

Tech SMEs in India

*Roz Price
Institute of Development Studies
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Question

- *What are the best estimates of survival / failure rates of Indian Tech SMEs (Small and Medium Enterprises)?*
- *What are the key constraints faced by tech SMEs in India in raising capital (Indian financial market failures/high commercial lending rates/lower levels of risk tolerance/ tech entrepreneurs lacking the capacity to make their business ideas bankable etc.)? What are the estimates of capital not raised due to the operation of these constraints? What is the evidence of firms benefitting by raising funds at lower interest rates, or in exchange for less equity if international investors accept lower returns?*
- *What is the ratio of investment to profit for Indian tech SMEs based on the most current data?*

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1. Summary

In India, the micro, small and medium sized enterprise (MSME) sector accounts for over 28% of GDP while creating employment for about 111 million people (Annual Report Ministry of MSME 2017-18 cited in Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 1). However, despite steps taken by the Government and Reserve Bank of India to address the issues faced by MSMEs, the sector remains informal and vulnerable to structural and cyclical shocks (Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 1). This rapid review explores the key constraints that limit the growth and survival of MSMEs in India; providing statistics where possible on factors such as funding gap estimates and failure rates. Important to note is that much of the literature found during this review focuses on MSMEs in general and does not distinguish between tech and non-tech enterprises.

This rapid review uses a mix of academic and grey literature, with reliance on industry and financial sector reports from the private sector. The review is not comprehensive. Although MSMEs and the entrepreneurial ecosystem in India has received increased attention in recent years, availability of data remains a key issue and reliable data continues to pose a challenge for research in this area (Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 12). Another issue concerns the definition of MSMEs, as MSMEs are defined in different ways and according to different criteria across the world. In India, the definition of MSMEs is based on initial investment in plant and machinery as per the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006. Concerns have been raised that this definition is outdated and does not include enterprises that may be larger than the specified criteria but still face similar issues as MSMEs (Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 18; IFC/Intellicap, 2018, p. 16). Another issue to consider which was not focused on due to the time limits of this rapid review, is that MSMEs can be at very different stages of development (i.e. startups vs established), and this is not always distinguished in the literature.

Key findings include:

- There are several estimates of failure/survival rate put forward for Indian MSMEs in the literature, however, when looked at more closely the original sources do not stand up to scrutiny. No failure rates could be found for Indian tech MSMEs specifically. However, the academic literature generally reports startups as having high failure rates relative to established firms (but these are not specific to India).
- Entrepreneurial characteristics, resources, strategy, and organisational structure and systems have all been highlighted as important factors in startup survival.
- Entrepreneurship is a complex and dynamic process and can be considered a continuous learning process. Results from a study of 45 high-tech startups headquartered in India, indicates key factors that reduce the time to survival include: entrepreneur's prior startup experience, explorative mode of learning transformation, causal decision-making of the entrepreneur and availability of funding for the startup (Krishna, 2018).
- The major constraints for entrepreneurship development in India include government policies; financial support; and cultural and social norms (Shukla et al., 2018). An IBM Institute for Business Value (2017) study of 100 venture capitalists identified the following as the top roadblocks for India's startups: lack of innovation, lack of skilled workforce, lack of sufficient funding, inadequate formal mentoring, poor business ethics, lack of experienced leadership.

