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ESG and Fintech–the Enablers for Indian MSMEs

Introduction—Small Business Financing in the Past

It was the year 2015. Ashok and Vinay could not sleep after their college trip to "Chokhi Dhani Village[1]". Being born and brought up in poor families, they were intrigued by the idea of showcasing a glimpse of culture and tradition by presenting a puppet show. They thought of starting a storytelling venture by using katputli (dolls). Being a small venture, it meant a meager investment of USD384 for taking a rented place, dolls, shamianas, and seating arrangements. Both of them immediately went to a known money lender who liked their idea and immediately lent them the money. Their weekly plays were enjoyed both by kids and the elderly alike and became the meeting ground of families. As their audience expanded through word of mouth, their demand for shows increased and hence they again went to the microfinance lender after 6 months. However, this time the money lender reluctantly said no to them as they wanted a loan of USD1,836.22 to buy a bigger setup where they could conduct more shows which required investment in place, amenities and people. They were sure of their entrepreneurial venture and did not lose hope and decided to meet a commercial bank manager in the nearby city of Amritsar. They met the micro, small and medium enterprises (MSMEs) branch head who was also convinced of their interesting venture but alas shook her head. The smallest amount that she could lend was USD12,239.97 which was also targeted for MSMEs, not informal start-ups. Ashok and Vinay felt dejected and looked at each other with gloomy eyes.

They had not even realized that they had become victims of what has been popularly known as the microfinance graduate syndrome or the missing middle syndrome. This refers to the lack of financing options for enterprises and start-ups whose needs are sandwiched between the typical loan sizes offered by microfinance institutions and commercial banks. This has been a common problem for millions of fledging entrepreneurs in developing countries.

Historically, MSMEs have had to finance their businesses largely through the owners' equity, since they could not easily access bank financing. The banks have been risk-averse for their own structural reasons. As a pre-condition for financing, banks would usually expect the MSMEs to bring in significant collateral, have a healthy financial status, and comply with restrictive conditions. As a result, the MSMEs suffered from lack of adequate and affordable financing.

MSMEs in India

As of November 2022, India had approximately 12.2 million MSMEs, providing employment to over 110 million persons. This sector contributed approximately 38% to the country's gross domestic product (GDP) and drives 45% of the production and 40% of exports. However, it receives only 16% of bank financing.[2] The MSMEs Notification[3] issued on 1st June, 2020 by the Government of India defines micro, small, and medium enterprises. For instance, a small enterprise is one where investment in plant and machinery does not exceed INR100 million and sales turnover does not exceed INR500 million. These enterprises have gained significance due to their inclusive economic development and hence are popularly known as the growth driver of the economy. They are widely dispersed geographically, located in rural, urban, national or international locations. The ease of access to financing is important for the growth and sustainability of any business. It is more so for small businesses. Hence, catering to their financing needs is imperative for policymakers and has the potential to make the Indian economy far more inclusive and dynamic than it is today.

Environmental, Social, and Governance (ESG) in India

The ESG framework in India is based on a combination of laws and codes of governance. The applicability of the laws depends on the size of the firm. Large firms are subject to more rigorous laws than MSMEs. One key regulation that was introduced as a part of the Companies Act 2013 asks large firms to spend at least 2% of their average net profits over the past 3 financial years on corporate social responsibility (CSR) initiatives. Firms also require permissions from pollution control boards, and environment and forest regulators (mostly government agencies) before operating any infrastructure project. Reporting requirements on ESG are mandated for large firms by the Securities and Exchange Board of India (SEBI). A National Green Tribunal (NGT) has been operating since 2010 with the mandate to adjudicate on matters related to environment protection. Firms in India are also subject to laws relating to deployment of labour and corporate governance.

The concern for ESG in India reflects the increasingly global concern. On 10th November 2022, the European Union (EU) Parliament formally adopted the Corporate Sustainability Reporting Directive (CSRD) in a move to make businesses within the EU and those that operate within the EU disclose information on their ESG credentials. The regulation had, till now, covered only large companies. However, listed MSMEs will also now be covered by the Directive.

MSMEs in India are also increasingly becoming a part of the larger framework for adhering to high standards of ESG. They recognise the need to adopt the best practices with respect to ESG. This has been brought out by a recent survey conducted by DBS and Bloomberg Media Studios.[4] The survey was conducted among MSMEs in 6 countries and regions, namely Singapore, Hong Kong, India, Indonesia, Mainland China, and Taiwan. As per the survey, 56% of Indian MSMEs are directing their focus towards employee well-being, and 40% focus on diversity, equity and inclusion (DE&I). Ninety-two percent of MSMEs believe that environmental issues concerning pollution monitoring, climate change, carbon footprint, and depletion of natural resources are top priorities directly impacting their businesses. Waste management is also a key concern raised by 77% of MSMEs in India compared to 62% overall in Asia.

