Subhashis NANDY\*

Abstract: This paper investigates the confluence of recent important political events and the current state of entrepreneurial ecosystem (EE) in India. Prior work has mainly focused on the development of EE only in certain cities in India but not in India's states. Filling this gap of knowledge, the current work uses data from multiple sources (GEM data, World Bank, Indian government) to show that the development and growth of EE has taken a firm foothold across India after Modi's win in the 2014 national election. Further, this work strives to develop an understanding of how the ascend of Modi's leadership and recent reforms in India might have led to the development of a healthy EE. This paper also addresses certain challenges faced by institutions and entrepreneurs in India.

**Keywords**: Entrepreneurial Ecosystem, India, Venture Capitalists, Global Entrepreneurship Monitor (GEM), Information Technology

## Introduction

NDIA HAS THE WORLD'S SIXTH LARGEST GDP (Gross Domestic Product). India's GDP in 2016 was \$2.26 trillion (World Bank 2018). Among the entrepreneurs in India, about 40% are engaged in retail activities, which exclude retailing of automobiles (Aurora 2015). Previous research focused on the development of entrepreneurial ecosystems (EE) in certain regions of India, such as in the south - Hyderabad and Bangalore (Subrahnanya 2017), in the west – Pune, and in the north - National Capital Region of Delhi (Srivastava 2017). There is a lack of research that documents the development of EE all

<sup>\*</sup> Subhashis NANDY, Research Fellow, Center for Global Business and Information Technology Research, School of Advanced Studies, University of Phoenix. Email: subasnandy@email.phoenix.edu

across India within the current political environment. Hence, the focus of the present work is to understand and document the development of EE in India.

# Literature Review

Baporikar (2013) suggested that the Indian government would have to develop and foster policies to encourage entrepreneurs to flourish in a networked Indian economy. Baporikat (2013) stated that the government of India must provide access to capital and develop the right environment for entrepreneurs to flourish. Aurora (2015) mentioned that, according to data from the Government of India, micro, small, and medium enterprises (MSME) contributed 8% to annual GDP and created 1.3 million jobs in India every year over the past several years.

#### IT Industry

In the past, India's economic growth was bolstered by the strong performances of entrepreneurial companies in Information Technology (IT) industry. Initially, Bangalore (south) emerged as the central hub of IT business in India in 1990s, but, in the very recent past, Hyderabad (south), Kolkata (east) and Pune (west) also emerged as other entrepreneurial centers for IT companies (Ramachandran and Ray 2005; Kolluru and Kolluru 2014). Bargade Baporikar (2017) completed case studies on two innovative entrepreneurial IT companies in India: Infosys Edge Limited and Phoenix IT Solution Limited. These authors concluded that the success of the IT industry in India has depended on nurturing a large talent pool of software scientists and engineers, who can develop sophisticated computer codes to innovate business processes. With Internet as a major business enabler, sales and marketing on global scale are not an issue for these entrepreneurial IT firms in India. Meil and Salzman (2017) noted that entrepreneurial businesses IT in India follow distinctive paths. Their achievements are different from other entrepreneurial businesses - as shown by the states of their business development and in their economic activities.

Srivastava (2017) estimated that more than 80% of entrepreneurs in India close their business within the first three years of their operation. Subrahmanya (2017) opined that the entrepreneurial ecosystem (EE) in Bangalore (the center of IT industry in India) and in Hyderabad (the capital of Andhra Pradesh and Telangana states) had entrepreneurs and prospective entrepreneurs surrounded by an outer layer. According to Subrahmanya (2017), this outer layer consisted of (i) private enterprises, (ii) education and research institutions, (iii) positive government support, (iv) venture capitalists, (v) accelerators such as business incubators or co-working spaces, and (vi)

technology and business mentors. Subrahmanya (2017) further stated that the EE in these two cities was also aided by exclusive start-up promotion policy, good weather, supportive media, and supportive culture.

In a recent paper, Jha (2018) discussed several positive aspects of the entrepreneurial ecosystem in India. According to Jha (2018), there are several innovative opportunities for entrepreneurs to explore in India: an educated workforce is available to be employed, and the ample availability of venture capital funding. However, Jha (2018) stated that there are also challenges to overcome in the further development of the entrepreneurial ecosystem of India. Jha (2018) identified these challenges: 1. value creation for venture capitalists, 2. the development of an acceptable framework for VCs to exit smoothly after providing the seed funding for entrepreneurial ventures, 3. proper education of young entrepreneurs, and 4. the need to develop a tolerance for failures in entrepreneurial activities in India.

