Financing India’s MSMEs

Estimation of Debt Requirement of MSMEs in India

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ACKNOWLEDGEMENT

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## Table of Contents

**ACKNOWLEDGMENT** 02

**Executive Summary** 08
- MSME Overview 09
- Debt Demand in the MSME Sector 09
- Flow of Finance to the MSME Sector 10
- MSME Credit Gap in the Sector 11
- Gap by Geography & Type of Enterprise 11
- Enabling Environment for Growth of Finance in the MSME Sector 12
- Potential Interventions to Increase Access to MSME Finance 13
- Methodology 13

**Introduction**

**Chapter 1**

**Chapter 2**

**Estimation of Debt Demand of MSMEs** 24
- Overall Debt Demand of the MSME Sector 25
- Addressable Debt Demand by the MSME Sector 26
- Addressable Debt Demand by Registered versus Unregistered Enterprises 29
- Addressable Debt Demand by Size of Enterprise 29
- Addressable Debt Demand by Type of Enterprise 31
- Addressable Debt Demand by Geography 33
- Low-Income States 34
- Northeastern States 34
- Rest of India 34

**Supply of Finance in MSME Sector** 36
- Supply of Finance in MSME Sector 37
- Flow of MSME Debt Finance from the Informal Sector 37
- Formal Debt Supply to the Sector 39
- State Bank of India – Supply Chain Finance 40
- State Bank of India – Online Seller Financing 42
- Dena Bank – Startup Financing 42
- Breakdown of Debt Supply by type of Banking Institution 43
- Supply of Finance by Scheduled Commercial Banks 44
Supply of Finance by Other Banks (RRBs & UCBs) 45
Supply of Finance by NBFCs 48
Priority Sector Lending Norms for the Sector 49
Breakdown of Debt Supply by Size of Enterprise 49
Breakdown of Debt Supply by Type of Enterprise 49
Breakdown of Debt Supply by Geography 51
NPA Analysis 53
Rising NPA Ratios across MSE and Overall Portfolios of SCBs 54
Stress in SCB MSE Portfolios 55
MSE Portfolios in Private Banks 56
Effect of NPAs on Bank Lending 56
Impact of Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI) 56

Chapter 3
Credit Gap in the MSME Sector 59
  Overall Credit Gap in MSME Sector 60
  Analysis of Credit Gap by Size of Enterprise 64
  Analysis of Credit Gap by Type of Enterprise 65
  Analysis of Credit Gap by Geography 66
  Cluster Analysis 69
  Detailed study on 30 clusters conducted by SIDBI 71

Chapter 4
The Rise in Digital Finance 73
  Rise in Digital Finance Models for MSME Lending 74
  Marketplace Lending 76
  Balance Sheet Lending 80
  Marketplace Hybrid Model 80
  Invoice Lending 81
  Supply Chain Finance 82
  E-commerce Partnerships Fueling Growth 83
  Digital Finance: Expanding the Number of Creditworthy Borrowers 84
  Key Environmental Factors to Foster Digital Finance in India 84
  Digital Finance Globally 85
  The Role of Regulation in the Digital Finance Sector 88
  The Role of Technology in Driving Digital Finance 89

Chapter 5
Enabling Environment for Growth of MSMEs and MSME Finance 91
  Enabling Environment 92
  Legal and Regulatory Framework 93
  Direct Government Support 100
  Financial Infrastructure 104
Chapter 6

Potential Interventions to Increase Access to MSME Credit

- Potential Interventions
- Proactive steps from suppliers to be able to meet the demand
- Strengthen the supporting infrastructure
- Provide necessary regulatory impetus
- Global Experience – Germany
- Global Experience – Singapore

APPENDICES

APPENDICES

- Appendix A — Demand Estimation Methodology
- Appendix B — Supply Estimation Methodology
- Appendix C — Comparative Figures for 2010 & 2017
- Appendix D — Indicative List of GoI schemes for MSMEs in India
- Appendix E — Summary of some credit evaluation tools
- Appendix F — Details of Primary Research
- Appendix G — Acronyms
Executive Summary

This study aims to provide an assessment of the Micro, Small and Medium Enterprise sector finance in India. The chapters in the study highlight the key characteristics of the MSME sector, and assess the demand for, and the flow of credit into the sector. The study also evaluates the consequent gap in the financing needs of MSMEs. Finally, it explores potential interventions to boost the flow of formal credit to the sector.
This study aims to provide an assessment of the Micro, Small and Medium Enterprise sector finance in India. The chapters in the study highlight the key characteristics of the MSME sector, and assess the demand for, and the flow of credit into the sector. The study also evaluates the consequent gap in the financing needs of MSMEs. Finally, it explores potential interventions to boost the flow of formal credit to the sector.