- A strong and vibrant entrepreneurial ecosystem is found to have a positive impact on startup fertility, stability and growth. Hence, ecosystem promotion is increasingly being supported through policy development in India. The entrepreneurial ecosystem for technology startups is unique (Bala Subrahmanya, 2017, 2018).
- The lack of adequate and timely access to finance is seen as the biggest challenge for the Indian MSME sector (IFC/Intellectap, 2018). Furthermore, women owning SMEs in India widely point to the lack of access to capital as the biggest constraint in running their businesses (IFC, 2019). Key issues in India include the risk in lending to the MSME sector are high, cost-to-serve barriers, lender coverage issues (Expert Committee on Micro, Small and Medium Enterprises, 2019).
- The overall demand for both debt and equity finance by MSMEs in India is estimated at INR 87.7 trillion (USD 1.4 trillion). Viable and addressable debt demand is estimated to be INR 36.7 trillion (USD 565 billion); hence the remaining credit gap is INR 51 trillion (IFC/Intellectap, 2018). The same study finds that 84% of the overall debt demand is financed from informal sources. The Expert Committee on Micro, Small and Medium Enterprises (2019), using the IFC/Intellectap addressable debt figure, put the overall credit gap in the MSME sector in India to be INR 20 – 25 trillion. Note these figures are for the whole MSME sector.
- According to Inc42 (2019), startups in India often face a problem in hiring due to a lack of adequate skilled talent in India resulting in many startups registering their entities outside India. Data on India's labour market remains patchy (Sengupta & Singh, 2019; Woetzel, Madgavkar & Gupta, 2017), limiting the literature's ability to give a detailed picture of the possible constraints a lack of skilled labour poses to MSMEs. More research is needed.
- Given the limited time frame of this review and the paucity of reliable data for India, information could not be found on return on investment for Indian tech SMEs, whether new investment in India displaces other investment or how much existing Indian tech firms have earned from international partnerships.

2. Survival/failure rates for Indian SMEs

There are several estimates of failure/survival rate put forward for Indian MSMEs. A number of the estimates mentioned in the literature when looked at more closely **do not hold up to scrutiny**. For example, an entrepreneurial study by the IBM Institute for Business Value using survey results carried out with Oxford Economics on startups in India, quotes that 90% of startups in India fail within the first five years. The report took this number from a news article on SME failure by Natasha Jog from 2016,¹ who in turn got the number from an article in Forbes on SME failure (not specifically Indian),² who got the statistic from a 2014 Fortune article on why startups fail.³ The “9 out of 10 SMEs fail” statistic has long been in the literature but remains unsubstantiated (see Kessler, 2014). Mehta (2014) in an article on Your Story reports relatively

¹ See Jog, Natasha. (2016, July) “Yes, Indian Start-Ups Are Failing. Why That’s Not All Bad.” NDTV. <http://www.ndtv.com/blog/yes-indian-start-ups-are-failing-why-thats-not-all-bad-1427517>

² See Patel, N. (2015, January). “90% Of Startups Fail: Here's What You Need To Know About The 10%.” Forbes. <https://www.forbes.com/sites/neilpatel/2015/01/16/90-of-startups-will-fail-heres-what-you-need-to-know-about-the-10/#4a32db1c6679>

³ See Griffith, E. (2014, September). “Why startups fail, according to their founders”. Fortune. <https://fortune.com/2014/09/25/why-startups-fail-according-to-their-founders/>

high failure rates for India, with around 80% of small businesses failing in the first 3 years. However, where this statistic is from could not be verified. Another news article in Economic Times India quotes 60% failure rate for Indian SMEs, but again this statistic is not verifiable and therefore not robust (Economic times India, 2018a). Additionally, **these failure rates concern MSMEs in general not tech MSMEs specifically**, adding a further layer of uncertainty to their exact significance.

In the academic literature, startups have generally been observed to have a **high failure rate** relative to established firms (Song et al 2008; Hannan and Freeman 1984; Hay et al 1993; Robinson 1998 all cited in Bala Subrahmanya, 2015, p. 56). They often face large and experienced competitors, powerful suppliers, sceptical customers and scarce resources. **Entrepreneurial characteristics, resources, strategy, and organisational structure and systems have all been highlighted as important factors in startup survival** (Gilbert, McDougall and Audretsch 2006 cited in Bala Subrahmanya, 2015, p. 57). Geographical location is also another important but external influencer of startup survival and growth. Therefore, for growth and survival a startup in India needs to successfully overcome the liability of newness, fighting against the uncertainty of value it promises to its stakeholders and dealing with underdeveloped markets (Bala Subrahmanya, 2015).

