The Mosaic of Indian Entrepreneurship: 
An Eclectic Introduction

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Mosaics defy easy pattern recognition. Their use or presence in murals, pavements, floor tiles, artworks, and a wide range of construction and industrial works, all indicate patterns or images that are made from many pieces of stone and glass. The objective is to achieve an aesthetically pleasing outcome. The mosaic of Indian life also holds out defiantly against easy interpretation, so does the richness of its culture, its people, its economics, and its prospects for opportunity development, or entrepreneurship. But mosaic tiles, murals and the rest, all reflect a sense of coherence, a coalescence of ideas, colours and images. The mosaic that is India has, perhaps, too many patterns and too many colours that defy construction and limit interpretation. In some situations, the Indian mosaic is a metaphor for fragmentation and division. Ramachandra Guha, in the very first line of his magisterial work, India after Gandhi, sums it up thus: ‘Because they are so many, and so various, the people of India are also divided’ (Guha 2007). This new book respects the tradition of complexity and creativity inherent in multiple pieces of economic and social activity that could be described as making the mosaic of Indian entrepreneurship.

The making of the mosaic of Indian entrepreneurship has a colourful history because of both endogenous and exogenous factors. What we may refer to as typically Indian about entrepreneurship has to be understood in terms of its socio-economic history. Since this chapter is simply an introduction to the book, we will limit any historical sweep to a simplified, temporally constrained overview with the only objective of identifying some patterns in the evolution of Indian entrepreneurship. Readers in Indian economic history are recommended to the excellent volumes on the Indian economy cited in the ‘References’ at the end of the chapter.

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1 Early Days

Early economic and trade history offers a few insights into the possibilities of entrepreneurial activity in the sub-continent. The opulent ‘east’, where living was reputedly, luxuriously easy, had opened Rome’s eyes to its wealth, if Cicero’s references to its harvests and rich variety of produce, animal herds, and exports were anything to go by (Cicero 1927). Egypt fell to the Romans when Cleopatra’s tryst with Mark Anthony was no match for Octavius leading the Roman army, in 30 BC. Soon after, Roman boats sailed to India launching an explosion of commercial exchange as shown by archaeological records. As Roman lamps, mirrors, amphorae, and gold coins started circulating in India, tin, copper, lead, topaz, ivory, gemstones, and spices went the other way from India to the Roman Empire. The ports in the west and east of India served as a kind of emporia much before those that emerged in the sixth- or seventh-century Europe. These emporia were the original platforms, the grand bazaars where goods from all over eastern and south-eastern Asia were brought before they were shipped to western shores (Frankopan 2016).

The curiously tolerant Mongols, who invaded India in the early days, had a significant influence on social and economic life in India. Some of the ritual pastimes of the Mongols, such as formal and ornate processions, were adopted in India by the rulers, in the thirteenth century. Both China and India carried their Mongol influences, the former more directly because of the Mongol’s conquest of the country. What lay beyond the military might of the Mongols was first their cultural and then the economic impact on Asia and later on Europe as well. Cultural and economic ingenuity, if not innovation, carried the tag of exotica. Frankopan (2016) recalls a Marco Polo story of animal flesh being thrown into ravines full of diamonds. The meat would attract the eagles which would swoop down to catch the meat that had diamonds impressed on them.

By the time of the fourteenth century, the establishment of trading posts on the Malabar coast of southern India facilitated trade in goods from Guangzhou which had become China’s hub for maritime exports and imports in the early thirteenth century. The unique flat-bottomed Chinese boats ruled the seas in the Indian ocean, introducing an innovation in boat design, together with the elliptical fishing nets that can still be found in the southern Indian state of Kerala.

The historical vignettes of the early history of the Indian economy do not reveal much in terms of specific entrepreneurial activity. However, even in this very short account, there lies the possibility of inferring the contribution of prevailing conditions to entrepreneurial outcomes. The entrepreneurship literature that explains the value of environments that are conducive to entrepreneurial activity refer to factor conditions, the ease of doing trade and business, a propensity for exporting and a free flow of ideas, resources. If we do not know who the entrepreneurs were at that time or indeed the organisations they created, we do know how favourable conditions could have unleashed entrepreneurial bounty and wealth creation. The merchants and the traders were the entrepreneurs driving the global flow of knowledge, products, and wealth creation. Perhaps a significant part of that flow was directed towards assuaging
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and satisfying dynastic indulgence, but could it have laid the ground for creating subsequent entrepreneurial environments?

The fourth and fifth century of the imperial power of the Guptas presided over one of the earliest renaissances in the world with its heady mix of artistic, cultural, and material prosperity. As we have seen in any such flowering (witness Florence of the Medicis in the fifteenth and sixteenth centuries), the creativity and ingenuity may have propelled entrepreneurial endeavour. However, the Gupta dynasty’s stronghold in Northern India accounts for only one geographical segment of the country. Western India under the rule of the Vakatakas offered similar opportunities for creative expression. However, the centuries that followed were characterised by classic mediaeval feudalism with landholding being the primary source of economic development and power, and social fragmentation, including the rise of the caste system, and brahmanical nationalism disrupting the social fabric of the country. However, there were cities and states of courtly splendour, including the building of great temples, the purveying of Chinese silk, the transportation of food grains over long distances, and some amount of overseas trade which flourished despite the edicts of the Brahmins against foreign interactions (Digby 1984).

2 Mediaeval Times and Wealth Creation with the Mughals.

Historians such as Simon Digby and Irfan Habib have referred to the difficulty of reconstructing the dynastic history of India before the late twelfth century. Fragmentary source materials, such as local Sanskrit literature works, the tales of Buddhist pilgrims, and Arab sailors traverse literary, spiritual and pedestrian accounts, with additional evidence from archaeological and numismatic studies (Digby 1984). Mediaeval India was marked by economic decline due to at least three factors—the invasion of Asian tribes, the closure of the silk routes, and the rise of Islam, with the exception of Gujarat and the Coromandel coast which was part of the network of sea-borne trade.

In the thirteenth and fourteenth centuries, there were kings and there were peasants. While the former may have presided over an abundance of land, the peasant (or muzari) needed a set of resources (maya) before embarking upon a profession. They needed a pair of oxen and tools of implements, but possession of a key factor of economic production, land, fell outside the remit of the muzari. The conditions then did not even encourage agricultural production because forests covered large tracts of land, especially in the Gangetic plains. By way of contrast only around the end of the sixteenth century when agricultural cultivation took over those same tracts of land, the peasants cultivated the land and lived in small villages consisting of 200–300 men, with an overall population of around 800 people in each village. While the size of the land varied we do not know much about the tools used by the peasants, apart from a limited use of iron, thus making it rather difficult how innovative they may have been in cultivating their plots (Habib 1984).
If we do not know much about the tools, we do at least know that the ways in which land was irrigated, through the use of wells, dams on streams and canals. They were a feature of local effort, the influence of migration and exposure to ideas from afar, mainly central Asia. In fact, as Habib (1984) points out that it was the immigrant, Qarauna Sultan, Ghiyasuddin Tugluq (1220–25) who can be credited with digging the first canal in the country. The diffusion of this innovation by means of the largest network of canals was introduced by Firuz Tugluq (1351–86). They were sultans, that is, rulers of the kingdoms that were established in the country. In India, immigrants ruled the country over centuries and, in some cases, were instrumental in unleashing change. Raising water was given a major uplift by incremental innovations including, for example, the ancient India ‘noria’, the arghatta (the Persian wheel used for irrigation), which carried a string of pots close to its rim, enhanced with pin-drum earing, making it possible to use animal power to work it. The wood and earthen pot, the forerunner of the modern metallic Persian wheel, may have contributed to irrigation in the rich Indus Valley.

Habib (1984) estimates that the breeding of the mulberry silkworm (sericulture) for producing real silk could have been introduced in the fourteenth and fifteenth centuries, even if typical Indian silk, such a tasar and muga, had their origins in ancient times. Here too, we find the example of knowledge exchange across borders since sericulture arrived in India from China over a long and tortuous period. It was the Chinese navigator, Ma Huan, who told the story of mulberry trees, silkworms, and cocoons in the eastern state of Bengal. Agricultural production extended to fruit and grain and many other products, and their cultivation was made possible by a complex and mutating, but exacting form of taxation and wealth creation for the rulers. Without a detailed consideration of the history, it is not appropriate to make a judgement, but it would appear that organisational innovation, involving a hierarchy of functional cohorts of people, appears to have occurred to accumulate wealth for the ‘haves’ rather than the ‘have nots’.

There were metals too. The iron ore mined in the mountainous regions of India was of a very high grade, producing damascened steel and earning global reputation. The Mughals thought that the Indian swords were the best and the rarest, thus fetching high prices. Other types of swords were made from soft iron which were alloyed with copper and silver. The bronze and brass were also well known, not forgetting the coinage of the sultanate of the thirteenth century. In fact, metallurgy heralded local innovations and quickly found use in various parts of the world. Gold and silver had disappeared, so imports of both those metals were the order the day, and there is evidence of diamonds being mined in the Deccan in western and southern India.

Textiles was perhaps India’s greatest industry. The spinning wheel, which improved cotton production, was perhaps introduced to the country from Iran by Muslims, as was the ‘pinjana, the cotton-carder’s bow, at around the fourteenth century. Europe too had benefited from the introduction of this instrument at around the same time. Both the wheel and the carding bow enhanced the spinner’s efficiency and the cost of the spun yarn. The sculptures of the ancient Ajanta caves in western India and mediaeval India, together with the Mughal miniatures, suggest the growing availability of cloth and the improvement in clothing worn by ordinary folk.
of those times. There was a wide range of cotton cloth, from coarser varieties for the poor to the muslin, ‘bhairon’ and ‘devgiri’ varieties for the nobility. What the textile industry became known for was the multiple forms of labour organisation. Spinning was done by women at home, and the home was also the unit of work for weavers with their looms. The cotton carder could have sold his services as a hawker. The ‘karkhanas’ or workshops produced the high-end, luxury clothes with thousands of workers weaving and embroidering material for exclusive use at the courts (Habib 1984).

We see this pattern of foreign influence in the building industry, which was responsible, to a great degree, for urban employment. The adoption of the Saracenic architecture spawned brick construction in towns and the Mughal rulers went on a spree of new builds employing thousands of stonecutters, masons, and other labour.