Fintech—the Enabler

Even as MSMEs in India are working towards achieving the high standards of compliance on ESG, they have been facing financing constraints for a long time (Thampy, 2010). These constraints are in the nature of the cost of as well as speed of access to funds. It is not easy for small businesses to stay competitive as well as sustainable in the face of a difficult financing environment.

However, in the last few years, the potential for growth of Indian MSMEs was boosted with the initiation of the Jan Dhan-Aadhaar-Mobile (JAM) trinity by India's Prime Minister Narendra Modi (Government of India, 2016). This government scheme intends to utilise three modes of identification of customers, based on their Jan Dhan account, Aadhaar card and mobile banking numbers, for implementing one of the biggest reforms in independent India. Jan Dhan accounts are bank accounts that have, in the last few years, been opened for the erstwhile unbanked sections of the society. These accounts integrate the poor sections of society into the mainstream banking infrastructure. Furthermore, government subsidies directed at specific persons or entities could be deposited into these bank accounts by way of direct transfers, thus eliminating potential leakages. The problem of unique identity proof was addressed by issuing an Aadhaar Card[5] to all citizens. The Aadhaar card contains a 12-digit unique individual identification number which serves as the proof of identity and address for all residents of India. Together, Aadhaar, helping in direct biometric identification of disadvantaged citizens, and Jan Dhan bank accounts and mobile phones, allowing direct transfer of funds into their accounts, enable an efficient and disintermediated financing process. The trinity of JAM was introduced to improve upon the previously inefficient and indirect subsidy schemes (such as public distribution system and the MGNREGA) directed at the poor residents.[6]

The JAM trinity facilitated adoption of digital financial services which served as the foundation of credit accessibility to the unserved segments of the market (see for instance Ghosh, 2017 for a detailed discussion on interlinkages of JAM with financial inclusion of MSMEs). Services on the JAM platform provided transparency due to its adaptability, multilingual options of access and robust interface, leading to an expansion of the consumer base. These financial technologies, or fintech, refer to software, mobile applications, and other technologies created to improve and automate traditional forms of finance for businesses and consumers alike (Figure 1). These transformations could fundamen-

Figure 1: Benefits of Modern Technology for Borrowers

Source: psbloansin59minutes.com

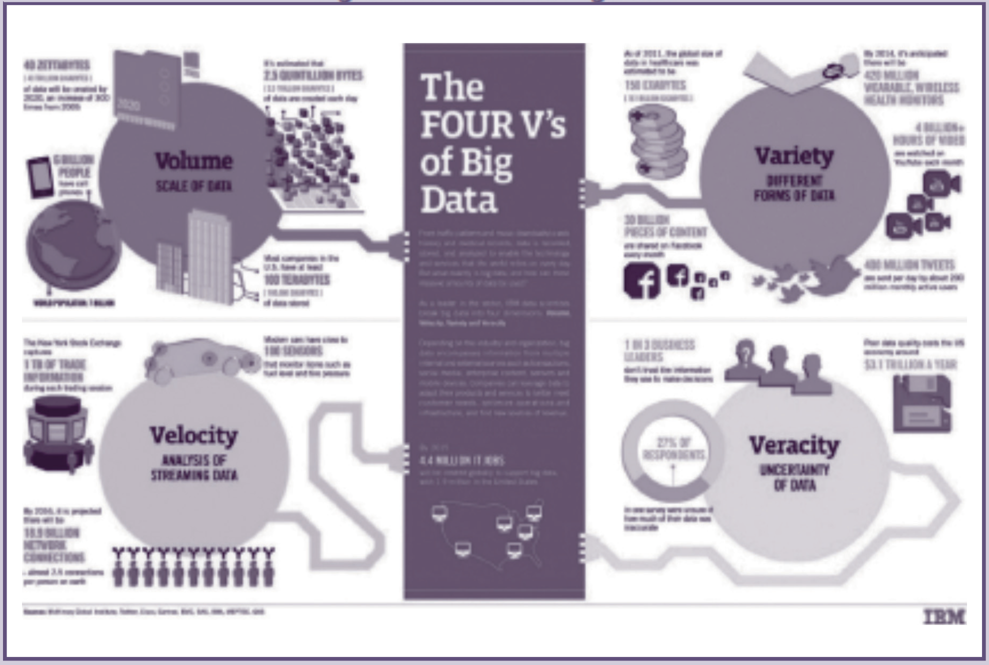
Box 1: What is Big Data?