**MSME Overview**

The Micro, Small and Medium Enterprise sector is crucial to India’s economy. There are 55.8 million enterprises in various industries, employing close to 124 million people. Of these, nearly 14 percent are women-led enterprises, and close to 59.5 percent are based in rural areas. In all, the MSME sector accounts for 31 percent of India’s GDP and 45 percent of exports.

Lack of adequate and timely access to finance continues to remain the biggest challenge for the sector and has constrained its growth. The financing needs of the sector depend on the size of operation, industry, customer segment, and the stage of development. Financial institutions have limited their exposure to the sector because of small ticket size of loans, higher cost of servicing the segment, and limited ability of MSMEs to provide immovable collateral.

**Debt Demand in the MSME Sector**

The overall demand for both debt and equity finance by MSMEs is estimated to be INR 87.7 trillion (USD 1.4 trillion), which comprises INR 69.3 trillion (USD 1.1 trillion) of debt demand and INR 18.4 trillion (USD 283 billion) of equity demand.

To estimate the debt demand that Financial Institutions would consider financing in the short term, the study does not take into account the demand from the enterprises that are either not considered commercially viable by formal financial institutions, or those enterprises that voluntarily exclude themselves from formal financial services. Thus, after excluding (a) sick enterprises, (b) new enterprises (those with less than a year in operation), (c) micro service enterprises that prefer finance from the informal sector, the viable and addressable debt demand is estimated to be INR 36.7 trillion (USD 565 billion). This is 53 percent of the total debt demand.
Flow of Finance to the MSME Sector

This study shows that of the overall debt demand of INR 69.3 trillion (USD 11 trillion), a major part – 84 percent or INR 58.4 trillion (USD 898 billion) – is financed from informal sources. Formal sources cater to only 16 percent or INR 10.9 trillion (USD 168 billion) of the total MSME debt financing. Within the formal financial sector, scheduled commercial banks account for nearly 81 percent of debt supply to the MSME sector, contributing INR 9.4 trillion (USD 144.3 billion). Non-Banking Finance Companies and smaller banks such as Regional Rural Banks (RRBs), Urban Cooperative Banks (UCBs) and government financial institutions constitute the rest of the formal MSME debt flow.

Within the informal financial sector non-institutional sources include family, friends, and family business, while institutional sources comprise moneylenders and chit funds.

Figure 2: Overall as well as Addressable Debt Demand from MSMEs in India

Addressable Debt Demand (INR Trillion)

- Debt Demand for Manufacturing Enterprises: Micro 3.4, Small 3.1, Medium 3.3
- Debt Demand for Services Enterprises: Micro 3.6, Small 1.7, Medium 1.2

Overall Addressable Debt Demand: 36.7

Excluded Enterprises: New Enterprises, Closed Enterprises, and Voluntary Exclusions

Source: MSME AR 16-17, Primary Research, Intellecap Analysis

Figure 3: Overall Credit Supply to MSMEs in India

- Total Supply of Debt to MSMEs (INR 69.3 trillion)
  - Formal Sources (INR 10.9 trillion)
    - Scheduled Commercial Banks (INR 8.8 trillion)
      - Public Sector Banks (INR 5.4 trillion)
      - Private Sector Banks (INR 3.1 trillion)
      - Foreign Banks (INR 0.3 trillion)
    - NBFCs (INR 1.5 trillion)
  - Informal Sources (INR 58.4 trillion)
    - Other Banks (INR 0.56 trillion)
      - RRBs (INR 0.11 trillion)
      - UCBs (INR 0.45 trillion)
    - Government Institutions (INR 0.04 trillion)
      - SIDBI (INR 0.01 trillion)
      - SFCs (INR 0.03 trillion)

Source: MSME AR 16-17, Bank and NBFC ARs, SIDBI, RBI, NABARD, Primary Research, Intellecap Analysis
**MSME Credit Gap in the Sector**

Despite increase in financing to MSMEs in recent years, the addressable credit gap in the MSME sector is estimated to be INR 25.8 trillion (USD 397 billion), which formal financial institutions can viably finance in the near term.