# **Venture Capital**

Deva (2008) stated that venture capital has become one of the main vehicles for investments in entrepreneurial business in India since late 1980s. This happened because of the formation of conducive legal and economic environment for foreign direct investment in India. Initially, venture capitalists (VCs) invested in the growing information technology (IT) sector. However, in the early 2000s, foreign VCs faced limitations in investments because Indian company laws did not allow foreign limited partnership or limited liability partnership (Deva 2008). This situation changed with the enactment of new Bankruptcy Code in India and American tax authorities accepting advances through bilateral pricing agreements (Weblog post 2016). Panda and Dash (2016) studied the relationship between venture capitalists (VC - representing institutions) and entrepreneurs (representing agents) in India. Their empirical case study revealed that the initial stages of the relationship between VC and entrepreneur entail low risks for agents, and a relational mechanism is used to develop cooperation between agents and VCs. However, in the later stages, the relationship with VCs entails more risks for the agents in terms of deprivation of funding. These authors suggested a control mechanism needs to be adopted in the later stages to mitigate this risk for the agents. Mishra and Bag (2017) stated that the Indian economy witnessed high inflow of capital for startups in recent years through venture capital (VC) investment. However, VC investors prefer to invest jointly. In other words, joint investment or coinvestment or syndication is a common trend. According to Mishra and Bag (2017), VCs adopt this strategy to minimize their future uncertainties as a part of the control mechanism. Jha (2018) stated that value creation for venture

capitalists is one of the main hurdles that must be overcome in the development of a thriving EE in India.

#### Recent Political Events in India

The Hindu nationalist Bharatiya Janata Party (BJP) won 282 seats out of a total of 543 seats in lower house (*Lok Sabha*) of the Parliament in the general elections held in 2014 (Chacko & Mayer 2014; Tillin 2015). The BJP was the first single party since 1984 to win majority status in the Lok Sabha. The Indian National Congress Party (commonly known as the "Congress" party), which held the majority stake in the Parliament since India's independence from Britain in 1947 to the 1980s, was reduced to a minority opposition party in the *Lok Sabha* after the 2014 elections (Chacko & Mayer 2014). The BJP won by a large margin as its leaders ran an effective election campaign, focusing on governance failure of the previous government, such as rising inflation and corruption scandals in the government (Chacko & Mayer 2014).

Narendra Modi, who in the past served as an effective chief minister (chief executive) of one of the most entrepreneurial and economically successful states of India, was promoted as the top leader of the BJP before the national elections in 2014. Mr. Modi became extremely popular among the electoral masses in the populated northern and central states of India (Chacko & Mayer 2014). After BJP's massive victory in the general elections in 2014, Narendra Modi became the Prime Minister (Chief Executive) of India.

# Political Impact on the Economy

The Congress government which ruled India in 1991, adopted a neo liberal economic policy that led to growth in India's Gross Domestic Product (GDP) but did not reduce unemployment significantly over the years (Siddiqui, 2017). India's economy opened to foreign direct investment in 1991, duties on imports were reduced, and taxes on capital gains were reduced (Siddiqui 2017). From 1991 to 2001, India's GDP grew at an average rate of 5.7% (Siddiqui 2017) — that was not much different from the growth rate of India's GDP in 1980s. Inflation in India increased to more than 10% during the first decade of 2000s. Since 1997, growth in the agricultural and manufacturing sectors in India have been only 2.3% and 4.3% respectively. These two sectors account for about 80% of employment in India (Siddiqui 2017). On the other hand, growth in the financial sector has been on the average 11.5% annually (Siddiqui 2017).

# **Data and Analysis**

Longitudinal data from the World Bank, the Indian government, and Global Entrepreneurship Monitor (GEM) were collected to illustrate the impact of Modi's ascent as Prime Minister and the subsequent impact on EE in India. Table 1 reports the changes of the ranking of India in its ease of doing business, a common measurement for EE quality.