"Big data" includes both structured and unstructured data that require cost-effective and innovative forms of information processing to produce actionable insights to aid decision making and automation.[a] Big data is used to describe information generated by traditional business activities and extracted from new sources such as electronic payments data from point-of-sale terminals, bank automated teller machines, mobile network operators, utilities, and social media (such as Facebook posts, Twitter tweets, and YouTube videos) and geodemographic data. The analysis of these data points can identify hidden behavior patterns that could be used to better anticipate future performance. Great advances are being made by analytic and processing capabilities, spreading data-driven intelligence across new digital systems at lower transaction costs.

The amount of digital data, a large part of big data, is expected to double every two years through 2020,[b] fueled by the phenomenal intersection of and growth in mobile, cloud, big data, electronic payments, and social media.[c] It is estimated that by 2020, 60 percent of digital data will come from developing countries.[d]

Because much of the volume of big data is unstructured, the veracity of insights derived needs to be carefully gauged. The data may also be rapidly changing—think about the number of electronic payment transactions or Facebook and Twitter updates an active user might make in one day. The IBM Four V's approach looks at how volume, variety, velocity, and veracity shape the use of big data (figure 3).

Figure 3: Four V's of Big Data



Source: "The Four V's of Big Data," IBM Big Data and Analytics Hub, Infographics and Animations, http://www.ibmbigdatahub.com/infographic/four-vs-big-data.

Note: [a] "Gartner IT Glossary: What Is Big Data," Gartner website, accessed June 21, 2017, https://www.gartner.com/it-glossary/big-data.
[b] International Data Corporation (IDC), cited in GPFI (Global Partnership for Financial Inclusion), "Alternative Data Transforming SME Finance," International Finance Corp., Washington, DC, 2017, vii.
[c] GPFI, "Alternative Data Transforming SME Finance."
[d] GPFI, "Alternative Data Transforming SME Finance."

Source: Trends and innovation in disruptive technology, World Bank Report, 2019 tally change the financial landscape of the nation so that end users could benefit from competitive cost-effective options and financial institutions could improve efficiency through low operational cost.

India has the second fastest growth rate of digital adoption amongst major economies.[7] Digital financial services have become a key driver of credit disbursement via digital platforms. India's fintech adoption rate is 87%, as against the global average of 64%, second only to China as per the Ministry of Commerce, Government of India. India has the potential to create over USD1 trillion in economic value from the digital economy, including services as per the Ministry of Electronics and IT. India's fintech market shall reach about $160 billion by 2025 as per Finance Ministry estimation. The IMF's *World Economic Outlook* suggests that India shall become a USD5 trillion economy by 2026-27. A large part of this growth is attributed to the exponential growth expected in digital infrastructure for services, especially in the financial domain. The fintech-driven gig and platform economy is helping India move towards the USD5 trillion target as per the latest National Institution for Transforming India (NITI) Aayog[8] (a government planning organisation) report.

These digital services gave financial assistance to the missing middle who were denied access to finance as they were too large for the self-help group and too small for corporate banks. Use of QR-based technologies for payments could now create a credit history and address the credit gap problem, especially in rural areas. It can assist small-scale industries in addressing the credit gap problems and invoice trading which can resolve working capital and cash flow problems due to delayed payments. These nascent technologies help in developing unique and innovative models which leverage Big Data, machine learning and alternative data (Box 1) to underwrite credit and develop credit scores for customers with a limited structured credit history. For instance, maintaining online transaction records (unstructured data) of small vendors may help them to obtain credit without collateral from banks.

Take the example of *psbloansin59minutes.com*, a new-age digital lending platform developed with the objective of providing advanced technology-based financial innovation and solutions. The platform was born off the insight that MSMEs found it hard to avail loans from formal banking channels due to the tedious application, documentation and verification processes.[9] Today, automated credit decision systems can help extract information from documents. The platform's chatbots and artificial intelligence (AI)-based call centres can assist in the filling of forms by MSMEs (Table 1). Thus, powered by rigorous innovation and technological advancements, *psbloansin59minutes.com* was recognized as India's largest lending platform by Credit Suisse in March 2019. Combined with passionately servicing customers, the integration of AI and machine learning automates the lending process for borrowers and lenders. Figure 1 illustrates how this platform redefines the customer experience. Additionally, in 2021 Reserve Bank of

Table 1: Regulatory Sandbox: Third Cohort on MSME Lending -Test Phase

The Reserve Bank announced opening of the Third Cohort under Regulatory Sandbox vide Press release dated September 13, 2021 for MSME Lending. The Reserve Bank received 22 applications of which eight entities have been selected for the 'Test Phase'. The entities, as per details below, commenced testing of their products in June 2022.