The micro, small, and medium enterprise segments respectively account for INR 8 trillion (USD 123.3 billion), INR 16.8 trillion (USD 258.6 billion) and INR 1 trillion (USD 15.6 billion), of the debt gap that is viable and can be addressed by financial institutions in the near term. With appropriate policy interventions and support to the MSME sector, a considerable part of the currently excluded demand can be made financially viable for the formal financial sector.

Micro and small enterprises together account for 95 percent of the viable debt gap that can be addressed by financial institutions in the near term. Available data and our research based on primary interviews indicate that medium enterprises in India are relatively well financed.

**Figure 4: Potentially Addressable Credit Gap in the MSME Sector (INR, trillion)**

<table>
<thead>
<tr>
<th>Demand</th>
<th>Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8</td>
<td>1.5</td>
</tr>
<tr>
<td>0.61</td>
<td>10.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Addressable Demand</strong></td>
</tr>
<tr>
<td><strong>SCBs</strong></td>
<td><strong>NBFCs</strong></td>
</tr>
</tbody>
</table>

Source: MSME AR 16-17, Primary Research, Intellecap Analysis

**Gap by Geography & Type of Enterprise**

Low income states (LIS) and Northeastern states (NES) together account for 24.2 percent of the addressable credit gap to the sector. The addressable credit gap in LIS is estimated to be INR 5.9 trillion (USD 90.6 billion), accounting for 23 percent of the overall addressable credit gap in the MSME sector. The state of West Bengal alone accounts for 30 percent of the region's addressable credit gap.

Low levels of bank penetration as well as higher degree of risk aversion from
financial institutions have constrained the growth of MSMEs in LIS and NES regions, and as a result, financing to these geographies is also lower. Banking penetration — defined as number of branches per hundred thousand people — is 3.26 in the LIS region, which is lower by about 20 percent as compared to the Rest of India. Additionally, the credit-to-deposit ratio in the LIS region is 46 percent compared to 86 percent in Rest of India.

Across India, there are significantly more service sector enterprises — ~79 percent — than manufacturing units — 21 percent. However, manufacturing enterprises are more capital-intensive with longer working capital cycles, and consequently have proportionately higher credit requirements. An estimated 47 percent of the demand for credit arises from the manufacturing sector. The share of credit gap in the manufacturing sector is 49.7 percent of the addressable credit gap.

**Enabling Environment for Growth of Finance in the MSME Sector**

The three main pillars of the enabling environment analyzed in the study are: (a) legal and regulatory framework (b) government support (c) financial infrastructure support. MSMEs function in a highly competitive environment and require an enabling environment to sustain growth. Well-rounded fiscal support, a strong policy framework, and incentives promoting innovation by financial institutions can significantly increase the penetration of formal financial services to the MSME sector.

**Figure 5: Schematic Key Elements of the Enabling Environment**

- **Legal & Regulatory Framework**
  - MSME (Amendment) Bill 2015
  - SARFAESI Act, 2002
  - Priority Sector Lending
  - Regulation of Factor (Assignment of Receivables) Bill, 2011
  - Companies Act 2013
  - Insolvency and Bankruptcy Code 2016
  - The Constitution (122nd Amendment) Bill 2014, (GST) / The Constitution (101st Amendment) Act 2017

- **Direct Government Support**
  - Subsidy based support
  - Public Procurement Policy
  - Credit Guarantee Scheme

- **Infrastructure Support**
  - Credit Information Companies
  - Collateral Registry
  - Asset Reconstruction Company for SME
  - Trade Receivables Discounting System (TReDS)
There have been commendable efforts on the part of the government and the financial sector to develop and implement multiple support mechanisms for the MSME sector. But many of the recently administered interventions are still in early stages or are yet to be operationalized and therefore their impact remains to be seen. Some of the key initiatives include the MSME (Amendment) Bill, 2015, revamped PSL norms, Insolvency and Bankruptcy Code 2016, Trade Receivables Discounting System (TReDS), among others.