Bala Subrahmanya (2015, p. 62) cautions against attempts at artificially reanimating “sick” or failing SMEs. There is a need for appropriate mechanisms to deal with startup failures by allowing their closures, as evidence has shown that some failed entrepreneurs go on to start new ventures using their learning and experience from past mistakes, whereas others might join large firms as employees (Bala Subrahmanya, 2015). Previous evidence from Microsoft Accelerator Research (2012 cited in Bala Subrahmanya, 2015, p. 62) found that about 61% of first-time failed entrepreneurs got back to work at large companies in India.

General Indian firms’ survival

Sengupta and Singh (2019a) of the Indira Gandhi Institute of Development Research present and analyse the status of all the new firms (i.e. of any size) formed in India between 1981 and 2011 (more than a million firms) using Ministry of Corporate Affairs data.⁴ Specifically, they look at the firm entry for every year of the sample period and study the survival rates of the new entrants as on 31 December 2015. It is important to note that small-scale industrial units were expected to register before starting as an enterprise but due to the informal nature of MSMEs they may not be captured by this information, however, the working paper gives an interesting insight into general firm survival rates in India. Key findings include (Sengupta & Singh, 2019a):

- Sengupta and Singh (2019a) found that on average, roughly 50% of new firms registered in India survive more than 20 years – equivalent to a survival rate of one out of two. The authors acknowledge that “This is way higher than other empirical studies (see Phillips and Kirchoff (1988) for the US), where they found that the survival rate of newly formed firms after six years is roughly 40%. Even for considerably longer horizon (25-35 years), the firm survival rate in India is consistently very high” (Sengupta & Singh, 2019a).

⁴ Whenever a new firm is formed in the formal sector in India, it is legally required to register with the MCA. Upon registration it obtains an identification number called Corporate Identity Number (CIN). The MCA database classifies the status of firms into three broad categories: active, dormant, and inactive. Sengupta and Singh (2019a, b) use the unique CIN codes, firm names, the dates of registration and the status categories in their analyses.

- Liberalisation of India's economic policies was initiated in 1991. The Indian data shows that on average, new firms have a survival rate around 45% in the post liberalisation period (1991-2011). One possible reason for this high survival rate might be the limited competition in the market. Another possible reason could be that firms change the sectors in which they operate but do not register themselves as new firms.
- The data set shows that firms formed since 2000 (as of December 2015) have a higher likelihood of survival compared to those set up earlier. Survival rate also improves for firms established in recent years.
- Of the firms set up in recent years (2001-2011), only 15% had become inactive. Also, majority of the new firms appear to have become inactive voluntarily, since less than 2% got liquidated and only one company in the data set was classified as 'default', perhaps due to the lack of a bankruptcy resolution framework before 2016.
- Some of these results might also be driven by the changes in data collection and reporting standards over time. The cause and effect remain elusive for lack of enough data. They argue the need for further research once more data becomes available.

SME failure rates from other countries

For comparison, examples of failure/success rates from other studies around the world include:

- SME Development Authority (SMEDA) of **Pakistan** estimates that financial stress causes 80-90% of SMEs in Pakistan to fail within the first 4 years and that only 1 in 20 is in existence after 25 years. However, others question this finding (see for example Ullah, Naimi & Yusoff, 2016).
- Kee, Yusoff and Khin (2019) highlight that on the whole, startup failure rates range between 50% and 95%. No further information is given.
- According to a Wall Street Journal article (Gage, 2012) on research by Shikhar Ghosh, a senior lecturer at Harvard Business School, about 75% of venture-backed firms in the **US** do not return investors' capital. These findings are based on data from more than 2,000 US companies that received venture funding, generally at least USD 1 million, from 2004 through 2010. This research emphasises that there are different definitions of failure and this can affect failure rates. For example, about 30-40% of high potential US startups "fail" if failure is equated to liquidating all assets, with investors losing all their money. Other estimates mentioned in the article by Gage (2012) include "about 60% of start-ups survive to age three and roughly 35% survive to age 10, according to separate studies by the U.S. Bureau of Labor Statistics and the Ewing Marion Kauffman Foundation[...]. Both studies counted only incorporated companies with employees. And companies that didn't survive might have closed their doors for reasons other than failure."