The other pattern of innovative change in the economic life of India was, as Habib (1984) reckons, numismatic. While the Muslims engineered the change and developed monetary policy, coinage and monetary assay was a skill of goldsmiths who were primarily Hindu. Plundering Hindu kingdoms, temples, and other religious sites yielded both gold and silver, but the Delhi sultanate fixed a firm ratio of 1:10 between gold and silver. If gold was more important than silver in the circulation of coins, then the monetary relation between the two became strained. It also led the disappearance of silver, the scarcer metal of the two. This was particularly evident when Muhammad bin Tughluq felt the need to innovate by issuing different types of gold coins of varied weight, sometimes even less than the silver coin.

The Mughal period was marked by the interaction of technology, the social system and the size and the character of the market. The affluent demanded many comfort goods, from household utensils to jewellery, perfumes, harness, and saddlery, requiring a wide-ranging group of manufacturers.

Although the manufacturing sector was vast and varied in terms of output, there were questions about any long-term changes arising from that development. Given the relatively basic character of the technology, an emphasis was on cheap, easy to use instruments, and a significantly low ratio of fixed to working capital. Consequently, individual units of production had a rather limited supply of labour and capital. Small units were the primary form of organisation with most of the production being organised for small-scale rural markets. The labour market included all producers of goods at, more or less, the same level, together with a sub-division of numerous occupations organised in terms of their relative ritual cleanliness and hereditary occupations. These family-based artisan backyards did not contribute to the either the manufacture of the large variety of boats or monuments (Raychaudhuri 1984).

Although the ‘karkhanas’ employed a wide variety of artisans, from embroiders to joiners, goldsmiths, and armourers, all on a regular wage, the objective of these manufacturing organisations was to serve the imperial court and the army. The market was not the target of manufacturing. Thus, although there was much by way of activity, the scale was limited enough to prevent any break from the past. Most of the capital which took the form of working capital came from the savings of the artisans while the tools of production were cheap and simple. Paradoxically, despite India’s pre-eminence in exporting manufactured goods, the technology was remarkably backward, especially
when comparisons are made with China and Europe. No proper use was made of coal and neither was there any knowledge of deep mining techniques. The ‘world-beating’ textiles were produced without the use of multi-spindle wheels, which were known to China for at least two centuries even though there is more than documented proof of openness to both China and Europe. The watermills of China and Iran were hardly in use in India and neither did block printing replace the copyist. The ingenuity of the worker, much lauded by various Western accounts, was somehow protected against any overture to innovative change across the board. However, some degree of sophistication was achieved in the heavy industry of armaments, including muskets, gun, and canon manufacturing. The sixteenth century saw the production of the heaviest bronze cast canon of 12 feet and 4 inches in length—the Malik Maidan. Indian rockets made of bamboos and iron cylinders were the sources of inspiration for European rockets of the nineteenth century. Imitative innovation was apparent too in the manufacture of European type, but smaller pinnaces, a product of great interest to the British. Raychaudhuri (1984) refers to necessity not being the mother of invention in Mughal India. The centuries-old technology was enough to meet the needs of the domestic and the foreign market. Excessive specialisation in the labour market was a function of the social system and its abundance of occupational castes and sub-castes.

The highly sophisticated culture of Mughal India had little curiosity about the laws of nature and neither the elite nor the mass of producers manifested any curiosity, utilitarian or otherwise about things mechanical. Unlike the Chinese artisans, the Indian craftsmen did not take apart the European clockwork to unravel its mystery nor did their noble masters, despite their fascination with such ‘toys’ ever express any curiosity as to how they worked. The movement of artisans from country to town, the growing tension between the merchant employer and his artisan employee, the freedom that went with city air and mine dust – familiar features of European life when the Mughals ruled over India – were conspicuous by their absence in the subcontinent’s society and economy………(Yet) An expanding market, organisational changes and imitative innovation in technology did constitute a powerful combination of features which could have induced a break with the established traditions in manufacture……Industrial involution is perhaps not an inappropriate label for the history of manufacture in our period. (Raychaudhuri 1984: p. 307)

Despite the limitations mentioned above, when the East India Company first decided to jettison the plunder of the Spice Islands in the far east to the militarily superior Dutch and focus on the putative rewards of trade in fine cotton textiles, chintzes and indigo, from India, they found a country at the zenith of contemporary economic power. At the beginning of the seventeenth century, India had a population of 150 million people, almost 20% of that of the world, producing approximately 25% of the world’s manufacturing, a country described by Dalrymple (2019) as the industrial powerhouse of the world and a global leader in manufactured textile. A fine example of the real diffusion of Indian innovation can be found in the common English language usage of words connected with weaving, as in calico, shawl, pyjamas, khaki, dungarees, chintz, taffetas, and cummerbund (Dalrymple 2019). The polyglot English language absorbed these Indian words in recognition of their common usage among English immigrants in India, while the common usage itself was a tribute to the diffusion of innovation in textiles in Mughal India.
The trajectory of the Indian economy and prospective entrepreneurship and innovation continued to be paradoxically arrested in its evolution. In the sixteenth century, the Indian merchant, mainly of Gujarati Muslim stock, was probably the most important figure in the nation’s overseas, maritime trade, but they were limited to the middle Indian Ocean. The structure within which they operated included the Arabs who dominated the carrying trade in the Arabian sea, the Chinese in the east, and later the Europeans who strengthened their position through, enterprise, guns, and germs. Around the east of Africa, Indian merchants traded freely with their Arab counterparts who in turn enjoyed peaceful access to India ports. Three types of Indian merchants sailed the seas—the ‘substantial merchants’ carrying valuable cargo, the agents of principles at home, and finally the smaller merchants who constituted most of the passengers of ships. The presence of the smaller merchants was almost ubiquitous even if the Indian ports were dominated by a few rich traders, and their low levels of investment and small margins meant that they were always around, gnawing away at the dominance of the richer lot and making monopolistic operations almost impossible. However, the weak, smaller merchant managed to retain their rights against entrepreneurs who were deprived of any assistance by way of legal and political pressure. The social structure prevented any such abuse, and if the weaver returned money advanced by the merchants before switching to a higher bidder, contracts were not binding on both parties. Social limits to competition meant that business was general organised round the family stretching to someone from the same social clan only on occasions. Nothing by way of impersonal collaboration was symptomatic of a way of life (Dasgupta 1984). The prevalence of strong social norms determining enterprise activity was an inevitable constraint to innovation and growth, even though the late seventeenth century could be regarded as the golden period of trade in textiles and maritime trade (Dasgupta 1984).

High levels of inequality between the wealthy and the rest of the community of Indians could have acted as a social brake on entrepreneurship development as we understand it. Trade was the primary economic activity supporting artisanal activity of high levels of dexterity while propping up the indulgent coffers of the nobility. Social structures reinforced the ambiguity of being open to foreign influences, trading across the seas while limiting the necessary organisational structures appropriate for the mobilisation of entrepreneurial resources.

The capital that had been accumulated by the merchants remained embedded in rigid caste-based systems that defined communities. The roots of industrial capital in the post-independent states of India can be found first in the bazaars of India’s non-coastal interior. Here, the merchants were engaged in supporting, inter-alia, the movement of artisan products and peasant crops, the inland trade in commodities and the marketing of agricultural produce, using an inland bill of exchange referred to as the ‘hundi’ and a very local version of a commission agency known as the ‘arhat’. The accumulated capital lubricated the long-distance links to the inland market which helped to build the foundations of industrial activity (Ray 1992).

Why is the bazaar, the typical Indian market, so important to understanding the evolution of Indian economies and entrepreneurship? If the Indianmess of this evolution is to be given any premium, something we strive to do in this book, then the
conventional European or North American classification of sectors into agriculture (primary), industry (secondary) and services (tertiary) may not be an appropriate method of tracking or evaluating sectoral developments (Ray 1992). India’s national income, until almost the achievement of political independence, was obtained more from handicrafts than industry. The modern industrial (secondary) sector is not characterised by either the traditional Indian merchants or by artisan craft making, and therefore, they cannot be properly included as part of the secondary sector. The industrial complex, largely an enclave of British enterprise and British hegemony, stood apart from the working and social lives of the peasants and artisans who made up the household economy. The organisation of this bazaar economy was different from Western models, it had its own dynamism, and it was the seedbed for nineteenth-century Indian industrial capitalists. The bazaar economy of merchants with its reliance on the ‘hundi’ negotiable instrument of credit was one of three forms of agglomerations alongside the subsistence economy of the peasants who had no access to the use of bills of exchange or bank credit, and the Western industry enclave of factories, banks, mines and plantations. It was clear that the British had started to capture the lofty heights of the industrial Indian economy thanks to British capital, but there was some trade-offs and adjustments with the merchants and bankers of the bazaars (Ray 1992).

3 The Organisation of Chicanery and Entrepreneurship of the British Empire

The bazaars and the merchants did not disappear with the British advance, but the merchant communities had to learn how to adapt with the consolidation of British rule, first in the state of Bengal. New merchant communities emerged, and they started dominating the flow of commerce between the market towns that lined the railway lines. It could be argued that the ability to adapt and the emergence of the Parsis, Bhatias, Khojas, Memons Banias, and Jains from Gujarat, Cutch and Kathiawad in western India, the Marwaris from Shekhawati, Bikaner, Marwar, and Jaisalmer, Aggarwals and Guptas in Northern India, and the Nattukottai Chettiers from Chettinad in the south, inaugurated a new period of entrepreneurship in India (Gadgil 1959). Many of them forged alliances with the British as the latter’s agents to make forays abroad. The Parsees went to China, the Bhajjias, Khojas, and Memons travelled to the Middle East and East Africa, and the Nattukottai Chettiers sought out prospects in Burma and the Straits Settlements. This was the beginning of a new transnational enterprise as their well-established and closely linked communities formed new mercantile and banking networks. The British government had set a defined space for them within the framework of the new imperial, colonial economy. That strategy excluded the new Indian merchants from trade with Europe, access to coastal and overseas shipping arrangements in India, manufacturing products from the rest of the world and foreign exchange.
So began the unbridled spread of pure, unadulterated and destructive entrepreneurship. The EIC had secured political hegemony and governance of the state of Bihar after defeating the combined Indian armies of the Mughal emperor and the Nawab of Bengal at the Battle of Buxar in 1765. Categorising Indians as barbarians, the EIC adopted an imperial position of authority introducing the notion of private ownership of property, endorsed by no less a person than the British politician Edmund Burke as a way of civilising the barbaric natives. Instead of growing an Indian version of the English system of improving landlords, the EIC chose to innovate, creating one of the most ‘rapacious rentier class whose aim was to extract as much revenue from their tenants as possible’ (Collingham 2017, p. 147). This class was called the Zamindars. The peasants could pay their taxes from the money they raised growing cash crops such as indigo and cotton. Their subsistence was dependent on maize, the same maize that was used together with manioc to supply slave traders for the diets of the slaves during the Atlantic slave trade. This maize had replaced the finger millet which was the peasants’ primary source of coarse grain. Of all the cash crops the one that was deemed to be of most value was opium (Collingham 2017).