Sl. No.	Sandbox Entity	Description
1	FinAGG Technologies Private Limited	The product 'Quick Cash Flow' is a cash flow-based digital credit line to MSMEs via Anchor led model through Co-lending.
2	Moshpit Technologies Private Limited	The product 'Finbox Embedded Finance' is a digital credit API infrastructure using which any company can build contextual credit products for their MSME customers.
3	Mynd Solutions Private Limited	The product 'M1xchange Small-Small' is a One-stop Plug and Play Small Seller to Small Buyer Factoring on TReDS focused on 'MSME Lending'.
4	New Street Technologies Private Limited	The product 'MiFiX' is a Blockchain Middleware that enables Co-lending for the MSME sector.
5	Rupifi Technology Solutions Private Limited	The product 'Pay By Rupifi' provides MSMEs real-time access to working capital through strong technology layer for data collection, data verification and risk calculation.
6	Small Industries Development Bank of India	The product 'GST Sahay' is a FinTech application for Invoice Based Finance for small businesses that is real time, contactless, cash flow-based and end-to-end digital.
7	SysArc Infomatix Private Limited	The product 'LENDperfect – Shishu Mudra' provides end to end STP journey for MSME Mudra Loan from lead to disbursal without any manual intervention.
8	ZikZuk Technologies Private Limited	The product 'Business Finance Manager' integrates with MSME's accounting software, banking ecosystem and uses its proprietary analytics engine empowering MSMEs with insights on sales, cashflows, payables, receivables etc. and enables lenders to take data driven decisions in order to provide contextual credit to MSMEs.

Source: RBI Press Release: 2022-2023/315

India announced eight more digital lenders are in the testing stage.

Credit facilitated by online platforms is popularly known as "debt-based alternative finance" (Wardrop et al., 2015) or "fintech credit" (Claessens et al., 2018). Lately, many technology companies have entered this fintech credit business, based on Big Data, either directly or in partnership with financial institutions (BIS, 2019; Stulz, 2019). These new age credit providers utilize not only the existing 20% of data on borrowers that can be easily read and analysed by machine, structured data. They also exploit the remaining unstructured data to understand the personality and psychographics of borrowers' social media profiles. Today, rapidly growing datasets on structured transactions are easily compiled by capturing an applicant's history of electronic payments, e-commerce, pay-as-you-go mobile telephone services and solar panels. This objective information on cash flow can be augmented with subjective behavioural information (for instance, what types of products and services are used, in what combinations, with whom, and at what time period). While the transactional and location data from borrowers' mobile devices could be structured, browsing patterns and social media profiles could give an indication of their unstructured data. Finally, digital payments can reveal information about owners' identity, financial health, habits, relationships, and even their personality which can help in judging the creditworthiness of individuals and legal entities. Box 1 suggests how Big Data helps these new age lenders lend seamlessly.

Conclusion

MSMEs have for long suffered from a lack of adequate volume and mix of financing. Also they are under heightened pressure from various stakeholders to comply with ESG norms. As a result of these twin challenges, MSMEs face an increasing pressure in the short term on their costs and competitive viability. In the face of this, the emergence of fintech-based lending companies has been a great help to the MSMEs. Fintech companies bring superior technological efficiency and risk-taking ability and thus are able to provide financing to MSMEs in a faster and more economical manner. This is a win-win situation for both MSMEs and fintech companies. At the same time, policymakers and regulators would do well to keep a watch for the emergence of systemic risks associated with the emergence of fintech credit platforms and evaluate the costs and benefits of one of the most significant emerging parts of the economic system.

Notes

1 Chokhi Dhani Group, which literally means "fine hamlet," is a Rajasthani-village-themed hospitality brand, which was conceptualised in 1990, with the notion to promote the heritage and culture indigenous to Rajasthan and India. Accessed from http://chokhidhani.com

2 https://www.ibef.org/industry/msme#:~:text=As%20per%20data%20from%20the,Udyog%20Aadhaar%20Memorandum%20(UAM https://www.ibef.org/blogs/india-s-msme-sector

3 https://msme.gov.in/sites/default/files/MSME_gazette_of_india.pdf

4 https://www.livemint.com/money/personal-finance/92-of-indian-smes-focused-on-adopting-esg-measures-survey-11668408896767.html

5 https://uidai.gov.in/en/

6 https://pib.gov.in/newsite/PrintRelease.aspx?relid=191189

7 https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1565669

8 "NITI Aayog is developing as a state-of-the-art resource centre with the knowledge and skills to act with speed, promote research and innovation, provide strategic policy vision for the government, and deal with contingent issues." Accessed from https://www.niti.gov.in/objectives-and-features

9 https://www.infosys.com/industries/financial-services/white-papers/Documents/banks-change-game-SME.pdf

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