3. Key constraints

Krishna (2018), appreciating that entrepreneurship is a **complex and dynamic process** and seeing entrepreneurship as a **continuous learning process**, undertakes Survival Analysis⁵ of

⁵ Krishna (2018, p. 68) explains that Survival Analysis "deals with analysing the time to the incidence of an event. The survival model works on a set of assumptions, primary ones being that when the observation of the data ends and the analysis begins, the observed data set would typically have a combination of units in such a fashion

data from 45 high-tech startups headquartered across different cities in India to determine which mode of transformation to learning outcomes and entrepreneurial decision making preference have a significant influence on their survival. The results indicate that **entrepreneur's prior startup experience, explorative mode of learning transformation, causal decision-making of the entrepreneur and availability of funding** for the startup as the key factors that reduce the time to survival of Indian high-tech startups.

According to the most recent Global Entrepreneurship Monitor (GEM) report for India for 2017-2018, the major constraints for entrepreneurship development in India include: **government policies; financial support; and cultural and social norms** (Shukla et al., 2018, p. ix).

The IBM Institute for Business Value survey results revealed that startups can exploit a range of attributes and advantages unique to India. More than three quarters (76%) of Indian executives pointed to India's economic openness as a major business advantage, while 60% identified India's skilled workforce. And 57% said that India's large domestic market provides significant advantages. However, the IBM Institute for Business Value (2017, pp. 3-4) study also highlights that despite India's entrepreneurial strength, the startup economy still has not reached full maturity. The study of 100 venture capitalists identified the following as the top roadblocks for India's startups:

- *Lack of innovation*: 77% of venture capitalists surveyed believe that many Indian startups lack pioneering innovation based on new technologies or unique business models. Indian startups are prone to emulate already successful global ideas.
- *Lack of skilled workforce*: 70% of the venture capitalists believe that talent acquisition is one of the biggest challenges faced by Indian startups, and limited availability of necessary skills impedes growth. As per a study, 80% of engineering graduates in India are deemed unemployable and 48% of employers in India face difficulty in filling vacancies.
- *Lack of sufficient funding*: Indian startups face funding roadblocks both at entry and exit stages while successful global startup ecosystems are well supported by active investor communities. 65% of venture capitalists revealed that funding is one of the major challenges for these companies.
- *Inadequate formal mentoring*: Although numerous startup accelerators have been formed in India as part of public-private partnerships, mentoring typically remains informal and voluntary. 64% of venture capitalists surveyed believed that India's startups struggle to succeed because their executives do not receive adequate mentoring from experienced leaders.
- *Poor business ethics*: 64% of surveyed venture capitalists believed that many startups are not successful due to poor business ethics, such as misreporting of financial and other data, misrepresentation of financial plans, and ignorance of regulatory requirements.
- *Lack of experienced leadership*: 45% of Indian venture capitalists surveyed assert that the presence of proven leaders is an essential ingredient in their willingness to invest in

that the event in question has actually occurred for some units, whereas the event may not have occurred for others (Aalen et al., 2008). The key advantage of this model is that it helps the data analysts to deal with missing information." (See Krishna, 2018, pp. 67-68 for more detailed methodology information).

startups, and 42% said that an ability to bounce back from failure is critical. They see inexperienced leadership as a key reason for startup failures in India.