Yet nothing the British tried could stop the Gujarati and the Marwari family-owned firms from developing extensive and influential networks connected with the two technological innovations of the British—the railways and the telegraph. The Gujaratis known, hitherto, for the flair for trade, built cotton mills in Bombay (now Mumbai) and Ahmedabad in the west of India. The Marwaris spawned a phalanx of operations from brokerage houses, banking establishment, commissioning agencies, and speculative enterprise (Timberg 2015).

The nineteenth century witnessed another new organisational innovation, namely in the form of managing agencies (Roy 2018), to undertake the first corporate business and industrial activities in India. Although created by the British, there was a degree of agency for trade for Indians as many of these agencies had substantial Indian partnerships at least in the early days of their evolution. These agencies carried out private European trade in Asian seas as dictated by the early, official monopoly of the English East India Company (EIC). The EIC’s primary business remit was to export the silk and cotton manufactured by Indian weavers. But cotton and silk gave way to indigo, and a new line of export trade in raw cotton and opium with China developed when India became a net importer of Manchester textiles by the 1830s. In fact as the EIC’s monopoly of trading activities with Europe came to an end by the middle of the nineteenth century, the exports of Bengal and Malwa opium to Canton in China, rose rapidly, channelled through the agency houses in Calcutta (now Kolkata) and Bombay (now Mumbai) (Ray 1992).

With their umbilical cord cut off from the EIC, the agencies did their own investments in indigo planters, silk filatures, and other inland industrial ventures. Their diverse portfolio included insurance companies, banking, and shipping, giving them the honour of starting the first private corporate businesses in the sub-continent. Linked to the agency houses were brokers, who were primarily Indian associates and whose job was to bring in and guarantee contracts for the supply of exportable products from the interior of the country. The scaffolding of the politics of British Empire in India was provided by willing or coerced Indians together with their prowess
in banking and shipping. Typically, these brokers were referred to as Banians in Calcutta, Dubashes in Madras (now Chennai), and guarantee brokers in Bombay. Many of these brokers were rich and important merchants in the value chain acting as a broker to several American and British traders and even financing the odd European principal or two. Some such as the shroffs (the ‘native money lenders’) were rich capitalists who were not dependent on the agency houses. The Marwari banking community had established their own base in the Barabazar district of Calcutta.

The growth of modern Indian industry can be dated back to 1854 when the first Indian cotton mill was floated. Unlike the railways and the tea and coffee plantations, coal mines, jute mills, various banks, and mercantile establishments, in which the British invested heavily, the industry of cotton textiles grew largely on the back of Indian capital. Cotton along with steel was developed by Indian entrepreneurs, the Parsees, being very active in cotton textile manufacturing and distribution. Ironically, as Sen (1992) notes, these were the two industries that formed the basis of British industrial revolution, and these were primarily in Indian hands.

British entrepreneurs found opportunities only in the industries that were used to extract wealth and produce for export to Britain. It is interesting to note that the innovations of colonial times that the British brought to bear on India were all associated with extraction and exportable conveyance for the markets and society of Britain. And the great Indian railways were built to ease the flow of goods from the interior to the coast and the ships that transported them to the ‘mother’ country. Industries such as coal were of course used for domestic consumption, and a possible unintended consequence of building the railways was that it enabled Indian industrialisation after independence. Care also needs to be taken that a primary factor promoting new enterprise development by the British relied on money raised in India by the managing agents and others. The evolution of the cotton industry is steeped in colonial politics especially when we see what happened after the mechanised cotton textile industry of Lancashire in England ushered in the first industrial revolution. The early nineteen century dominance of the pre-mechanised, hand-spinning and hand-weaving cotton industry of India went into sharp decline as cotton was now managed as an import by the colonial rulers. The paucity of investment in Indian cotton mills by British interests in India was a function of the threat Indian mills posed to the cotton mills of Lancashire. By way of interesting comparison was the growth of the indigenous Indian jute industry which attracted significant investment from Scottish investors despite the earlier presence of the Dundee jute industry in Scotland. Jute in Britain was an infant industry, and jute from the Indian mills to the USA and other parts of the world played an important part in the settlement of Britain dollar purchases (Sen 1992).

The development of the iron and steel industry in India followed a different trajectory. This local industry flourished despite the existence of an iron industry in Britain. However, the latter took over the supply of iron and steel for the new Indian railways from Indian enterprises. But Britain could not sustain its iron and steel industry when German and Belgian competition proved too strong. So even when the likes of Tata Steel failed to raise capital in Britain, there was implicit support for the company’s growth in India if only to hurt the Germans and the Belgians.
However, Tata’s £1,630,000 flotation had a special appeal because it invoked the idea of ‘Swadeshi’ or the development of Indian industries for the Indian market, which was being pushed by India’s freedom movement (Sen 1992).

Colonial political supremacy of the British in India had two distinctive features. The first was to enhance British economic power in Britain by any means possible, including where necessary the temporary promotion of Indian enterprise followed swiftly by the its squashing as soon as British replacements were found. The second feature was the heinous practice of racial divide in the organisations of place, space, and people. Moral and physical demarcation of the rulers and the ‘natives’ was seen in the practice of apartheid, with the creation of ‘black and white towns’ in the cities of India. This was exacerbated by the unabated distribution of resources and licences, so that if private business was given responsibility for developing a new enterprise, then it was always the private British business that earned that privilege. When Indian engineering skills were found to be better than what the colonials could offer, the Indian entrepreneurs such as Rajendra Nath Mukherjee could only exploit their excellence by partnering with British firms. British exceptionalism was buttressed by colonial policy to ensure, for example, the stopping or limiting of Indians from availing of technical education, or from being admitted to chambers of the commerce, (with the exception of the Bombay Chamber of Commerce, which was all Parsee) (Bagchi 1992). This intermingling of the politics of power with economic and entrepreneurial endeavour has haunted Indian industry even beyond independence from the British.

Another interesting aspect of the spatial divide during British times can be found by observing the extant geographical distribution of business activity during British times. Eastern India with its headquarters in Calcutta was by all accounts a ‘British enclave’. The three major industries of the region—jute, coal, and tea—were almost all controlled by the managing agencies of curious British innovation repute. In the western part of India, things were rather different. Here, it was the entrepreneurial capabilities of the Parsis, Gujaratis, Cutchi Memons, and the Sindhis which flowered in the late nineteenth centuries. They exercised economic power in the cities of Bombay and Ahmedabad. The northern and southern parts of the country also saw the prevalence of Indian industries.

The standard, but rather lazy, explanation suggests different entrepreneurial competencies of the British and the Indians and their link to special features of different industries. The British were an advanced race of entrepreneurs fuelled by some kind of Weberian, Protestant ethic, while the lot of eastern India, the Assamese, Bengalis, Biharis, Oriyas, were ‘indigent, feckless, and devoid of entrepreneurial drive’—so goes the discourse (Goswami 1992, p. 230). Perhaps the British did encounter such a lot and found that these rather maladroit people resembled themselves if not their voracious appetite for chicanery! What is overlooked in such typical colonial and jaundiced views is, as Goswami (1992) explains, the British controlled eastern Indian industries for export, while the western states catered mainly to domestic markets which did not interest the British. A basic factual check shows that Indian entrepreneurship in eastern India flourished after the First World War, growing dramatically from the 1920s to the 1940s. As stated earlier, they included
domestic market-oriented industries as well as those in which the British had a direct interest, especially coal and jute. The Indian entrepreneurs consisted of the Marwaris who started their own businesses and bought shares in European firms. On the other side, the domestic market was infiltrated by British and American transnational firms, introducing new products and innovative marketing methods.

4 The Community of Indian Entrepreneurs Breaking the British Mould

The Marwaris who originate from Rajasthan, were bankers for a long period of time, often financing the great trade routes passing through their home state, and sometimes acting, in common with many rich banking houses, as financiers for Mughal and other local princes as well as their enemies, the British. The advent of the railways in India spreads the Marwaris across India, financing cash crop production of cotton and opium, with some becoming immensely successful after their relatively simple start as moneylenders and small-time shopkeepers. The diversity of their operations is seen in the history of the famous house of Birlas who, inter-alia, took deposits and lent money, plied their trade in speculative commodities, provided insurance cover, and cashed bills of exchange. A strong family support network coupled with a sense of community philanthropy, and a flair for ruthless competitiveness and risk taking, constitute the behavioural characteristics of the Marwaris (Timberg 2015; Das 2007). Their involvement in the jute industry covered raw jute procurement, trade, and export. Goswami (1992) states that the introduction of the ‘fatka’ or futures trading and hedge transactions by six Marawris, way back in 1905, propelled them to dizzy territories of wealth creation and business success. The fact that ‘fatkas’ were illegal at the time did not stop them from using the instruments; their relentless application forcing an eventual legitimisation of the instruments by 1911. So often do ‘illegal’ forms of business (consider ‘Uber taxis today) acquire social legitimacy simply by virtue of their unstoppable use by consumers (Goswami 1992). The Marwaris and the Gujaratis also dominated the internal trade of coal with many of the collieries being managed by Bengali partnerships. Ownership of the jute mills and the collieries was one mode of entry by Marwaris as they graduated from trade to industry. They had a second armour up their sleeve and that was the slow and steady acquisition of shares in European managing agencies (Goswami 1992).