Potential Interventions to Increase Access to MSME Finance

Building on the efforts already underway, there are several potential interventions that can be undertaken to expand the access to MSME finance in India. Thus, proactive steps from credit suppliers, specific interventions in supporting environment, and regulatory impetus can significantly augment the credit flow to the sector. Some of these potential interventions include:

Proactive steps from suppliers to meet the demand

- Revamp credit appraisal processes and focus on alternative data for assessing capacity and willingness of borrower to repay the loan
- Focus on sector-specific product development
- Capitalize on the reach of informal moneylenders
- Explore collaboration opportunities with financial technology firms focused on MSME lending

Strengthening the supporting infrastructure

- Undertake an initiative to identify and catalogue existing MSMEs
- Expand the scope of assets registered with CERSAI to facilitate movable asset-based lending
- Take remedial measures to enhance the effectiveness of the Credit Guarantee Scheme
- Carry out a geographical mapping of all institutional lender points

Provide necessary regulatory impetus

- Ensure that regulations are unambiguous and consistent across regulators
- Improve access to funds for NBFCs and MFIs and provide them with regulatory impetus to cater to MSMEs
- Revamp the Negotiable Instruments Act to make it stricter for defaulters

Methodology

In the process of completing this study, the research team has referred to several credible sources of data, including existing research literature and industry publications. In addition, a series of primary interviews were carried out to understand and evaluate the size of the MSME finance market, and these results were validated with key stakeholders such as the MSMEs, MSME Associations, RBI, SIDBI, public and private sector banks, and credit rating agencies.
Introduction
Introduction

In 2012, the International Finance Corporation, the private sector arm of the World Bank Group, published a report on the state of the financing landscape for Micro, Small and Medium Enterprises in India. The report highlighted that MSMEs have a significant unmet demand for financing that formal channels of finance can capitalize on successfully. The government and development experts have always considered the sector pivotal to fostering development, promoting employment and eliminating poverty in resource-poor setting. Since the publication of the report in 2012, the MSME sector has garnered even more interest from the private sector with both the financial services and technology industries evolving their traditional or inherited skills and use of business models to serve the sector better. This has, in part, been spurred by government reforms and initiatives introduced to bring MSMEs into the mainstream and contribute to India’s overall economic growth.

Since the last report, the financing landscape has changed significantly with many new players, business models, and approaches appearing in the market and competing alongside existing solutions. Some constraints to the growth of the MSME sector still persist. Foremost among them is the lack of access to debt capital.

The current report reflects some quantitative and qualitative changes in the MSME sector as of 2016-17 and brings into focus changes, particularly in the financing landscape for MSMEs, as well as government efforts to continue to strengthen the sector for it to deliver its economic growth and development potential.

MSME Sector in India

With a sustained growth rate of over 10 percent in the past few years, the MSME sector has come to represent the ability of the Indian entrepreneur to innovate and create solutions despite the logistic, social, and resource challenges across the country. As the nation’s largest employer, generating more than 124 million jobs through close to 56 million enterprises and contributing 31 percent of the nation’s GDP and 45 percent of the country’s overall exports, the relevance and role of the MSME sector as the central driving force behind India’s assertive vision to be a dominant global economic power cannot be overemphasized.

Given that MSMEs essentially rely on traditional or inherited skills and use of local resources, particularly in rural and industrially underdeveloped areas, the sector has the ability to empower traditionally resource-poor communities and markets to mobilize products and services, both nationally and globally.