Entrepreneurial ecosystem

Bala Subrahmanya (2018, p. 1619) highlights that a **“strong and vibrant entrepreneurial ecosystem is found to have a positive impact on start-up fertility, stability and growth.”** Hence, ecosystem promotion is increasingly being supported through policy development in India. To better understand the entrepreneurial ecosystems for technology startups, Bala Subrahmanya (2017) compares the experiences of ecosystem evolution in Bengaluru (erstwhile Bangalore) and Hyderabad, two startup hubs in India. He finds that the entrepreneurial ecosystem is essentially regional in character. The ecosystem for tech startups can be broadly viewed as operating “within the triple helix model and has a nucleus with two outer layers: i) an inner layer of primary (indispensable) factors and ii) an outer layer of supplementary (secondary) factors” (Bala Subrahmanya, 2017, p. 47). The nucleus consists of existing and prospective startups, and the triple helix base comprises Government (both national and regional), industry (both public sector and private sector enterprises), and academic/research institutions (both Government-promoted and private-owned). The inner layer of indispensable (primary) factors consist of sources of finance; market support; human resources; nurturers (i.e. accelerators/incubators); and technology and business mentors. Supplementary (secondary) factors consist of a supportive culture (induced by constant talent immigration), supportive media and good weather (Bala Subrahmanya, 2017, pp. 54-55). All levels and their components are important and influence each other.

There are thought to be four different but sequential stages of entrepreneurial ecosystem evolution: **(i) nascent, (ii) evolving, (iii) mature and (iv) self-sustainable** (Bala Subrahmanya, 2017). For example, Israel and Silicone Valley are considered self-sustainable. In India, **Bengaluru** is considered to have one of the best ecosystems for tech startups in the world; but it is **still evolving**, as are all the leading entrepreneurial ecosystems in India (e.g. National Capital Region – Delhi, Mumbai, Hyderabad, Pune and Chennai) (Bala Subrahmanya, 2018).

In an article in 2015, Bala Subrahmanya argues that there have been **three phases/waves of startups in India**, with the third wave/new generation startups largely being the product of the ICT revolution and globalisation. India’s policy for new generation startups is in its infancy, it primarily focuses on the “generation phase of start-ups” and not on the subsequent stages to deal with either “success and growth” or “failure and closure,” but there is a need to view this third wave through a different lens (Bala Subrahmanya, 2015, p. 61).

According to Mulas, Minges and Applebaum (2015, p. 99), **“Innovation is becoming urban;** what was previously the preserve of “innovation parks” is now growing organically within cities.” However, they further highlight that these technology innovation ecosystems are not growing equally in all cities, and it is not yet clear what factors cause different growth rates, although it is suggested that density of people and firms and agglomeration effects play a critical role (Carlino and Kerr 2014 and Pan et al 2013 cited in Mulas, Minges and Applebaum, 2015, p. 100). In their working paper, Mulas, Minges and Applebaum (2015) produce a framework to identify and categorise key success factors for the growth of an urban technology innovation ecosystem (applying it to New York City). Key findings include the “significance of networking assets for the growth and sustainability of technology innovation ecosystems in cities, and the importance of startups’ social dimension compared with their geographic dimension” (p. 116). They identify four main categories that are important for the growth and sustainability of innovation ecosystems,

which are **connected through networks and markets**. The four categories are: **human capital or people; physical assets or infrastructure; economic assets; and government and policy or enabling environment** (Mulas, Mingos and Applebaum, 2015, p. 108).

Joshi and Satyanarayana (2014) attempt to empirically explore the role played by ecosystem related factors in the emergence and growth of high technology startup clusters in India, using secondary data from six major startup hubs in India during the period 2005-2013. They find that specific startup ecosystem related factors such as **internet penetration, availability of venture capital funding and a pre-existing critical mass of relevant high technology businesses and skillsets** are key. Furthermore, their results indicate that policy efforts at all levels to address the main challenges faced by the early-stage startups is critical.

India is improving its startup infrastructure and ecosystem. In 2016, the Government of India launched the “Startup India” initiative to empower youth and promote entrepreneurship (KPMG< 2018, p. 23). In 2017, the number of active **incubators/accelerators** increased approximately 36% compared to 2016 (KPMG, 2018, p. 21). Startup incubators are companies which help new startups in their initial phase of growth by providing several services such as office space, research labs, alumni support, support in raising startup capital (KPMG, 2018). Accelerators support startups in building prototypes, fundraising, brand building and customer growth. They can broadly be classified into four segments: corporate, private, academic and Government-supported.