The Bengalis of Calcutta and Eastern India did not fall short of entrepreneurial achievements either. They were not outdone by the predominantly British managing agencies, having control of at least 20% of the pithead output of those years (Simmons 1976). Apart from other interests in cotton mills and tea, the most interesting arena of endeavour was in technology-based entrepreneurship. Two contradictory forces catapulted Bengali enterprise in the early twentieth century to cutting edge innovation territory. The first was scientific rationalism and the second was the idea of Swadeshi, and in this case, a technocratic ‘Swadeshi’. The likes of Jagdish Bose and Prafulla
Ray were highly educated practising scientists, influenced on the one hand by their British education in Calcutta, Cambridge, and Edinburgh, and on the other by their scientific commitment to a nationalistic consciousness. Scientific history credits Bose with designing and building an apparatus to detect radio waves much smaller in wavelength than had been known hitherto, and the idea of an ‘all being one’ Boseian thesis uniting living and non-living matter. He had found that the behaviour of radio waves resembled the fatigue found in animal tissue such as muscles. Ray, on the other hand, discovered a method of producing mercurous nitrite in a stable crystalline form so that chemists could work with a compound and carry out other investigation of its properties (Dasgupta 2010) Both are pioneering examples of the academic entrepreneur. Apart from adding to the canon of knowledge in physics and chemistry respectively, they started technology-based ventures in Calcutta. The city witnessed the creation by these two science and technology entrepreneurs of Bengal Chemicals and Pharmaceuticals which specialised in pharmacy products, while another firm, Calcutta Chemicals, which produced consumer items such as soap, toothpaste, and herbal cosmetics, was started by two Bengali families, the Mitras and the Dasguptas, who introduced state-of-the-art manufacturing techniques from England, the USA, and Germany. Another star in the firmament was Bengal Lamps established by the Oxford educated, wealthy Zamindar, Kiran Shankar Roy. The Bengal Pottery Works, which was formed by a Maharajah, Manindra Chandra Nundy, was also another example of entrepreneurial drive and mission (Goswami 1992).

These new ventures were complemented by the ownership of collieries and tea gardens by Bengalis who also entered banking as evinced in the founding of the Comilla Bank in East Bengal (now Bangladesh), two newspaper groups, the Ananda Bazar Group and the Amrita Bazar-Jugantar-Basumati group by the Sarkar and Ghosh families, respectively. What they possessed in entrepreneurial drive and nationalistic pride did not evolve into managerial dexterity as their narrow equity base in privately owned companies failed to raise sufficient funding with which to innovate their technologically intensive product portfolio (Goswami 1992).

The twin forces of technology and nationalism represented another interesting duality in the creation of new enterprise and in the mindsets of the entrepreneurs. The duality was evident in the engagement with Western science and technology together with its uses on the one hand, and the Indian response to Western science characterised by a consciousness steeped in Indian philosophical beliefs and ideas, drawn from, for example, the Rig Veda, and the literature writings of Tagore (Dasgupta 2010) and others, on the other. The cross-cultural mind of this period known as the Bengal Renaissance fostered a holistic approach to the understanding of science, technology, enterprise, art, and poetry that permeates the best of Indian thought and action today.

Indian enterprise has always been variegated in terms of the representation of its many people. A significant community of Indian enterprise was the Parsis who played a critically significant role in the advances Indian industry made in the nineteenth century, not least because their contribution was disproportionate to the size of their community. Was it their foreignness or was it their lack of caste that made them more entrepreneurial? Perhaps both. But as with all attempts at attributing enterprise
development to personal characteristics, we simply enter a cul-de-sac of false differenti-ation between different groups of people. The Paris came to Gujarat in the dying days of the seventh century fleeing persecution in Persia. There is this warm folk tale about the Parsis who on being granted refuge in arrival was asked by the local king, Jadi Rana, what the new immigrants would offer in return given that his land was full. An old Parsi priest asked for a bowl full of milk. He put a tiny amount of sugar in that bowl of milk and explained to the king that just as the sugar has mixed seamlessly with the milk and could not be noticed anymore, the Parsis would mix with the people of India, sweetening the local culture with their own without any disturbance. The sugar would sweeten the milk without coming up to the surface or spilling the milk over.¹

Desai (1992) notes that nothing was heard about them for nearly 700 years since their arrival, which suggests that the Parsi Priest’s story is both apocryphal and prescient. The Parsis had indeed assimilated in the local population of Hindus imbibing much by way of social mores and occupation such as farming. Shipbuilding became an important enterprise for the Parsis in the seventeenth and eighteenth centuries alongside cotton and silk textiles manufacturing and foreign trade, which made them particularly active in the Persian and Arabian gulfs. The key players in the Bombay textile industry were almost exclusively Parsis as theirs was the business of agglomeration through manufacturing, trade, shipping, and finance. The Parsis also started a paper factory and introduced steam navigation to India in 1841. Acting as agents for the British, they also became involved in supplying opium to China. The diversity of their successful entrepreneurial activities inevitably supported the accumulation of capital. Growing their capital base was supplemented by close networking with the British, and especially the EIC. When the EIC mutated from a trading company to a political power base, the Parsis came to share some of the latter. However, the early dominance of the cotton textiles industry by the Parsis (with the British) fell away with time. Cotton as a commodity was subject to price fluctuations which drew in merchants and traders from all over the country. The diffusion of ownership and trade led to an inevitable collapse in profits and investment opportunities. With trade opportunities shifting to the eastern shores of India, with the growing British interest in tea, indigo, manganese, and mica, the shipping monopoly that the Parsis enjoyed also fell apart (Desai 1992). It was later in the twentieth century, with iron and steel, that the Parsis led by the now ubiquitous name, Tatas, that the Parsis regained their entrepreneurial adroitness with a pronounced ‘Swadeshi’ touch to its development.

There was another community of Indians, down in South India, who became pioneers of fast-growing industry but who did not necessarily come from the stock of traditional business communities. The uniqueness of the Chettiar lay in their early move towards internationalisation with their adventures in Burma. With the

¹There are numerous versions of this story which I have heard from many Parsi friends. This version is taken and partially adapted from ‘The five Stories about the Fascinating History of the Parsis’ by Debanjan Dhar in StoryPick, 21 March 2016, available on https://www.storypick.com/parsee-leg ends/, last accessed on 12 May 2020.
annexation of lower Burma by the British, there was a realisation that the Irrawaddy delta’s economic value had gone unnoticed. As credit lubricated export-oriented paddy cultivation in the delta, it was the Chettiar who overtook the Burmese firms in supplying such credit to the peasant farmers. Years of apprenticeship, exposure to business ethics and techniques, including a special accounting system, were responsible for inculcating a strong capability for business organisation. This capability was propped up by internal group solidarity, lending between firms and the use of informal sanctions to control default in payments. In many ways, the Chettiar had acquired the kind of business acumen associated with the Marwaris. When the political crisis of the 1930s engulfed Burma, the Chettiar found new opportunities back in Tamil Nadu which saw the emergence of a new form of industrialisation spearheaded by small firms (Ray 1992).

5 The Accumulation of Variety

This patchwork narrative of Indian entrepreneurship during British colonisation of India suggests a curious mix of different modes of enterprise coupled with distinctive Indian approaches to business organisation. Indians found doing business with the British both necessary and rewarding, but this was made possible by the British reliance on Indian entrepreneurial ingenuity to create new industries, and finance business opportunities of direct interest to Britain. The merchants and traders who took part in this form of enterprise development had a rich tradition forged during Mughal times and before. The riches of the Mughal emperors may have only trickled down to ordinary Indians, but there was sufficiency of experience and capital accumulation, which, together with a business skills base in trading and finance, had equipped different communities, such as the Marwaris, the Khojas, the Bhatias, the Gujaratis, the Cutch Memoms, the Parsis, and the Chettiyars with distinctive entrepreneurial competencies. Add to that the knowledge and experience of the Bengali technocrats and it is not difficult to find a rich mosaic of entrepreneurial activity across the sub-continent.

A long tradition of openness to foreign trade, foreign know-how, and foreigners made it possible to carve out Indian niches even though the British systematically decimated Indian industry and looted the country of its riches. When the British arrived in India in the seventeenth century, India had a 27% share of the world economic pie. Before the British established themselves in India as a colonial power in the eighteenth century, India’s share of the world economy was as much as the whole of Europe, despite a slight fall in the share of the global economic cake to 23% (Maddison 2013).
6 The Politics of Entrepreneurship

The establishment of a political base was a necessary means to utilise India as an outpost of the British Empire. The outpost’s function was to destroy Indian manufacturing and local enterprise, first by exporting Indian raw materials to England and then substituting Indian textile products with British ones, which were made from the same Indian raw materials. Yet Indian handloom, including the fine muslin, produced by Indian weavers, and then manufactured in larger quantities in English factories in India, was popular in England and across Europe, Asia, and the Middle East. To make matters worse when English textiles were brought to India, they paid for them from the revenues earned in India, thus reducing the prices of the new English imports. But Indian textiles were rather cheap by comparison anyway, and the only way their sale could be stopped was to physically destroy the looms of the local weavers and to impose exorbitant tariffs of 70–80% on the remaining lot of Indian textiles. The dramatic shift from world leading manufacturing to exporting commodities such as jute, raw cotton, spices, rice, tea, and opium, led to a remarkable drop in India’s manufacturing to 2% under British rule (Tharoor 2016).

Maddison’s (2007) calculations show that between 1600 and 1947, the period covering British entry to India and Indian independence, Indian per-capita income rose by 12% while that of Britain increased sevenfold. India’s population grew from just under 135 million to 414 million during the same period, while the population of the United Kingdom (UK) rose from around 6 million to just under 50 million. The more interesting statistic is that of gross domestic product for both countries. When India welcomed the East India trading company and its merry bunch of traders back in 1600, India’s gross domestic product (GDP) stood at approximately 74 million compared to 6 million for the UK, or just 8% of India’s GDP. By 1947, these figures had changed to just above 250 million for India and around 327 million for the UK, a change of 245% and over 5000%, respectively! A transfer of about a fifth of India’s net savings which could have been used to import or make capital goods was lost. Furthermore, around 5% of the national income went to British personnel stationed in the sub-continent.

