to Innovation Driven 3 = Innovation Driven

REFERENCES

Acs, Z. J. and Szerb, L. (2007). Entrepreneurship, economic growth and public policy. *Small Business Economics*, *28*(2–3), 109–122.

Amorós, J. E. and Bosma, N. (2013). Global Entrepreneurship Monitor 2013 Global Report, Global Entrepreneurship Research Association (GERA).

Arenius, P. and Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. *Small Business Economics,* 24(3) 233–247.

Arenius, P. and DeClercq, D. (2005). A network-based approach on opportunity recognition. *Small Business Economics,* 24(3), 249–265.

Audretsch, D. and Thurik, R. (2001). What's new about the economy? Sources of growth in the managed and entrepreneurial economies. *Industrial and Corporate Change,* 10, 267–315.

Audretsch, D. B. and Keilbach, M. (2004). Does entrepreneurship capital matter? *Entrepreneurship Theory and Practice,* 28, 419–429.

Baron, R. A. (2007). Behavioral and cognitive factors in entrepreneurship: Entrepreneurs as the active element in new venture creation. *Strategic Entrepreneurship Journal,* 1(1–2), 167–182.

Bettis, R. A. and Hitt, M. A. (1995). The new competitive landscape. *Strategic Management Journal,* 16, 7–19.

BNP (2016). Paribas Global Entrepreneurialism Report 2016, BNP.

Bosma, N. (2011). Extended Report: Entrepreneurs and Entrepreneurial Employees across the Globe. Global Entrepreneurship Monitor (GEM)

Bowen, H. and Clercq, D. (2008). Institutional context and the allocation of entrepreneurial effort. *Journal of international Business Studies,* 39, 747–767.

Brimmer, A. (1955). The setting of entrepreneurship in India. *Quarterly Journal of Economics*, 119 (41). 555-576

Carree M. A. and Thurik A. R. (2003). The Impact of Entrepreneurship on Economic Growth. In: Acs Z. J. and Audretsch D. B. (eds). *Handbook of Entrepreneurship Research. International Handbook Series on Entrepreneurship*, Vol 1, Springer, Boston, MA

Comeche, M. J. and Loras, J. (2010). The influence of variables of attitude on collective entrepreneurship. *International Entrepreneurship and Management Journa,* l 6(1), 23–38.

Davidsson, P. (2004). *Researching Entrepreneurship*. US: Springer.

Davidsson, P. (2006). Nascent entrepreneurship: Empirical studies and development. *Foundations and Trends in Entrepreneurship*, 2(1), 1–76.

Dodd, S. and Anderson, A. R. (2007). Mumpsimus and the mything of the individualistic entrepreneur. *International Small Business Journal,* 25(4), 341–336.

Douglas, E. J. and Shepherd, D. A. (February 2005). Entrepreneurial human capital and the self- employment decision. Paper presented at the Entrepreneurial Research Exchange, Swinburne University, Melbourne, Australia.

Drucker, P. (2006). *Innovation and Entrepreneurship*. Harper Collins, UK.

Economic Survey of India 2016–17. Published by Ministry of Finance, Govt. of India

Elam, A. and Terjesen, S. A. (June 2007). Institutional logics: Gender and business creation across 28 countries. Paper presented at the Babson College Entrepreneurship Research Conference (BCERC), Madrid, Spain.

Gartner, W. (1990). What are we talking about when we talk about Entrepreneurship? *Journal of Business Venturing*, 5(1), 15–28.

REFERENCES

Grilo, I. and Thurik, R. (2005). Latent and Actual Entrepreneurship in Europe and the US: Some Recent Developments. Discussion paper on Entrepreneurship, growth and Public Policy, Max Planck Institute of Economics,

Grilo, I. and Thurik, R. (2008). Determinants of entrepreneurial engagement levels in Europe and the US. *Industrial and Corporate Change*, 17(6), 1113−1145.

Hitting the sweet spot: The Growth of the Middle Class in Emerging Markets. Ernst and Young Report, 2012. Retrieved from https://www.ey.com/Publication/vwLUAssets/Hitting_the_sweet_spot/$FILE/Hitting_the_sweet_spot.pdf

NASSCOM & Zinnov Management (2016). Indian Startup Ecosystem Maturing – 2016. A NASSCOM-Zinnov report.

Isenberg, D. (2011). Six domains of Entrepreneurial Ecosystem. Developed at Babson College.

Kelley, D. J., Ali, A., Brush, C., Corbett, A. C., Lyons, T., Majbouri, M. and Rogoff, E. G. (2013). 2013 United States Report. London, UK: Global Entrepreneurship Monitor, pp. 33– 37, 46.

Kirzner, I. M. (1973). *Competition and Entrepreneurship*. Chicago: University of Chicago Press.

Klapper, L. F. and Parker, S. C. (2010). *Gender and the Business Environment for New Farm Creation*. Oxford University Press, The World Bank Research Observer, pp. 1–21.

Klyver, K., Hindle, K. and Schøtt, T. (2007). Who will be an entrepreneur? How cultural mechanisms and social network patterns structure together influence entrepreneurial participation. Paper presented at the 27th Annual Babson College Entrepreneurship Research Conference, 7–9 June, IE Business School, Madrid.

Koellinger, Ph., Minniti, M. and Schade, C. (2007). "I think I can, I think I can": Overconfidence and entrepreneurial behaviour. *Journal of Economic Psychology,* 28(4), 502-527.