Skilled workforce

Shukla et al. (2018, p. ix) highlight that the Indian government have been **investing in educational institutions and creating a base for entrepreneurship education and training**, which according to the Global Entrepreneurship Monitor (GEM) India Report 2017-18 has greatly lifted the entrepreneurial aspirations of young students. Students are strengthening the workforce but are also aspiring to lead startups by using their skilled education. In general, in India, entrepreneurs with strong educational background, coupled with a few years of professional experience have been traditionally successful. However, the previous GEM India Report 2016-17 (Shukla et al., 2017), conducted among 3,400 respondents aged between 18 and 64 years, found that 11% of adult population in India is engaged in “early-stage entrepreneurial activities”, and only 5% of people go on to establish their own business or startup, one of the lowest rates in the world. The report questioned the ground-level impact of the Startup India initiative.

Sengupta and Singh (2019) highlight that in India, firm demographics (i.e. how the population of firms has changed over time and why) has not been explored in detail. They suggest this is because of **data limitations**; publicly available data on firms in the Indian economy can only be obtained from the Ministry of Corporate Affairs (MCA) and even there, the availability of critical data fields is restricted.

A discussion paper by McKinsey Global Institute (Woetzel, Madgavkar & Gupta, 2017) into India’s labour market, highlights that the rise of independent work and micro-entrepreneurship in India, aided by new digital ecosystems, are providing new work opportunities with better pay, including in parts of the country less covered by formal labour markets. Their initial estimates are that “the rapidly growing sectors of cab-hailing platforms, e-commerce, digital financial services through networks of banking correspondents, and lending for micro-entrepreneurship and self-help groups have improved income opportunities for 18 to 22 million workers in about the past three years” (Woetzel, Madgavkar & Gupta, 2017, p. 2). However, the paper emphasises that

although India's labour markets are experiencing structural change, there is a dearth of reliable data to capture these shifts.

The Inc42 (2019, p. 132) annual report for 2018 highlights that startups in India often face a **problem in hiring the right resources to drive innovation due to lack of adequate skilled talent** in the country. This results in many startups **registering their entities outside India**, where a skilled and efficient talent pool is easily available. Also, startups don't offer too many employee benefit schemes, which makes it difficult for them to attract quality talent compared to established businesses.

Accessing finance

Access and adequate finance are key to the growth of the MSME sector in India. A report assessing MSME sector finance in India by the IFC/Intellicap (2018) highlights **the lack of adequate and timely access to finance as being the biggest challenge for the Indian MSME sector**, and this has constrained its growth. Furthermore, **women owning SMEs in India widely point to the lack of access to capital as the biggest constraint in running their businesses** (IFC, 2019).

According to the Expert Committee on Micro, Small and Medium Enterprises (2019, p. 59), the institutions lending to MSMEs in India regulated by Reserve Bank include Scheduled Commercial Banks (Public Sector Banks, Private Sector Banks including Small Finance Banks, Foreign Banks, Co-operative Banks and Regional Rural Banks) and Non-Banking Financial Companies (NBFCs – including microfinance NBFCs). The Securities and Exchange Board of India (SEBI) regulates the institutions engaged in providing or mediating capital to MSMEs. Table 1 shows the estimates of credit flows to MSMEs in India from these different sources. Findings from the study by IFC/Intellicap (2018, p. 48) indicates that **NBFCs will become a serious player for financing the MSME sector in India** as they are agile in their structure and can easily adapt to serving a niche market segment compared to banks.

Despite ongoing policy focus, **growth of MSME credit in India has been weak** (Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 62). MSMEs in India also largely rely on **informal sources** for equity (i.e. own saved funds and funding from family and friends); few enterprises utilise equity as a source of finance (Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 81). According to a KPMG (2018, p. 13) report on the startup landscape in India, a one year old company is typically funded through family and friends, a three year old company is typically funded through angel/seed funds/venture capital/private equity, a five year old company is funded from venture capital/private equity/banks, and an eight years and above old company is funded through public market/private equity investment.