Table 1: Ranking of India in Ease of Doing Business

Categories	DB 2018 Rank (out of 190 countries)	DB 2018 DTF (DTF is Distance to frontier"	DB 2017 DTF	Percent Change
Overall	100	60.76	56.05	+4.71
Starting a business*	156	75.40	73.69	+1.71
Dealing with a construction permit*	181	38.80	36.17	+2.63
Getting Electricity	29	85.21	85.17	+0.04
Registering Property	154	47.08	48.83	+0.25
Getting Credit*	29	75	65	+10
Protecting Minority Investors*	4	80	76.67	+3.33
Paying Taxes*	119	66.06	47.67	+18.39
Trading Across Borders*	146	58.56	57.61	+0.95
Enforcing Contracts*	164	40.76	38.90	+1.96
Resolving Insolvency	103	40.75	32.75	+8.00

Source: World Bank - http://www.doingbusiness.org/data/exploreeconomies/india

The items in Table 1 that are marked with an asterisk indicate the areas that India has made improvements in 2018. According to the World Bank (2018), these improvements are:

- Starting a Business: This category has accelerated by merging the applications for the Permanent Account Number (PAN) and the Tax Account Number (TAN), and by improving the online application system.
- Dealing with Construction Permits: India made dealing with construction permits less cumbersome by implementing an online system
- Getting Credit: India strengthened access to credit by amending the rules on priority of secured creditors outside reorganization proceedings and by adopting a new law on insolvency that provides a

time limit and clear grounds for relief to the automatic stay for secured creditors during reorganization proceedings.

- Protecting Minority Investors: India strengthened minority investor protections by increasing the remedies
- Paying Taxes: India made paying taxes easier by making payment of taxes mandatory electronically and
- Trading across Borders: India reduced import border compliance time in Mumbai by improving infrastructure at the Nhava Sheva Port. Export and import border compliance costs were also reduced both in Delhi and Mumbai by eliminating merchant overtime fees and through the increased use of electronic and mobile platforms.
- Enforcing Contracts: India made enforcing contracts easier by introducing the National Judicial Data Grid, which makes it possible to generate case measurement reports on local courts.
- Resolving Insolvency: India made resolving insolvency easier by adopting a new insolvency and bankruptcy code that introduced a reorganization procedure for corporate debtors and facilitated continuation of the debtor's business during insolvency proceedings.

World Bank (2018) gave India a score of 100 among 190 countries in "Doing Business" rankings (which is a measure of business regulations), as compared with China's ranking of 78.

Table 2: Ranking of the states of India in the Category of "Ease of Doing Business"

State	2016 Score (%)	Rank	Rank	Percent
		(2015)	(2016)	Change
Andhra Pradesh	98.78	2	1	-50
Telangana	98.78	13	2	-84.6
Gujarat	98.21	1	3	200
Chhattisgarh	97.32	4	4	0
Madhya Pradesh	97.01	5	5	0
Haryana	96.95	14	6	-57.1
Jharkhand	96.57	3	7	133
Rajasthan	96.43	6	8	33.3
Uttarakhand	96.13	23	9	-60.9
Maharashtra	92.96	4	10	150

Source: Assessment of Implementation of Business Reforms 2016, published by the Department of Industrial and Procedures. Government of India.

In Table 2, a positive percentage change indicates a deterioration in the ranking of a state in "Ease of Doing Business" from 2015 to 2016, whereas, a negative percentage change shows an improvement in a state's ranking. Data from the above table show that among all the ten states considered, four

states – Andhra Pradesh, Telangana, Haryana and Uttarakhand showed significant improvement in rakings from 2015 to 2016, while the states of Chhattisgarh and Madhya Pradesh maintained the same rankings between 2015 and 2016. The state of Gujarat (home state of the current Prime Minister of India) slipped in ranking from 1 to 3 between 2015 and 2016. Some of the highlights of the analysis are:

- Andhra Pradesh (capital city: Hyderabad) was ranked 1st in 2016, compared to 2nd in 2015. In 2016, this state scored 100% on 8 of 10 parameters. These 8 parameters were: 1. Access to Information and Transportation, 2. Single Window Policy, 3. Construction Permits, 4. Environmental Regulations, 5. Labor Registration, 6. Obtaining Utility Connection, 7. Tax Registration and Compliances, and 8. Carrying out Inspections. The two parameters where the scores were less than 100% were: Land and Property Rights (90% score) and Enforcing Contracts (77.78% score).
- Telangana (capital city: Hyderabad) jumped from a rank of 13th in 2015 to 1st in 2016. It scored 100% on 7 out of 10 parameters, and above 90% on another 2 parameters, which were Land and Property Rights, and Construction Permits. Telangana had room for improvement on Enforcing Contracts (88.89% score).
- Gujarat (capital city: Gandhinagar) was ranked 2nd in 2016, down from 1st in 2015. The state scored 100% on 6 of the 10 parameters of this assessment. In 2016, Gujarat focused extensively on strengthening their single window system, as well as on inspections reforms. Although Gujarat scored 100% on 6 of 10 parameters, it had room for improvement on Land and Property Registration (90% score), Construction Permit (95% score), Tax Registration and Compliance (98% score) and Enforcing Contracts (77.78%).

Table 3 shows that nine of the top ten most entrepreneurial states (except for Uttarakhand) saw an increase in the number of private companies that were newly registered for business from 2012-2013 to 2013-2014. No data exist for 2014-2015. The increase from 2012-2013 to 2013-2014 could be attributed to the anticipated results from the parliamentary elections and the expected electoral victory of the current Prime Minister, Narendra Modi, in 2014.

Table 3: Private Companies – Newly Registered for Business in the Top Ten Entrepreneurial States – Comparison from 2012-2013 to 2013-2014 and 2015-2016

	2012-2013	2013-2014	Percent Change	2015-2016
			from 2012-2013 to	
			2013-2014	
Andhra Pradesh	6460	7981	23.50	2144
Telangana				5689

Gujarat	4337	4977	14,75	3535
Chhattisgarh	462	512	10.82	409
Madhya Pradesh	2126	2165	1.83	1508
Haryana	2944	3401	15,52	3341
Jharkhand	652	940	44.17	860
Rajasthan	3432	3503	2.07	2257
Uttarakhand	5933	466	-92.10	505
Maharashtra	15616	17220	10.27	15138

Source: Ministry of Statistics and Programme Implementation. http://www.mospi.gov.in/statistical-year-book-india/2017/186)

Table 4 shows that societal values towards entrepreneurship in all categories have increased from 2015 to 2016. The societal value toward "Entrepreneurship as a Good Career Choice" shows the highest increase of 12.97% from 2015 to 2016.

Table 4: Comparison of Societal Values Towards Entrepreneurship Between 2015 and 2016 (Reported as Percentages of Adults Surveyed)

Category	2015 (%)	2016 (%)	Percent Change
High Status to Successful	46.5	46.6	0.20
Entrepreneurs			
Entrepreneurship as a Good	39.3	44.4	12.97
Career Choice			
Media Attention to	39.4	39.7	0.76
Entrepreneurship			

Source: GEM (Global Entrepreneurship Monitor) India Annual Report, 2018.

Table 5 shows that among the states considered in the study (Gujarat, Madhya Pradesh and Chhattisgarh, Jammu and Kashmir) – Gujarat shows the highest percentages in favorable rating of societal values toward entrepreneurship. As shown in Table 2, - Gujarat was ranked - 3, Madhya Pradesh – 5, and Chhattisgarh - 4 among the ten most entrepreneurial states in India in 2016.

Table 5: Comparison of Societal Values Towards Entrepreneurship in Different States (Reported as Percentages of Adults Surveyed)

	Gujarat (%)	Madhya Pradesh and Chhattisgarh (%)	Jammu and Kashmir (%)
Entrepreneurship as a Good Career Choice	55.2	41	9
High Status to Successful Entrepreneurs	63.2	33.8	2.9
Media Attention to Entrepreneurship	57.2	38.1	4.8

Source: GEM India Annual Report, 2018.

Table 6 shows that increases in all three categories of self-perception towards entrepreneurship ("Perceived Opportunity", "Perceived Capability" and "Entrepreneurial Intention Rate") between 2015 and 2016. At the same time, there was a decrease of 15.9% in the "Fear of Failure" category between 2015 and 2016.