The Mughals conquerors made India their home even if the phenomenal amount of tax revenues they raised from Indian peasants, merchants, and others meant that 15% of the national income after tax went to 1% of the country’s labour force represented by the Mughal emperor and his court and the retinue of mansabdars, jargridars, zamindars, and native princes. The merchant and labouring Indians constituting 17% of the economy received 37% of the share of the national income, while the village economy of 72% obtained a share of 45%. The overall wealth of the economy and the coffers remained part of India (Maddison 2007). As stated earlier, India’s share of the global economy at the time of British entry, when the Mughals were still in power, was 27%. When the British left, it was just over 3%. Industry’s share of GDP at the time of British departure was 7.5% (Tharoor 2016, 2010).
7 Independent, Entrepreneurial India

The departure of the British and their waste of India necessitated the launch of a free, Indian economy, requiring an early formulation of policy and direction with which to support entrepreneurship development. Jawaharlal Nehru, India’s first Prime Minister, set about navigating the interests of the well-organised nationalist movement whose members were not averse to Western values and even some of the changes in the wider social system engineered by the British. His own penchant was for a kind of socialism with its focus on state led economic planning and state led industrial development which was supplemented by the strength of Gandhi’s legacy of self-sufficiency. A good number of commentators argue that the Nehruvian approach was at best a holistic approach to economic recovery where the state had to take a leadership role accompanied by distrust for private enterprise. Critics suggest that this approach stymied Indian entrepreneurship and economic progress because of the controls exercised by a ‘mixed economy’ marked by the absence of freedom to access global technology, the pressure for import substitution, growing red-tape and the denial of the right to compete globally. This led to corruption, the rise of the ‘Licence Raj, the imposition of even stricter controls by subsequent governments, the nationalisation of banks and the Monopolies and Restrictive Trade Practices Act (Das 2007). This quasi-command and control economy, at its height under the stewardship of Indira Gandhi, Nehru’s daughter, in the 1970s, may well have stifled the breath out of Indian entrepreneurs (Ahluwalia 1985).

Yet some of the measures introduced by Nehru and some of his followers, which have stood the test of time, spawned some of the most exciting developments in India. The creation of the Indian Institutes of Technology and later the Indian Institutes of Management would herald a bold attempt to foster a technological and professional cadre of people, many of whom would go on to create and lead highly successful enterprises. It did not stop the likes of the Tatas and the Indian Iron and Steel Company, for example to introduce, innovations in the manufacture of steel. It did not stop Aditya Birla, the country’s leading entrepreneur, to become a global entrepreneur in viscose staple fibre and palm oil, insulator and carbon black production, even though his success was dependent on him moving out of the country and building 70 factories in six countries with more than half of his profits being generated overseas. The likes of Dhirubhai Ambani could also make a fortune by building the world’s largest maker of paraxylene and emerging among the top five producers of polyester, polypropylene, and polyethylene. But unlike Aditya Birla, Ambani rose into prominence by playing the Licence Raj in India while also being focused exclusively on petrochemicals (Das 2008). It was possible to live the entrepreneurial dream under the alleged socialist shroud of Nehru’s government. This possibility raises many questions about how the enlightened state can drive entrepreneurship (witness China) as Mazzucato (2013) has analysed so clearly in her book, ‘The Entrepreneurial State’. Facile commentaries that simply reject the role state can play do so without researching in any depth the role that governments can and do play in enabling entrepreneurship to thrive.
However, it was essentially a fascination with the large state, and a revulsion of greedy capitalism nurtured by ruthless rent-seekers, which influenced policy development. Any sensitive commentator would understand why Nehru and his government would have been cautious of private gain. The most egregious form of corporate capitalism had just finished its 200-year odd innings in India leaving the country in ruins. It was necessary to build a hard infrastructure of roads and bridges and a soft infrastructure of technology-based education to propel the country towards an entrepreneurial future. Sadly, although these attempts at creating a new and protective scaffolding by the state may have been well-meant, the turgid process of planning, the restrictive practices, not to mention the absence of progressive policies in elementary education, simply helped to unleash a state cronyism that helped to generate either unproductive or destructive entrepreneurship.

The Nehruvian period did not necessarily regard entrepreneurs as a priority. They had relative low levels of representation in the five-year plans, but it was interesting to note that, intentionally or accidentally, the plans allowed entrepreneurship to embrace the work of both large business owners and jobless engineers. The smaller enterprises were lumped together with cooperatives, and artisans, and regarded as ‘small producers’, suggesting a low level of interest despite their strong presence.

A rather patronising attitude towards these ‘small producers’ was evident in the references to them being profligate with regards to costs or as rent-seeking usurpers of community resources. In other words, while it was easy to identify entrepreneurship as a way of generating employment, it was not regarded as a conduit for growth and development. Larger, richer firms were better bets. This position changed during the 1980s with a shift from supply side actions to reduce poverty, following the failure of the populist ‘garibi hatao’ (get rid of poverty) agenda of the late 1970s. With the focus still on larger business to stimulate economic growth, the sixth and seventh five-year plans looked to widening the country’s entrepreneurial base through several actions aimed at supporting small-scale industries in animal husbandry, beekeeping, manufacturing, and silk production. The purpose was to try and address market failures in wider capacity development through training. The two five-year plans provided for training opportunities in agricultural enterprise development through the ‘Training Rural Youth for Self-Employment (TRYSEM) for one million low income youth (6th FYP), while the 7th FYP attempted to address the needs of underemployed science and technology graduates in new, small business formation through the Entrepreneurship Development Programme. Articulating a visceral openness to the international market-place, the Indian government looked overseas for stimulants. But this time, the target was Indians abroad, or the successful non-resident Indians (NRIs), and their technological expertise, particularly in the USA and in the UK. Their expertise and riches could boost necessary developments in, for example, the telecommunications industry and replace international agency (e.g. the International Monetary Fund, or IMF) loans as sources of operating capital (Irani 2019). This was the beginning of the Indian chapter of a new phenomenon, that of transnational entrepreneurship where Indians who had taken up citizenship abroad and started new business in their adopted countries, could also form new businesses in their country of origin. This was
a new instrument in the growth and development policy toolbox of India, embedding entrepreneurship, Indian style, in its policy formulations.

8 Liberalised, Emancipated but Confused India

The year 1991 was a turning point as far as Indian economic reforms are concerned. A significant number of licensing requirements and other restrictions were removed unleashing a wave of all kinds of enterprise development. These heady days saw several prospective entrepreneurs unprepared for the hard graft of creative, productive, technology-driven enterprise creation. Joint ventures with new foreign partners fell apart because of a lack of compatibility of expertise between the Indians and their overseas co-founders. A few, like the Bajaj family under the leadership of the maverick entrepreneur, Rahul Bajaj, overcame the initial paradox of being a local leader in the manufacture of scooters in a closed, high-cost economy, and its sudden opening up to foreign competition, to make dramatic changes to production processes, marketing strategies and quality management (Das 2007), to compete with the likes of Japanese Honda and Italian Lambretta scooters.

The post-economic industrial and capital liberalisation programmes ushered in by the government of Narashiman Rao and his acclaimed finance minister, Manmohan Singh, pursued the entrepreneurship development agenda as a necessary corollary of global capital investment. The lawyer (Rao) and economist (Singh) duo had the intellectual strength and the political guile to withstand initial domestic discomfit of Indian business houses. They did so by capitalising on the enthusiasm of the growing technology (software) sector which had already shown its mettle by working as outsourcing agents of major software firms abroad, and by accommodating the overtures of the Confederation of Indian Industries (CII) which represented the collective interests of the technology firms and the high-end element of Indian industry. The Indian was now the global Indian, even if the attention was reserved primarily for the rich technocrats in the West, rather than the large diaspora community of labourers across Asia, Africa, and the Middle East. The significant remittances back home of this larger diaspora outside the West were not leveraged to generate entrepreneurial growth. Rather the focus was on large investments and established managerial expertise. Together with the range of economic reforms which facilitated private–public partnerships, all in the name of a new ‘fiscal discipline’, the role of government was being re-shaped from a distributive and centralised agency to that of an enabler for the creation of a new ‘entrepreneurial society’. Bear (2015) refers to this kind of society as a new compact between the public and private sector for the public infrastructure to be a vital source for new opportunity development.

The emergence of a technology entrepreneurship ecosystem, with substantial support from US-based NRIs, moved the spirit of enterprise from the domain of the family and the belief in entrepreneurs being born, to an awareness of the making of entrepreneurs from all backgrounds. But the origin of this new awareness stemmed from what Indians, cast adrift in the high seas of technocratic secularism in the West,
could achieve as new venture creators, venture capitalists, private equity players, and policy makers, irrespective of their caste, creed, or family heritage, with vigour in the Western style eco-system. A similar ecosystem has begun to take shape in India around the high-technology founders in the congested cities of Bengaluru, Hyderabad, Mumbai, Guragaon, Noida, and Delhi to Tier 3 cities, and including start-ups, mentors, growth stage investors, business angels, and venture capitalists. This process of importation and replication of ideas was instrumental in driving the new technology-based entrepreneurship movement forward.

So now, India generates entrepreneurs from all communities, whether the first-generation entrepreneurs from non-business communities or the next-generation members from traditional family businesses. Truly, a remarkable feat achieved in less than three decades! Just as the radically transformed attitude towards new venture creation of an IIT or IIM equipped tambram (Tamilian Brahmin) draws appreciation, so does the metamorphosis of a baniya youngster into an IIT and/or IIM equipped entrepreneur, elicit praise.

Today’s ‘new economy’ entrepreneurs and their ventures differ from the ‘old economy’ entrepreneurs and their businesses in several respects.

If asset heavy manufacturing and conventional service businesses characterised by incremental improvements in technology defined the old economy, asset light, online-based new service ventures characterised by rapidly changing technology represent the new economy.

In place of family-based management teams, the co-founders of the new ventures are ‘merit’ based, bringing in specific complimentary skills. Often, the founding team can be traced to the college dorm where you can assess both competence and compatibility. The skill set required for such ventures is domain specific, and dependent on execution-under-pressure skills. For sometime now, India has acquired a status of being one of the countries known for its hi-tech start-ups in the global economy (Gai and Joffe 2013), focusing, particularly on software.

Cities have tended to be the focal points for the proliferation of hi-tech capability and success, and New Delhi, Mumbai, Hyderabad, and Pune have all earned their spurs for being fertile grounds for software, business process outsourcing and technology services. But the city that stands out as India’s ‘Silicon Valley’, Bengaluru (known as Bangalore until 2014) probably has one of the best entrepreneurial ecosystems for start-ups in the world, one among nine international ‘Start-up Hubs’ outside the US (Pullen 2013). Vignette 1 below is a snapshot of the much-vaunted urban oasis of enterprise and technology in India.