KPMG India (2016). India Soars High. KPMG India. Retrieved from https://assets.kpmg.com/content/dam/kpmg/pdf/2016/02/India-Soars-high.pdf

Kwon, S. and Arenius, P. (2010). Nations of entrepreneurs: A social capital perspective, *Journal of Business Venturing,* 25(3) 315-330.

Landes, D. (1998). *The Wealth and Poverty of Nations*. New York: W.W. Norton and Company.

Leff, N. (1979). Entrepreneurship and economic development: The problem revisited. *Journal of Economic Literature,* 17(1), 46–64.

Lundström, A. and Stevenson, L. (2002). *On the Road to Entrepreneurship Policy*. Stockholm: Swedish Foundation for Small Business Research.

Mason, C. and Brown, R. (2014). Entrepreneurial Ecosystems and Growth Oriented Entrepreneurship, Working paper, OECD.

Master Card Index of Women Entrepreneurs (MIEW) report, 2017.

Medhora, P. (1965). Entrepreneurship in India. *Political Science Quarterly,* 80(4) 558-580.

Minniti, M., Arenius, P. and Langowitz, N. (2005). Global Entrepreneurship Monitor 2004 Report on Women and Entrepreneurship, The Centre for Women Leadership, Babson College.

Mitchell, R. K., Busenitz, L. W., Bird, B., Gaglio, C. M., McMullen, J. S., Morse, E. A. and Smith, J. B. (2007). The central question in entrepreneurial cognition research 2007. *Entrepreneurship Theory and Practice,* 31(1), 1–27.

Moore, F. J. (1993). Predators and prey: A new ecology for competition. *Harvard Business Review*, May–June 1993.

DIPP (October 2011). National Manufacturing Policy. Department of Industrial Policy and Promotion (DIPP), Govt. of India.

OECD Economic Survey India 2017.

India Startup Outlook Report 2016, Published by InnoVen Capital

RBI (2015). Reserve Bank of India Bulletin 2015. Retrieved from http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/0BULL090115_FULL.PDF

IMF (April 2016). Regional Economic Outlook: Asia and Pacific Building on Asia's Strengths during Turbulent Times. International Monetary Fund. Retrieved from http://www.imf.org/external/pubs/ft/reo/2016/apd/eng/areo0516.htm

Reynolds, P. D., Bygrave, W. D., Autio, E., Cox, L. W. and Hay, M. (2002). Global Entrepreneurship Monitor 2002 Executive Report. Babson College, Ewing Marion Kauffman Foundation and London Business School.

Reynolds, P., Storey, D. J., & Westhead, P. (1994). Cross-national comparisons of the variation in new firm formation rates. *Regional Studies 28*(4), 443-456.

Romer, P. M. (1986). Increasing returns and long term growth. *Journal of Political Economy,* 94(5), 1002–1037.

Rostow, W. (1960). *The Stages of Economic Growth: A Non-Communist Manifesto*. UK: Cambridge University Press.

Saraf, N. and Banerjee, B. (2013). *Global Entrepreneurship Monitor 2014 India Report*. New Delhi: Emerald Publishing.

Scherer, F. M. (1991). Changing perspectives on the firm size problem. In Z. J. Acs & D. B. Audretsch (eds.), *Innovation and Technological Change: An International Comparison*. Ann Arbor: University of Michigan Press, 24–38.

Schumpeter, J. A. (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.

RBI (2017). Sixth Bi-Monthly Monetary Policy Statement, 2016–17. Reserve Bank of India. Retrieved from https://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=16054

Shukla, S., Bharti, P. and Dwivedi, A. (2015). *Global Entrepreneurship Monitor 2015 India Report*. New Delhi: Emerald Publishing.

Shane, S. and Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy Management Review,* 25(1), 217–226.

Slavica, S., Amorós, J. E. and Arreola, D. M. (2014). Global Entrepreneurship Monitor 2014 Global Report. Global Entrepreneurship Research Association (GERA).

Stam, E. and Spigel, B. (2016). Entrepreneurial Ecosystem. Discussion paper, Utrecht School of Economics, Utrecht University.

State of the Urban Youth, India 2012. UN Habitat, April 2013, p. 123.

"The Power of Many The Power of Many-Realizing the socioeconomic potential of entrepreneurs in the 21st century" October, 2011. Published By McKinsey. Retrieved from https://www.g20yea.com/images/reports/The_Power_of_Many-_McKinsey_Report.pdf

Tripathy, D. (1971). Indian entrepreneurship in a historical perspective. *Economic and Political Weekly,* 6(22) p.M59.

Van Stel, A., Carree, M. and Thurik, R. (2005). The effect of entrepreneurial activity on national economic growth. *Small Business Economics,* 23, 311–321.

Wennekers, S. A. and Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics,* 13, 27–55.

Wennekers, S., Van Stel, A., Carree, M. and Thurik, A. R. (2010). The relationship between entrepreneurship and economic development: Is it U-shaped? *Foundations and Trends in Entrepreneurship,* 6(3), 167–237.

REFERENCES

World Bank (2017). Doing Business Report 2017. World Bank. Retrieved from http://www.doingbusiness.org/reports/global-reports/doing-business-2017

World Economic Forum (2016). The Global Competitiveness Report 2016, World Economic Forum. Retrieved from http://reports.weforum.org/global-competitiveness-report-2015-2016/

World Population Prospects. The 2015 Revision. United Nations Department of Economics and Social Affairs.

www.startupindia.gov.in

www.makeinindia.gov.in

mp.gov.in

www.chhattisgarh.gov.in

www.gujaratindia.com

jkgad.nic.in