**Table 6: Self-Perception Among Entrepreneurs Regarding Starting a Business** (Reported as Percentages of Adults Surveyed)

Categories	2015	2016	Percent Change
Perceived Opportunity	38	44.3	16.6
Perceived Capability	38	44	15.8
Fear of Failure	44	37	-15.9
Entrepreneurial Intention	9	14.9	65.6
Rate			

Source: GEM India Annual Report, 2018.

Table 7 shows that male respondents who participated in the survey in 2016 show the highest percentages in favorable rating regarding starting a The preferences for the first three categories ("Perceived Opportunity," "Perceived Capability," and "Fear of Failure") are quite similar for both genders, while the preferences for "Entrepreneurial Intention Rate" are low for both genders.

Table 7: Self-Perception Among Entrepreneurs Regarding Starting a Business (Reported as Percentages of Adults Surveyed) - Comparison Among Genders

Categories	Male (%)	Female (%)
Perceived Opportunity	59.2	40.8
Perceived Capability	60.5	39.5
Fear of Failure	61.2	38.8
Entrepreneurial Intention Rate	17.5	12.4

Source: GEM India Annual Report, 2018.

Table 8 shows that the highest percentages of adults (surveyed by Global Entrepreneurship Monitor) who were involved in "Total Entrepreneurial Activity" were in the South and West regions of India.

Table 8: Distribution of Total Entrepreneurial Activity in the Different Regions of India in 2016 (Reported as Percentages of Adults Surveyed)

<u> </u>	
Regions	Total Entrepreneurial Activity (%)
East	7.0
West	5.8

South	13.4
North	16

Source: GEM India Annual Report, 2018.

Data from Table 9 show that the mean scores for India (usually considered a factor economy) are comparable to the scores or exceed the mean scores of the highest form of economy- innovation-driven economy. India's mean score is lower than that of innovation-driven economy in "Physical Infrastructure."

Table 9: Comparison of Mean Scores of Entrepreneurship Framework Conditions Between Different Forms of Economies and Indian Economy in 2016

Parameters	Factor	Efficiency	Innovation	India
	Driven	Driven	Driven	
Entrepreneurial finance	3.9	4	4.5	5.7
Government policies and relevance	4.7	3.9	4.5	5.6
Government policies taxes and bureaucracy	4.4	3.6	4.3	4.3
Government entrepreneurship programs	4.4	3.9	4.8	4.7
Entrepreneurial education at school level	2.8	2.9	3.4	4
Post-school entrepreneurial 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 regulations	4.0	4	4.6	5
Physical infrastructure	6.0	6.4	6.8	6.5
Cultural norms	4.5	4.7	4.9	5.2

Source: GEM India Annual Report, 2018.

Global Entrepreneurship Monitor (GEM, Babson College, Boston) also conducted national expert surveys (NES) in India in 2016 and 2017. The survey findings showed that the major constraints to the flourishing of entrepreneurial activities in India are: (1) financial support, (2) cultural and

social norm, (3) R&D transfer, and (4) education and training. GEM also noted that the major source of empowerment and support to entrepreneurs in India came from the entrepreneurship programs recently adopted by the current government, under the current Prime Minister Narendra Modi. Some of these programs recently implemented by the government of India are: "Startup India," "Stand Up India," "Skill India," and "Made in India." The authors of this report opined that these government support programs have created a favorable entrepreneurial ecosystem in India. Further, it was noted that the government of India has taken steps to adopt favorable regulations and policies to support entrepreneurs. The authors also mentioned that universities have started new programs in entrepreneurial education and training These institutions of higher learning established incubators to support entrepreneurial activities (GEM 2016-2017; India Annual Report, 2018).

## Conclusion

It can be concluded that the societal value toward "Entrepreneurship as a Good Career Choice" in India increased between 2015 and 2016. Further, as the Word Bank (2018) report suggests, certain factors considered in "Ease of Doing Business" improved in India from 2017 to 2018. Increases have been observed in all three categories of self-perception of adults in India towards entrepreneurship - "Perceived Opportunity," "Perceived Capability," and "Entrepreneurial Intention Rate." At the same time, there has been a decrease in the "Fear of Failure" category among adults in India. Overall, it can be concluded that the societal values towards entrepreneurship and self-perception of adults toward entrepreneurship have improved under the current Prime Minister in India. Further, the government of India has taken adequate steps to foster a thriving entrepreneurial ecosystem (EE). With adequate venture capital funding, the entrepreneurs can now leverage the EE in India to start successful new ventures.