Vignette 1: The Much-Vaunted Case of Bengaluru

Back in 2009, Reuters claimed that Bengaluru had come a long way since the birth of its IT industry. The move by the putative giants of the Indian software industry, Infosys and Wipro, in 1983, was followed by other technology firms, including foreign companies keen to cut costs by recruiting cheap labour, who grew their ventures around the would-be giants. The consequence of this
development and the rapid escalation of software prowess was a mix of high technology, particularly, digital technology capability, raising the living standards of the digital natives, with a reputation, globally for both skills and cheap labour.

Things have moved on in Bengaluru and indeed in other cities boasting a plethora of technology talent. In common with the buzz of global high-tech spots, the streets of Bengaluru and districts in the other cities are replete with full bars, coffee shops, restaurants and software technocrats and developers. Bengaluru gave way to Hyderabad the world’s most dynamic city, according to the World Economic Forum, based on strategies for innovation and technology. So now, the likes of Walmart and Amazon have joined Microsoft, Google, Apple, GE, and almost every other big brand name in the stellar community of high-technology firms. When Walmart bought Flipkart, an Indian e-commerce platform based in Bengaluru, for £12 bn., it was characterised as watershed moment for the start-up scene in the city, raising, however, alarm bells among many small traders in Indian cities fearing a skewing of their business prospects because of their dependency on Flipkart.

Part of the shift from standard engineering employment activity in factories to a pro-active start-up agenda, occurred not because they were driven to it by necessity but by a mindset geared towards starting something exciting in the field of software technology. Has this development been organic? Perhaps, to some extent, but we cannot discount for the number of programmes and initiatives, such as the not-for-profit 10,000 start-ups, which connects start-ups with funders, accelerators and mentors, with a view to building 10,000 new businesses in the city by 2024. The incubator’s move from quantity to the quality of start-ups explains why and how the trend there is towards work on ‘deep tech’, such as blockchain, AI, and machine learning.

Could there be something which speaks about the Indianness of the evolution in a city such as Bangalore? Take the Microsoft Centre in Bengaluru. You can find the same tech city props that you might find anywhere else in the world, with the usual assortment of beanbags and coffee served in steel tumblers. The centre is staffed with over 60 full-time researchers abroad with their PhDs from abroad working on state-of-the-art R&D projects of Microsoft, including mobility and cryptography. On the one hand, such a scenario helps to change the stereotypical perception that India does not have the right environment of high-end research and development. Crucially, the development of, for example, a Bing tool which allows searches for locations with incomplete or even correct addresses could perhaps be only developed in India which the high number of undocumented and unregistered properties, a readymade test ground for a tool that could be used globally.

Not unlike some of its more established competitors, Bengaluru’s tech scene struggles with gender equality. In 2017, just 2% of all equity funding that was raised went to start-ups with a female founder.
If entrepreneurship was the clarion call for the new economics of India, then innovation, its handmaiden, could not be left behind. Innovation could resolve anomalies in and contradictions in trade policy, intellectual property development issues, and the growth of communications technologies. There was a massive push by the World Trade Organisation and the USA to ensure that Indian policies aligned with global standards, enabling the Indian government to set new agendas for protecting and prioritising access to monopoly rights especially in the food, pharmaceuticals and high-technology sectors (space and atomic energy), and encourage process patents. A positive externality of the support for process patenting was the possibility now of producing versions of drugs and technologies using an alternative process without paying royalties. A genuinely healthy outcome of this was that Indian produced generic drugs facilitated the significant lowering of their prices, making India into one of the largest producers of pharmaceutical drugs in the world (Irani 2019). In fact, India is the largest provider of generic drugs globally. The Indian pharmaceutical sector industry supplies over 50% of global demand for various vaccines, 40% of generic demand in the USA and 25% of all medicine in UK. Currently, over 80% of the antiretroviral drugs used globally to combat Acquired Immune Deficiency Syndrome (AIDS) are supplied by Indian pharmaceutical firms (IBEF 2020). The country also has a large community of engineers, scientists, and entrepreneurs who have the capability for raising the economic and social value of the industry.

The idea of the innovation advantage was not limited to the high-flying business elites. Alongside the technocrats and their government backers were also those who argued for the stronger legitimisation of grassroots innovation of the poor. Traditional knowledge and indigenous resources were granted the status of property and craftsmen and women in urban and, especially, rural areas became part of an inclusive entrepreneurship and innovation agenda championed globally by the World Bank and the Organisation for Economic Cooperation and Development (OECD). By 2003 and following a welter of measures that moved attention to product patenting, which could ostensibly protect and commodify materials of daily Indian life, such as basamati rice, turmeric and neem, and quantify the value of labour associated with their production, the government even called for a National Innovation System (NIS) as part of its Science and Technology Policy. NISs and Regional Innovation Systems (RISs) had become part and parcel of framing European and North American innovation policy. Joining the global club of capital of new technology development and innovation meant India did not have any other choice. The saffron heat of technology in India followed the white heat of technology mission of the UK, and the Silicon Valley dreams of technology entrepreneurs in the USA many of whom helped to fashion Indian policy. India, however, took the drive for entrepreneurship and innovation one step further. As Irani (2019) notes business school professors (with many educated in the USA), consultancies (with many funded by American capital or operating as India branches of the top five), corporate executives (with their new Corporate Social Responsibility agenda) joined hands with the dynamic informal economy to hoist their innovation mast high in the Indian skies. The Planning Commission broke their straitjackets to produce a report entitled ‘Creating a Vibrant Entrepreneurial
Ecosystem in India’ in 2012, and soon Davos was beckoning Indian bureaucrats and corporate vendors to articulate and conflate two separate strands of Indian innovation. One was ‘juggad’ (a Punjabi word for informal solutions to problems) and its underpinning mindset of ‘dhandha’ (or living), both requiring hands-on exposure which was more useful than classroom based education. The other was high technology-based innovation which demanded exposure to higher education and global capital.

The willing conflation of the informal economy of the mainly poor and their micro-enterprises with the high-technology temples of the rich was a trope for extending a no-holds barred culture of entrepreneurship where every citizen could be seen to be doing something for their country. Prahalad (2005) had failed to recognise the entrepreneurial poor because his interest was in the market that the meagre income of the poor could offer multinational corporations. The entrepreneurial poor was a new category of entrepreneurial denizens whose informal economic pursuits were an alternative form of economic value creation. The arguments offered by Sanyal (2007) and Banerjee and Dufflo (2011) that the poor could hardly be made to accumulate capital and that entrepreneurship did not lift the poor out of poverty, could hardly disturb the anti-poverty discourse of the privileged but sensitive corporates, or their public sector champions!

The universalisation of the entrepreneurial spirit response was driven in part by the incorporation of entrepreneurship as a legitimate field of study in especially engineering and management schools. E-Cells in engineering colleges emerged as safe spaces for triggering awareness and action promising entrepreneurial action among students from both business and non-business communities. The National Entrepreneurship Network (NEN), set up by the US-based Wadhwani Foundation in partnership with the IIMs and the IITs together with other institutions, engaged in designing and delivered courses on New Venture Creation, organised Business Plan Competitions, instituted E-Cells and started Incubation Centres. Over a decade plus years, the seed sown by NEN has blossomed into a nursery of E-Cells engaged in promoting start-ups at the college level. Going beyond E-Cells, IIM Ahmedabad built a reputed Centre for Incubation and other institutions started conducting public programs on ‘Start Your Business’ projects for aspiring entrepreneurs and ‘Grow Your Business’ programmes for early growth stage entrepreneurs.

Besides E-Cells, the number of higher education institutions setting up Incubation Centres has been increasing, with established private firms following the global trend and chipping in by rolling out start-up accelerators. However, the paucity of experienced mentors and domain experts restricts the effectiveness of these institutions. Entrepreneurship is the youngest academic discipline in India, little more than a decade in existence, leading to a mismatch between the start-up entrepreneurs’ needs and the availability of faculty and mentor expertise.

With the enthroning of the Modi government (now rethroned), a rash of new developments began to surface around the country. The Planning Commission was replaced by the National Institution for Transforming India, or NITI Aayog, in 2015, paying due homage to the magic of entrepreneurship and promising to create a knowledge, innovation, and entrepreneurial support system. State-led planning and
distribution gave way to national coordination of entrepreneurial governance of the states and the centre. If the state withdrew, the happy citizens could be set free to create their own wealth or disappear fast into the immiserating abyss of poverty. If the poor could be looked at as ‘opportunities’ by themselves and by the rich, then it was easier to relinquish any Gandhian notion of responsibility towards them.

Let us then examine briefly in this final part of the introduction how the Indian economy recasts its entrepreneurial promise. What is entrepreneurial about the new economy in India?

9 The New Indian Economy of Entrepreneurship

The Indian economy has made important strides in the second decade of the new century. Official figures suggest that 124 new firms were created in 2018 representing a jump of a little over 77% over a four year period (from the creation of 70,000 new firms in 2014). Approximately, 22.62 Cr (or 226,000,000) new jobs were created in urban and rural areas during the six years between 2011–12 and 2017–18. Before COVID-19 reared its pandemic head, GDP growth was expected to grow in the range of 6.0–6.5% in 2020–21 (Economic Survey 2019–20). Underpinning these impressive figures was the apparent newness of government initiatives such as digital India, Startup India, RuPay and UPI transactions, GeM, and improvements in the ease of doing business, all attracting record foreign investment. The World Bank ranked India at 63rd position among 190 nations in their ‘Ease of Doing Business’ index. The move upwards of 14 places from 77 in 2018 (100 in 2017 and 130 in 2016) was an acknowledgement of the multiple economic reforms by the current Indian government, a total of 59 regulatory reforms in 2018/19 which accounts for a fifth of all recorded reforms made worldwide (World Bank 2019; Economic Times 2020).