See: Table 1: Credit flow to MSME sector in India (in Indian Rupees (IRN) billions), Expert Committee on Micro, Small and Medium Enterprises (2019, p. 59), <https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/MSMES24062019465CF8CB30594AC29A7A010E8A2A034C.PDF>

Generally, India's banking system is still small relative to the needs of the real sector, and so MSMEs find it challenging to access adequate credit. Barriers affecting this include (Expert Committee on Micro, Small and Medium Enterprises, 2019, pp. 62-63):

- *The risk in lending to MSME sector are high:* this is due to inability and unwillingness to pay linked to business risk factors such as delayed buyer payments embedded in supply chains, changes in consumer demand or extraneous events that create a slow-down in the market. MSMEs often have little to no equity buffers.
- *Cost-to-serve barriers:* credit risk assessment of an MSME can be difficult due to information asymmetry, particularly with respect to financial performance, hence, underwriting the customer often entails a "high-touch" approach which translates into higher operating cost.
- *Lender coverage issues:* there is very poor credit depth in large parts of India, especially outside of urban areas. This remoteness translates into weaker access to formal credit.

Furthermore, MSMEs in rural areas of India also suffer disadvantages "in the form of higher cost of logistics, limited market access, lack of knowledge, uneven connectivity, limited access to finance, a labour market lacking in skills and poor infrastructure[;...] these add up to lower productivity and shorter life spans for such enterprises" (Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 78).

The IFC/Intelcap (2018, pp. 61-62) highlight the following demand side reasons as to why enterprises are not able to access formal credit or prefer not to:

- *Information asymmetry:* There is a large gap in the information available on the lending processes and enterprises are often unaware of how to procure a loan.
- *Inadequate collateral:* Micro and small enterprises typically do not have adequate access to immovable collateral that meets the criteria of financial institutions.
- *Limited equity base:* MSMEs often take loans from multiple lenders due to their inadequate equity base, overextending themselves financially.

The IFC/Intelcap (2018, pp. 62-63) highlight the following supply side reasons as to why enterprises are not able to access formal credit:

- *High transaction cost and lower margins:* For banks and NBFCs financing MSMEs is expensive and a high-risk proposition; constantly engaging with MSMEs is considered too high a cost of business.
- *Low risk appetite:* Financial institutions typically perceive MSMEs as a high-risk segment due to their incomplete understanding of MSME businesses.
- *Outdated underwriting process:* The issue of higher risk aversion in the case of MSME loans is further exacerbated by outdated standards of credit evaluation that place too much emphasis on collateral.

- *Lack of product innovation:* Traditional lenders continue to lack understanding of the MSME sector and have therefore not changed their approach to lending.

According to a recent report by IFC (2019, p. 9) exploring the financing gaps for women-owned MSMEs in India, highlights that women-owned businesses in India “are likely to face higher borrowing costs, may be required to provide collateral for a higher share of their loans than their male counterparts. They also mostly get shorter-term loans.”

Funding gap estimates

According to the National Association of Software and Services Companies (NASSCOM), **tech startup** funding has been growing year-on-year in India, with a **108% growth in total funding from USD 2 billion in 2017 to USD 4.2 billion in 2018** (Economic Times India, 2018b). However, NASSCOM also report a decrease in seed funding over the same period, with a large increase of around 250% in late stage funding (Series C, D, E, F). Analysis from Inc42 DataLabs in their most recent annual funding report for 2018 (Inc42, 2019) looking at **all Indian startups**, found that they received USD 11 billion in funding through 743 deals in 2018, with an **overall decline in both deals and funding as compared to 2017**. Further, 48% of the total funding was taken by just 1.4% of the startups that raised funding. The report found a similar trend to the NASSCOM data in that late and growth-stage funding increased in 2018, with seed funding decreasing overall in comparison to 2017.