# References

APS (Adult Participation Survey) Data 2016-2017, GEM India (2018). Available at: http://www.gemindiaconsortium.org/gem data APS.php (accessed 10 April 2018).

Aurora R (2015). Why India is the Land of Rising Entrepreneurship. *Inc.* Available at: https://www.inc.com/rohit-arora/why-india-is-the-land-of-rising-entrepreneurship.html (accessed 9 March 2018).

Baporikar N (2013). Entrepreneurship in a Networked Modern Indian Economy. *International Journal of Asian Business and Information Management* 44(4): pp. 48-66.

Baragde D and Baporikar N (2017). Business Innovation in Indian Software Companies. *Journal of Science and Technology Policy Management* 8(1): pp.62-75.

Chacko P and Mayer P (2014). The Modi lahar (wave) in the 2014 Indian national election: A critical realignment? *Australian Journal of Political Science* 49(3): pp.518–528.

Deva S (2008). Foreign Venture Capital Investment: The Indian Experience. *The International Lawyer; Chicago*: pp.177-192.

Gokhale N (2016). Supporting Research-Inspired Entrepreneurial Activities in India. *Technology Innovation Management Review* 6(5): pp.10-14.

Global Entrepreneurship Monitor (GEM) India 2016-2017 Annual Report (2018). Babson College, Boston, Massachusetts. Available at http://www.gemindiaconsortium.org/gem\_india\_report.php (accessed 7 April 2018).

Government of India Ministry of Skill Development and Entrepreneurship (2016). Available at: http://www.skilldevelopment.gov.in/proposed-scheme.html (accessed 31 July 2018).

Jha SK (2018). Entrepreneurial Ecosystem in India: Taking stock and looking ahead. *IIMB Management Review* 30: pp. 179-188.

Kolluru M and Kolluru SK (2014). A Study of Software Technology Parks in India. *Indian Journal of Management Sciences* 4(3): pp.35-43.

Loomba J (2014). 16<sup>th</sup> Lok Sabha Elections and Contagion Effects to Indian Stock Market. *Asia Pacific Journal of Management & Entrepreneurial Research* 3(2): pp. 133-149.

Meil P and Salzman H. (2017). Technological Entrepreneurship in India. *Journal of Entrepreneurship in Emerging Economies* 9(1): pp.65-84.

Mishra S and Bag D (2017). Syndication in Venture Capital Investment in India: An Empirical Study. *Journal of Entrepreneurship and Innovation in Emerging Economies* 3(2): pp. 81–90

NES (National Expert Survey) Data 2016-2017, GEM India (2018). Available at: http://www.gemindiaconsortium.org/gem\_data\_NES.php (accessed 7 April 2018).

Panda S and Dash S (2016). Exploring the venture capitalist - entrepreneur relationship: evidence from India. Journal of Small Business and Enterprise Development 23(1): pp.64-89.

Ramachandran K and Ray S (2005). Formation of Information Technology Clusters: How Late Movers Follow Models Different from Early Movers. Working Paper Series. Indian School of Business. Available at www.isb.edu (accessed 8 June 2018).

Siddiqui K (2017). Hindutva, Neoliberalism and the Reinventing of India. Journal of Economic and Social Thought 4(2): pp.142-186.

Srivastava K (2017). Contours of Indian Entrepreneurial Ecosystems - Perspectives from Pune and NCR Delhi. Journal of Commerce & Management Thought 8(2): pp. 318-332.

Subrahmanya MHB (2017). Comparing the Entrepreneurial Ecosystems for Technology Startup in Bangalore, and Hyderabad, India. Technology Innovation Management Review 7(7): pp. 47-61.

Tillin L (2015). Indian elections 2014: explaining the landslide. Contemporary South Asia. 23(2): pp.117-122.

Weblog post. (May 18, 2016). Newstex Global Business Blogs. The Hindu Business Line: US firms bullish on India after passage of bankruptcy law, says US official.

World Bank Data (2018). Available at: https://data.worldbank.org/country/india (accessed 31 July 2018).