Unpicking such baseline data may appear to be a cynical exercise. However, if ‘truth to power’ has any meaning at all, then there is a need to shed some light on what we think we know. First, the latest World Bank ranking fell short of the Indian government’s target of 50th place. Second, the report was an assessment of improvement in the ease of doing business environment in Delhi and Mumbai, just two out of nearly 300 cities. The overall improvements mask critical deficiencies in different and especially rural parts of the country. Third, India continues to have more problems in enforcing contracts than 162 other countries (rank of 163rd) and registering property (rank of 154), which are deemed essential metrics for securing a place among the capitalist elite of the OECD’s high income countries. If it still takes 58 days and costs on average 7.8% of a property’s value to register a new business, and 1,445 days to resolve a commercial dispute, its loose institutional arrangements adversely affect the prospects of many of its highly talented individuals to launch and grow their new ventures. Fourth, it should be noted that the World Bank’s indicators are primarily regulatory, and therefore, they do not account for a range of other factors that would constitute an environment conductive to or framework conditions
for entrepreneurship, including people’s attitudes, propensity and capacity for new venture formation, access to start-up finance.

The Economic Survey of 2019–20 has come up with a rather novel conceptualisation for explaining the state of the Indian economy. The Chief Economic Adviser to the Government of India, Krishnamurthy Subramanian, added a spicy touch to the survey by including a chapter on ‘Thalinomics’. ‘Thalinomics: the Economics of a Plate of Food in India’ quantifies what a common person pays for a thali (a round platter for serving food in India and South-east Asia, and rather popular in Indian restaurants in the United Kingdom!) The idea was to use the metaphor of food which the government claimed was getting cheaper in the country, to explain an idiosyncratic approach to the travails and wonders of the economy. If there was ever an instance of public innovation at work, this was certainly an interesting example!

The little bowls of vegetables, lentils, pickles with a dash of chilli and rotis (Indian bread) are an attractive proposition on the table, but they are, metaphorically, a platter of competing flavours and mismatched recipe for the Indian economy, as Mihir Sharma’s op ed for Bloomberg, suggests. Add to that the grand invocations of philosophical writings from Adam Smith to Aristotle, Bhagavad Gita, Confucius, and the Rig Veda, together with some amount of data sourcing from Wikipedia, we might have a prospect of economic indigestion far too hard for entrepreneurs to bear (Sharma 2020).

Figure 1 shows the trajectory of GDP growth, decline and stagnation from 1961 to date and suggests that the four years between 2014–15 and 2017–18 were indeed heady days with growth averaging at approximately 8%. But, subsequently, GDP

![GDP growth rates and annual change in India: 1961–2020.](https://www.macrotrends.net/countries/IND/india/gdp-growth-rate)
growth rates have either remained relatively low or have dropped. Do GDP growth rates have anything to do with entrepreneurship? Recessions can engender new innovations and entrepreneurial solutions in most countries. However, a healthy, growing economy is made possible by a mix of stolid performance by incumbents as well as new entrants often working in close contractual proximity to their larger, established counterparts. What does that mix produce and is it entirely reliant on the traditional neoclassical factors of land and capital contributing to growth?

Using an aggregate production function, the Nobel Prize winning economist, Solow (1957) found that only around 13% of US growth in GDP could be attributable to increase in measured inputs, labour, and capital. The remainder was unexplained, and he proposed that the large residual, 87% of the change in growth, represented a rather elusive concept of technological change. Other writers introduced other variables such as human capital. Explaining growth purely in terms of factor inputs provides only a partial explanation; what matters is the way in which entrepreneurs are supported and incentivised by institutions. The idea that entrepreneurship and institutions are pivotal in explaining the variation in economic growth accounted for by the ‘residual’ was central to the ideas of Baumol (1990, 1993) who argued that even if all countries had similar supplies of entrepreneurs, the institutional structure would determine the allocation to productive, unproductive, and destructive entrepreneurship (Acs et al. 2018).

If we are to accept the findings of the studies referred to above (and many other that have corroborated or nuanced these findings in terms of these relationships between strong and weak institutions, entrepreneurship and economic growth), then we could deduce that uneven growth marked by sudden peaks of high growth may be responsible for either spurts of entrepreneurial activity or indifferent institutional scaffolding of these activities. The fact that India’s uneven growth patterns do not reflect the alacrity of individual entrepreneurial endeavour and their sustainable development, may be attributable to either ad hoc or chaotic institutional activity. While the Indian government has acknowledged recent declines in GDP growth and low levels of consumer spending, they have chosen to blame the global economic climate scenario. Indeed, a slippery and weak environment for global manufacturing, trade and demand has led to the slowing down of the Indian economy with GDP growth moderating to 4.18% in 2019–20, lower than 6.12% in 2018–19 and 7.04% in 2017–18 (all in 2011–12 prices. This has been complemented by a sharp decline in real fixed investment induced by a sluggish growth of real consumption which has weighed down GDP growth from second half of 2018–19 to first half of 2019–20 (Ministry of Statistics 2020).

The point about the importance of institutional support and incentivisation is seen quite clearly when India is compared with Bangladesh (one of the poorest economies in the world), Vietnam (a rising emerging economy), and China (which has moved beyond emergence to being a global leader), all having been able to move up the value chain by increasing their competitiveness in the international market. They have done so through the practice of organisational innovation and productive institutional arrangements including improved delivery time and domestic production capacity.
However patchy the function and performance of institutions in India, evidence of better education provision, ease of doing business, infrastructure improvements, particularly in metros and policies such as ‘the Start-Up India initiative’ has catapulted India to third position globally in terms of the number of new firms created. This growth has run parallel to growth in the wider economy since 2014, with the number of new firms in the formal sector growing at a cumulative annual growth rate of 12.2% from 2014–2018 (it was 3.8% from 2006–2014) according to the World Bank (Economic Survey 2019–2020). In absolute terms, the rates represent 124,000 new firms in 2018 (from 70,000 in 2014) or a growth of nearly 80% taking the comparative figures for those two years. Interestingly, the spatial distribution of entrepreneurial activity in manufacturing indicates that entrepreneurship has not been restricted to the traditional, moneyed heartlands of Delhi and Mumbai and their surrounds. The highest rates can be found in the western province of Gujarat, the North-eastern state of Meghalaya, in the South-east in Puducherry, and in the Northern states of Punjab and Rajastahan. But manufacturing entrepreneurship pales by comparison to the service industry. The survey’s data showed that new firm creation in services sector (at around 85,000) was considerably higher than the c15,000 new firms created in manufacturing. The lowest levels of new firm manufacturing were to be found in infrastructure and agriculture (approximately, 5000 new firms each). The data confirms the expectation that entrepreneurial opportunities are more likely to lie in those sectors which have created an ecosystem of talent, technology, financial and human resources, and a degree of institutional support, mainly in urban areas. In India’s case, this expectation lies in stronger entrepreneurial activities and the consolidation in the services sector with software technology playing a key role. Figure 2 shows the comparative business formation of data of several countries indicating the growth of new firms in India climbing at a higher rate than many other nations, especially in Asia.

Much has been made about the wealth at the bottom of the pyramid ever since Prahalad (2005) and his glittering entourage of American scholars made the phrase a necessary device for corporate social responsibility. Interpreting the bottom of the pyramid in terms of the lowest level of administrative units in India, the ‘district’, the survey shows that these units have a profound impact on wealth creation at the grassroots level, with a 10% increase in registration of new firms at that level yielding a 1.8% increase in gross district domestic product (or GDDP). How do we analyse this phenomenon knowing that infrastructure and knowledge creation barriers, lack of access to resources and education, are major impediments to the functioning of entrepreneurship, let alone their success? The survey points to literacy and education in districts as being the key supply side factors foster local entrepreneurship. Citing the example of the eastern part of India which has the country’s lowest literacy rate of about 59.6% according to the census of 2011, the survey identifies the region as having the lowest new firm formation rate. It goes on to make a statistical point about the impact of literacy on entrepreneurship being most pronounced when it is above 70%. As we shall note later, the correlation between patchy improved literacy and entrepreneurship may not hold. Inculcating a notion of entrepreneurship as a responsible civic duty especially in circumstances of economic scarcity and social
Fig. 2  New business formation in some entrepreneurially driven countries (excluding China) from 2006 to 2018

fragility can push people to the pursuit of activities which they may not necessarily consider to be entrepreneurial.

Since we are reflecting on statistical management of raw data, it is worth dwelling briefly on the implications of outputs per capita. Focusing primarily on the formal economy, the survey finds that on a per-capita basis, India had rather low rates of entrepreneurship. During the ten-year period of 2006–2016, the mean number of new firms registered per year per 1000 workers was 0.10. Comparisons with so-called developed economies are always conditional, but a simple contrast with the mean entrepreneurial intensity for the UK (12.22) and the USA (12.12) suggests that India may have a long climb ahead if it has ambitions to acquire high global status as an entrepreneurial economy, as measured by new firm density, let alone reaching the target of becoming a $5 trillion economy. The World Bank’s annual data based on their 2019 report shows that new business density per 1,000 people stood at 0.14. The proximate countries on this measure were Madagascar (0.13), Pakistan (0.1), Iraq (0.1), Canada (0.16), Argentina (0.2), and Afghanistan (0.21).2

The exclusion of all other new firms (i.e. those that are not corporates) does reduce the overall impact value of new firm creation in that significant numbers of non-corporate and informal economy enterprises are left out of the count. This is indeed

2'The new business entry density is defined as the number of newly registered corporations per 1000 working-age people (those ages 15–64). As in the World Bank’s annual Doing Business report, the units of measurement are private, formal sector companies with limited liability’ https://www.doingbusiness.org/en/data/exploretopics/entrepreneurship, last accessed- 25 May 2020.
a problem in that it ignores the actual incidence of entrepreneurial activity, recognising only that which are formally registered. In emerging economies where relatively under-resourced institutions and often unenforceable legislation are common deficiencies, the limited count simply provides figures that are evaluated by way of comparison to the state of play in developed economies.

At least, the recognition of the contribution that micro- and small- and medium-sized enterprises (MSMEs) can make to an economy shows an appreciation of drivers of growth through innovation and entrepreneurship. The outcome that inevitably catches the attention of government is employment creation and especially when new firms offer such opportunities at relatively lower capital cost. The Economic Survey shows lists a wide range of government initiatives that ensure better credit flow, technology up-gradation, ease of doing business and market access, including the sanctioning of 159,422 loans worth INR 49,330 Cr. (or approximately US$ 500 million), the interest subsidy of 2% for all Goods and Sales Tax (GST registered MSMEs on incremental credit up to INR 1 Cr, enabling compulsory purchase from MSME by Central Public Sector Undertakings (CPSUs) of at least 25% of their total purchases, with 3% of that being reserved for female entrepreneurs. Underpinning these positive measures are government schemes such as ‘Make in India’, which aims to create 4 Cr (40,000,000) well-paid jobs by 2025 and double that by 2030. According to the World Bank (2018), India needs to create more than eight million jobs every year to ensure that it keeps its employment rate constant. This is because the country’s working-age population, which starts at a very low age level of 15 years, appears to be increasing by 1.3 million every month. The same study also shows that the declining rate of jobs in India in recent times is because of the unfortunate development of women leaving the job market marked by a falling female employment rate of 5% per year between the ten years of 2005–2015. The overall employment rate of 52% in 2015 is well below that of smaller and often poorer countries such as Nepal (81%), Maldives (66%), Bhutan (65%), and Bangladesh (60%) but above Pakistan (51%), Sri Lanka (49%), and Afghanistan (48%) (World Bank 2018; Deccan Herald 2020).