Defining the Sector

The term MSME is widely used to describe small businesses often lacking formalized institutional processes. Governments and financial institutions around the world have varied definitions for the sector — sometimes vary even between the public and private sectors within the same country. Criteria used to classify an enterprise as an MSME include number of employees, annual sales, total assets, type of assets, urban or rural location of enterprise, and financial need.
In India, the government’s criteria for MSMEs is different from the definition the World Bank follows — based solely on whether an enterprise is operating in a manufacturing or service industry. MSMEs are classified based on their investment in plant and machinery for a manufacturing enterprise or investment in equipment for a service enterprise. This definition was established in the Micro, Small and Medium Enterprise Development Act (MSMED Act) of 2006. While there has been concern raised that this definition is outdated and does not include enterprises that may be larger than the specified criteria but still face similar challenges and conditions as MSMEs, the definition provided below is the most widely accepted classification of MSMEs based on which policies for the sector are created and implemented. The analysis presented in this report is also based on this classification.

In India, the government’s criteria for MSMEs is different from the definition the World Bank follows — based solely on whether an enterprise is operating in a manufacturing or service industry. MSMEs are classified based on their investment in plant and machinery for a manufacturing enterprise or investment in equipment for a service enterprise. This definition was established in the Micro, Small and Medium Enterprise Development Act (MSMED Act) of 2006.

**IFC MSME Definition**

<table>
<thead>
<tr>
<th>Enterprise Size</th>
<th>Number of Employees</th>
<th>Total Assets</th>
<th>Total Annual Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>Less than 10</td>
<td>Less than INR 6.5 million (USD 100,000)</td>
<td>Less than INR 6.5 million (USD 100,000)</td>
</tr>
<tr>
<td>Small</td>
<td>10–50</td>
<td>INR 6.5–195 million (USD 100,000–3 million)</td>
<td>INR 6.5–195 million (USD 100,000–3 million)</td>
</tr>
</tbody>
</table>

Source: [https://www.ifc.org/wps/wcm/connect/de9d8a24a7f2f90a4d8f99a5a9b0a56a9/InterpretationNote_SME_2012.pdf?MOD=AJPERES](https://www.ifc.org/wps/wcm/connect/de9d8a24a7f2f90a4d8f99a5a9b0a56a9/InterpretationNote_SME_2012.pdf?MOD=AJPERES)

**MSMED Act Definition of MSMEs**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Manufacturing Enterprise – Investment Limit in Plant &amp; Machinery</th>
<th>Service Enterprise – Investment Limit in Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>INR 2.5 million (USD 40,000)</td>
<td>INR 1 million (USD 15,000)</td>
</tr>
<tr>
<td>Small</td>
<td>INR 50 million (USD 0.8 million)</td>
<td>INR 20 million (USD 0.3 million)</td>
</tr>
<tr>
<td>Medium</td>
<td>INR 100 million (USD 1.5 million)</td>
<td>INR 50 million (USD 0.8 million)</td>
</tr>
</tbody>
</table>


Financial Institution Classification of MSMEs

All financial institutions, especially banks, use the definitions provided by the MSMED Act to classify MSMEs and report their lending to the sector. But at the same time, banks and NBFCs use other informal criteria over and above these parameters to expand lending opportunities to the sector.

Investment in plant and machinery is a measurable and verifiable variable;
however, this information does not give a sense of the financial performance and the growth potential of an enterprise. Therefore, many financial institutions also look at an enterprise's financial turnover (annual sales/revenue) and loan size to organize their business lines and product offerings. Primary and secondary research indicate that for financial institutions, the annual turnover for MSMEs stretches from INR 0.05 million–1.5 billion (USD 800–USD 23 million) and the range of lending starts with a credit size of INR 100,000 (USD 1,500) up to INR 200 million (USD 3 million). 

### Contribution of MSMEs to the Indian Economy

As a key player in generating employment and contributing to the country’s GDP and industrial output, the MSME sector is vital to the growth and development of the Indian economy. MSMEs are critical for local and international supply and value chains and support the progress of larger, more mature consumer markets as suppliers, manufacturers, contractors, distributors, retailers, and service providers.

### Key Statistics on MSMEs – 2017

<table>
<thead>
<tr>
<th>Key Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Working MSMEs</td>
<td>55.8 million</td>
</tr>
<tr>
<td>Total MSME Employment</td>
<td>124 million</td>
</tr>
<tr>
<td>MSME Contribution to GDP (%)</td>
<td>31%</td>
</tr>
<tr>
<td>MSME Contribution to Total Indian Exports (%)</td>
<td>45%</td>
</tr>
</tbody>
</table>

*Source: MSME Annual Report (2017), WBG-Intellecap Analysis*

An important thing to remember is that current estimates of MSME contribution to GDP do not take into consideration the contribution made by the unorganized sector because government agencies are unable to track this data.