According to a report for the IFC by Intellectap (IFC/Intellectap, 2018, p. 9), which assesses MSME sector finance in India, the overall demand for both debt and equity finance by MSMEs in India is estimated at INR 87.7 trillion (USD 1.4 trillion). It estimates the viable and addressable debt demand to be **INR 36.7 trillion** (USD 565 billion); hence the remaining credit gap is **INR 51 trillion**. The study finds that 84% of the overall debt demand of INR 69.3 trillion is financed from informal sources, formal sources only account for 16%. Furthermore, IFC/Intellectap (2018, p. 11) highlight that the addressable credit gap in the MSME sector that can viably be covered with formal financial institutions in the near term (1-2 years) is estimated at INR 25.8 trillion. **Medium enterprises in India are generally thought to be relatively well financed, whereas small and micro enterprises continue to be underserved** (IFC/Intellectap, 2018).

The Expert Committee on Micro, Small and Medium Enterprises (2019, p. 59), using this figure put the overall credit gap in the MSME sector in India to be **INR 20 – 25 trillion**.⁶ This is based on the IFC/Intellectap estimates of total addressable demand for external credit being INR 37 trillion, while the overall supply of finance from formal sources is estimated to be INR 14.5 trillion.

A report by IFC (2019, p. 11) into financing gaps for women owned MSMEs in India found that 90% of the women entrepreneurs surveyed had not accessed finance from formal institutions. The study estimated that 70.37% of the financing demand remained unmet, translating to a credit gap of **INR 1.37 trillion** (USD 20.52 billion).

⁶ This roughly equates to c. GBP 231 – 288 billion (using average INR to GBP conversion rate for the last 90 days from XE currency converter, accessed 17/09/2019. See <https://www.xe.com/currencyconverter/convert/?Amount=20&From=INR&To=GBP>).

International investment

The IBM Institute for Business Value (2017) study reports strong government promotion of entrepreneurship has strengthened a rapidly evolving startup culture – a proposed reduction in corporate tax from 30% to 25% is expected to further boost startup activity. KPMG (2018, p. 31) highlight that the Indian Government has set-up the “**Invest India**” agency to encourage international companies to invest in the country. **China** is one of the leading participants of this scheme. Since 2015, India has experienced a significant increase in investment from Chinese firms, primarily in startups and technology platforms. For example, in 2017, Indian startups received INR 129 billion (USD 2 billion) from China, three times as much compared to 2016.

Other factors affecting MSMEs

The *Report of the Expert Committee on Micro, Small and Medium Enterprises* (2019) highlights that challenges faced by MSMEs as being “**formalization, access to knowledge services, access to timely and adequate finance, improving competitiveness, availability of skilled man-power, access to latest technology and marketing.**” Other major challenges constraining the sector according to the report include (2019, pp. 2-3):

- *Policy and institutional interventions:* In order to provide support to the MSME sector and to facilitate its growth, there are numerous institutions in the country. However, formulation and effective implementation of targeted policies in for example infrastructure development and technology adoption, has been a challenge for all the stakeholders. Government interventions have tended to be supply-side oriented and unable to effectively respond to demands of the market.
- *Accelerating growth and enabling formalisation:* Utilisation and reach of various schemes and credit support is constrained due to lack of formalisation and low level of registration of MSMEs in Udyog Aadhaar Memorandum (UAM). Promoting formalisation and digitisation amongst MSMEs has remained a challenge.
- *Addressing infrastructural bottlenecks:* Infrastructural bottlenecks affect the competitiveness of MSMEs and reduces their ability to venture into domestic as well as global markets. Development of MSME clusters has been largely confined to Government organisations with low level of private investment.
- *Facilitating capacity building:* Traditionally, MSMEs are subject to severe information asymmetry problems. Lack of information about various schemes for instance and access to information about market opportunities is sub optimal and unstructured.

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