10 By Way of Some Concluding Observations

This eclectic account attempts only to find some patterns in the evolution of entrepreneurship in India, patterns that might capture some images, if not the complete mosaic art of the vast and varied history of the country’s entrepreneurial endeavours. The absence of data for the early and pre-Mughal age makes this task difficult. What we do know, however, is the openness of an environment conducive to the development of new ideas, learning, cultural exchange, and trade which would have created numerous opportunities for the provision of new goods and services together with the mobilisation of resources. The organisational arrangements for availing of those opportunities may have at best been fluid, reflecting a functional response to the need for exchange in different markets. This openness to the world
allowed for two opposite strands of global exchange—the increase in local wealth creation and the appropriation of that wealth through conquest during Mughal times. Feudal times, anywhere in the world, probably reflect a stronger binary mode of wealth creation and distribution—Land generated wealth only because the poor tilled them, while military power and appointed agents of rulers appropriated the wealth for the latter. In between torrid times of great cruelty and productive assimilation, the Mughals came, saw, and settled down in the country. The enormity of the wealth that was produced at that time could not have been possible without the ingenuity of the innovators and entrepreneurs of those times. We find some of that evidence in the rise of the artisans and the merchant traders whose agency may have been circumscribed by the feudal order of that age. As we have seen, however, the mix of that limited agency and the cultivation of economic and cultural power by the Mughal overlords produced extraordinary wealth much of which was generated from the spread of significantly rich resources in the land.

The British exploited the lack of resilient organisational capability and imposed their own. The openness to trade, business, and entrepreneurship was a function of British supremacy that regarded India as an outpost for the improvement of Britain alone. If the wealth of a country is plundered by ruthless hordes, then the tendency is for that period of plunder to last for a short period of time. If that wealth was to be appropriated through the introduction of new technologies and above all careful, hegemonic organisation over time, then there are spillover effects which even the ‘lumpen subordinate’ could benefit from over time. The British left India bereft of economic wealth, but they had not been able to subjugate the culture, the art, and the spirit of collective efficacy that formed a new tryst with destiny.

The openness to the world has remained strong both out of necessity and opportunity ever since India became an independent country. However, the trials and tribulations of the nation as an enterprise and its effective governance have left both scars and prospects. If ever there was a case to be made for driving home the importance of the wider economic and social environment, the framework conditions and the institutions as the necessary set of building blocks of enterprise creation and development, then India provides the one of the richest canvases for experimental research on the subject of entrepreneurship and innovation.

That canvas of Indian enterprise has paradox written into its fabric. The rigidities of its institutions have thwarted enterprise development and continues to do so, yet the country is not short of policies for and instruments of enterprise. The plethora of initiatives that have crisscrossed the paths of both state benefaction and economic liberation have left a bewildering array of possibilities for Indian entrepreneurs. Some of them such as the recent policy on innovation and entrepreneurship by the Modi government is probably one the finest examples of strategic policy formulation supporting the creation and growth of innovative enterprise. Yet the absence of skills sets, the underpinning education, and institutional capability means that the policy is difficult to translate in terms of developing a critical mass of creative enterprise outside the pockets of information and communications technology, pharmaceuticals, and a few other sectors.
The continuing measures of centralised policy constrain easy access to programmes and funds, yet that does not stop smart, new technology start-ups and a technology ecosystem prevailing. The nation state and its machinery rally its citizens to think and be entrepreneurial, yet it dispenses its liberalised regime’s largesse to the technocratic middle classes who act as agents of a new form of governance. The poorer sections of the community are expected to find solutions themselves through ‘jugaad’ and ‘dhanda’ or through micro-enterprise development with the assistance of non-governmental organisations. The cognoscenti heap justifiable praise on the entry of Indian entrepreneurs in the knowledge economy, with particular areas of excellence in IT-related services, pharmaceuticals (mainly generic), telecoms, petro-chemicals and steel. The likes of Bharat Forge, Infosys, Wipro, Tata Consultancy Services, and Sundaram Fasteners have joined their global knowledge counterparts to have a significant presence in both the Indian and foreign markets.

The country produces approximately 300,000 computer science graduates a year, yet education institutions can boast of approximately 100 computer science Ph.D.s, a small fraction of the 1500–2000 that get awarded in the USA, or China, every year. Citation rates of academic researchers are way below those of Chinese researchers, impugning the knowledge base of its putative knowledge economy. There are well over 100, dollar billionaires (Forbes 2020), mostly living in cities, but there are nearly 300 million people living in poverty with 80% of them having their home in rural areas, living on less than $3.10 a day, the World Bank’s median poverty line (World Bank 2016). And 21%, or more than 250 million people, survive on less than $2 a day. Moni Basu, writing for CNN, sums it up neatly when she notes that in India, the wealth of 16 people is equal to the wealth of 600 million people (CNN u.d.) The paradox that defines the state of India and her people is evident at all levels. Reflecting on the macro-economy, The Economist (2020) concludes:

India has always been a paradox. Its economy is large but its people are poor. Its institutions are strong enough to warrant an investment-grade rating, but its policymaking is not. Its public debt is high, its foreign debt modest. To these long-standing paradoxes, some observers add another. India, they say, is like a Monet painting. Up close it’s a big old mess. But from afar it still has the power to beguile. (The Economist 2020)

Contradictions abound everywhere. Detroit is not the same as California, London is not the same as Newcastle in the UK, and Gansu is not the same as Shanghai in China. Comparisons using the Rostowian (1960) and Porterian-Schwabian (2008) conceptualisation of different stages of the economy are at best limited, if not facile, because not all parts of a country grow together. Moreover, human lives and development cannot be measured purely by economic metrics. More importantly, if the paradoxes have any meaning, they matter mainly to Indians and how they see their country accommodating the contradictions of being the third-largest economy in purchasing power terms while housing some of the world’s poorest. Entrepreneurship and innovation in India obtain in the gleaming towers of India’s metros, in the urbanisation of rural villages, and in the bottom-up approach of indigenous innovation flowing from the villages and traditional knowledge. The challenge lies not in the different explanations but how the exponents (policy makers and entrepreneurial agents) can
combine and recombine these different strands to extend the scope and value of entrepreneurship that has an effect on the lives of all Indians. This will be possible when India invests financial, social, and human capital together in policy making, in spurring innovation in all sectors through the agency of technology entrepreneurs who can work in tandem with other entrepreneurs in alternate enterprises and embed entrepreneurs’ transnational potential.

11 In the Rest of This Volume

The mosaic of Indian entrepreneurship is perhaps too large and too various in its mix of colours, glasses, and stones to explain in one book. But the authors who have worked with me write eloquently about the current state of Indian entrepreneurship. Together we reflect on the underlying issues and wider implications of entrepreneurship in India. This book is not about the hyper mode construction of technology-based enterprises. It is about policy, people, communities, and organisation. It is about the economy and the society in which entrepreneurship emerges.

Vijaya Gupta continues the journey after this Introduction to chart the development of policy and how that is playing out in modern India. This is followed by Amitava Bhattacharya’s narration of a personal story based on the phenomenal work of his social enterprise, Banglanatak dot com, examining the under representation of culture and the arts and the rich lives of poor artists and performers in Indian entrepreneurship and in the wider economy, and how that can be transformed by imagining art for life. Sarika Pruthi draws on a story of Indian entrepreneurship that is transnational in scope and value extending well beyond Indian contours. The last chapter of the book is an examination of technological innovation in public R&D laboratories in India by Santanu Roy and Jay Mitra, and their critical role for creating an entrepreneurial and innovative environment in India. The book is threaded through by a selection of a revealing set of mini case studies of Indian entrepreneurs from the unique state of Goa, prepared by Renji George Amballoor. The focus on Goa for these cases was based on the idea of taking any one state which did not necessarily feature high on the entrepreneurial map of India but whose entrepreneurial representatives capture well the breadth and depth of the dynamism of Indian entrepreneurs.

The plan was not to seek a linear pathway of discourse but rather to follow the currents of precept and practice across the many rivers of Indian entrepreneurship today. Do many rivers contribute to an idea of an ecosystem? Perhaps they allow for the flow of knowledge, resources and creativity, if the waters are not clogged up by either ideology or waste. Each chapter in this book is a metaphorical river flowing through and for an evolving ecosystem. The chapters address policy formulation affecting entrepreneurship development and supply side issues such as the infrastructure conditions for technology and innovation and the critical role of networked public sector research. The waters of the demand side flow across the creation of different types of firms, the experience of transnational venturing and the crucial, entrepreneurial resilience of art, culture and social enterprise to create new lives
and habitats from tradition. The rivers do not necessarily flow into a vast oceanic ecosystem, but they reveal the currents and the eddies that could create either fertile environments or obscure development. Few countries in the world possess the strength and weaknesses of paradox than India. We explore whether productive entrepreneurship and innovation in all its different forms can attempt to resolve the tensions or live creatively amidst the paradox.

Mosaics or rivers—you choose the metaphor! India is rich enough to offer both!

This book has several limitations. We have not examined the role of female or young entrepreneurs specifically. Neither have we looked at the prospective cutting edge of technology, nor have we explored the distinctive patterns of urban and rural entrepreneurship. This series has every intention to cover issues that matter. The volumes that follow should pick up where we leave with this book and address a range of issues pertinent to entrepreneurship development in the country.

I hope the reader will find in this book the possibilities for understanding some of the trajectory of developments in entrepreneurship and innovation and engage with us in generating new ideas for encouraging and making sense of creativity, opportunity identification, mobilising resources and creating cultural, personal, economic, and social value in India.

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