### Growth of MSME Sector vs. Growth of IIP and Overall GDP

*Source: MSME Annual Report (2017), MOSPI, WBG-Intellecap Analysis*
Given the rapid growth of the sector, MSMEs are an effective vehicle to address livelihood challenges of the country and curb urban migration by presenting opportunities for people to participate in productive, non-farm activities. But for the sector to contribute to the economy even higher, it is important to first bring informal businesses into the organized sector.

MSME Landscape in India
Just about 15 percent of the businesses in the sector are registered enterprises – while the huge balance are all unregistered. In order to encourage registration, the Ministry of Micro, Small and Medium Enterprises has simplified the registration process, replacing the earlier two-stage registration process with a one-step filling of memorandum.

<table>
<thead>
<tr>
<th>Size of the MSME Sector in India (in million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15% Registered</td>
</tr>
<tr>
<td>8.5</td>
</tr>
</tbody>
</table>

Source: Ministry of MSME-Udyog Aadhaar, WBG-Intellecap Analysis

Heterogeneity in the MSME Sector
The sector is classified into micro, small and medium enterprises based on the size of initial investment in plant and machinery or equipment in the enterprise as defined by the MSMED Act. Almost 95 percent of the entire sector comprises micro enterprises, followed by 4.9 percent small and the rest medium enterprises. Within each of these segments, enterprises differ in characteristics due to differences in ownership structure, industry of operation, and geography of operation.

<table>
<thead>
<tr>
<th>Size of the MSME Sector in India (in million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>94.9% Micro</td>
</tr>
<tr>
<td>0.2% Medium</td>
</tr>
<tr>
<td>53</td>
</tr>
</tbody>
</table>

Source: MSME Annual Report (2017), WBG-Intellecap Analysis

* Registered Enterprises: MSMEs that file business information such as investment, nature of operations, manpower with District Industry Centers (now replaced by online registration under Udyog Aadhaar system) of the State or Union Territory are considered as registered enterprises. The data on enterprise output and performance is periodically tracked by the government agencies.

* Unregistered Enterprises: Enterprises whose output performance is not adequately tracked by government agencies.

* MSME Annual Report (2015), WBG-Intellecap Analysis

* MSME Annual Report (2015), WBG-Intellecap Analysis
Differences in Ownership Structure of MSMEs

The MSME Census data from 2007 indicates five specific types of ownership structures. Proprietorship is the most commonly adopted ownership structure, accounting for almost 94 percent of all MSMEs primarily because this structure requires lower legal overheads. Among other ownership structures that enterprises adopt are partnership, cooperative, private limited company, and public limited company. Most small and medium enterprises that are well established or in knowledge-based service industry sectors are structured as private limited or public limited companies23.

Ownership Structure of Enterprises in the MSME Sector

<table>
<thead>
<tr>
<th>Ownership Structure</th>
<th>Share of MSME Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietorship</td>
<td>93.83%</td>
</tr>
<tr>
<td>Partnership</td>
<td>1.53%</td>
</tr>
<tr>
<td>Private Company</td>
<td>0.23%</td>
</tr>
<tr>
<td>Public Company</td>
<td>0.04%</td>
</tr>
<tr>
<td>Cooperative</td>
<td>0.13%</td>
</tr>
<tr>
<td>Other</td>
<td>4.24%</td>
</tr>
</tbody>
</table>

Source: MSME Annual Report (2017), WBG-Intellecap Analysis

Differences in Industry of Operation

According to the MSME definition provided by the MSMED Act, there is a clear distinction between MSMEs in the manufacturing and service sectors. Due to the differences in their financial needs, sales timelines, and target customer markets, among other factors, MSME policy and lending initiatives must be tailored to the specific needs of both the sector as well as the enterprise size. Even within the manufacturing and service sectors, there is considerable diversity that needs to be taken note of. For instance, manufacturing industries comprise products as diverse as handmade crafts to high-precision machine tools, while the service sector includes tourism and hotel management, transaction-based industries like retail trade, and knowledge-based industries such as Business Process Outsourcing and Information Technology. The key industries that dominate the MSME sector across the country are food products, textiles, and retail. Estimates indicate that the manufacturing sector accounts for an estimated 21 percent of all enterprises in the sector, while the services sector at 79 percent24.

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23 MSME Annual Report (2017), WBG-Intellecap Analysis
Differences in Geography of Operation

There are significant geographical variations in India that have an impact on the distribution of micro, small and medium enterprises. The type of MSME, industries based in the region, and scale of operations also varies based on differences in the availability of natural resources and other regional characteristics, such as infrastructure, nature of local government incentives, access to markets, and education levels also dictate the type and scale of MSME activity in the region. Consequently, the size and nature of finance demand and supply by MSMEs tends to vary with geography.

For the purposes of this study, the states in India are split into three broad regions:

- Low Income States (LIS) – Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, West Bengal
- Northeastern States (NES) – Assam, Arunachal Pradesh, Nagaland, Manipur, Meghalaya, Mizoram, Tripura
- Rest of India – All states other than Low Income States and Northeastern States
Low Income States (LIS)
23.6 million MSMEs (42.3% Share)
34% Share of India's GDP

Northeastern States (NES)
1.9 million MSMEs (3.4% Share)
3% Share of India's GDP

Rest of India (ROI)
30.3 million MSMEs (54.3% Share)
63% Share of India's GDP

Recent Government Initiatives for the MSME Sector

In 2014, the government capitalized on the magnitude and potential of the MSME sector that produces over 6,000 unique products in the manufacturing sector alone. The government brought MSMEs to the forefront of national policy by setting up the multi-stakeholder program, Make in India. The initiative is designed to encourage investment, foster innovation, enhance skill development, protect intellectual property, and build best-in-class manufacturing infrastructure. The end goal of Make in India is to encourage multinational and national companies to manufacture their products in India, while establishing innovation hubs and cities across the country.

In the wake of the buzz created by the Make in India campaign, several other major government initiatives have also been launched. Accordingly, Startup India was introduced in January 2016 as a flagship initiative of the government with the aim of building a strong ecosystem for nurturing innovation and startups in the country. To meet the objectives of the initiative, the government announced an action plan that addresses several features of the startup ecosystem, focused on the following areas — simplification and handholding, funding support and incentives, and industry-academia partnership and incubation.

Not just that, a version of Startup India was also launched for rural India, Deen Dayal Upadhyay Swaniyojan Yojana. The scheme provides basic skill sets for self-employment in various fields and also offers credit facilities and incubation centers wherever needed. The program has been designed by the rural development ministry and will be supported by MUDRA Bank loans.

Stand-up India promotes entrepreneurship among the minority communities and women. Under the scheme, every bank branch is required to provide bank loans of INR 1-10 million (USD 0.02-0.2 million) to at least one Scheduled Caste or Scheduled Tribe borrower and a minimum of one woman borrower for setting up a greenfield enterprise.

The momentum created by these initiatives has further strengthened programs, such as the Credit Linked Capital Subsidy Scheme, National Manufacturing Competitiveness Program, Credit Guarantee Schemes, among others.

One of the most pressing issues that afflicts MSMEs sector has been facing is the lack of timely receipt of payments due to them for supplies to both larger corporates as well as government. To address this issue, the Reserve Bank of India has launched the Trade Receivables Discounting System (TReDS) — a digital platform where MSMEs can get access to credit by auctioning their trade receivables. Similarly, the government and the RBI have been instrumental in pushing the idea of Small Finance Banks to better cater to the credit needs of this segment. A push towards digital transactions from both the government as well the private sector is further expected to redress this issue.
Renewed Regulatory Interest

There has been a renewed regulatory interest in the sector as a result of which regulatory norms that have not been looked into — in some cases for decades[^31] — have been updated. In 2015, the central bank increased Priority Sector Lending to the MSME sector, particularly to micro enterprises[^32]. There have also been a few suggestions to amend several bills, including the MSME Development Act of 2006, to include a broader definition for these businesses and to make the recently passed Insolvency and Bankruptcy Code more lenient toward MSMEs[^33].

New regulations are expected, particularly around the peer-to-peer (P2P) digital lending segment and the electronic Trade Receivables Discounting System (TReDS) to finance MSMEs' trade receivables and improve liquidity in the sector[^34]. More details on these ecosystem changes are included in the 'Enabling Environment' chapter of this report.

New Category of Lenders

New category of credit suppliers have emerged as an alternative banking channel to cater to the MSME sector. Among them are the Small Finance Banks and the MUDRA Bank, both of which were set up to encourage more credit to the MSME sector and have been seen as productive steps in raising awareness and resources for the MSME sector[^35]. That's not all. Another category of lenders, Fintech Lenders, has emerged that relies on technology and uses non-traditional sources of data for credit underwriting and disbursal. They are often organized as NBFCs and are likely to boost the credit flow to the sector in the near future[^36]. Together, these new participants will continue to bring more MSMEs under the ambit of formal financing.

[^31]: Primary Research
[^32]: RBI (2015)
[^33]: YourStory (2015), Deccan Herald (2016)
[^34]: RBI (2016), Ministry of Finance (2015)
[^35]: Ministry of MSMEs
[^36]: RBI
Chapter 1

Estimation of Debt Demand of MSMEs
Estimation of Debt Demand of MSMEs

The average finance demand has been defined as the sum of the capital expenditure and working capital demand of an enterprise. Capital expenditure, or long-term finance demand has been defined as the annual demand for financing to increase fixed assets. Working capital, or short-term finance, demand has been defined as the quarter (3 months) of an enterprise’s annual operating expenses. The estimation of the total demand for credit by MSMEs has been derived from data taken from the Fourth All-India MSME Census (2007).

Overall Debt Demand of the MSME Sector

The overall demand for both debt and equity finance by MSMEs is estimated to be INR 87.7 trillion (USD 1.35 trillion)⁸. Overall demand is the amount of capital required for operational expenses and for investments in fixed assets. This demand includes credit that can come from both formal and informal sources of capital.

Research shows that debt finance accounts for approximately 80 percent of the overall finance demand, with the remaining demand comprising equity⁹. There is a significant difference in the leverage levels of enterprises at different stages of their evolution. On an average, the debt-to-equity ratio of MSMEs is 4.1, but this varies from 0 to 5.1, depending on the size and stage of an enterprise as well as the sector in which they operate. In 2017, the demand for debt capital is estimated to be INR 69.3 trillion (USD 1.1 trillion)⁹.

Overall Finance Demand by the MSME Sector – 2017 (INR trillion)⁶

<table>
<thead>
<tr>
<th>Total Demand</th>
<th>Debt Demand</th>
<th>Equity Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>87.7</td>
<td>69.3</td>
<td>18.4</td>
</tr>
<tr>
<td>(1.35)</td>
<td>(1.07)</td>
<td>(0.28)</td>
</tr>
</tbody>
</table>

*Figure in brackets is in USD trillion
Source: MSME Census, IFC MSME Finance in India Report 2012, WBG-Intellecap Research

⁵ WBG-Intellecap Analysis
⁶ WBG-Intellecap Analysis – Equity Report
⁷ Please refer to annexure for comparative figures
The total debt demand has increased from INR 26 trillion (USD 520 billion) in 2010 to INR 69.3 trillion (USD 1.07 trillion) in 2017, of which nearly 70 percent is the demand to meet working capital needs\(^4\). This is in equal measure due to the overall growth rate in the economy as well as the inclusion of an additional 13.3 million micro enterprises, thanks to an expanded definition of the MSMEs specified in 2006, but retrospectively included in the MSME count only in 2012-13\(^4\). These additional micro enterprises are part of the service sector industries, including retail trade, legal, educational and social services, hotels and restaurants, transport, non-cold storage, and warehousing. These were included as part of service MSMEs in 2006 under the MSMED Act. This was done in response to the recognition of the contribution of the service sector to the economy and its role in providing financial inclusion opportunities\(^4\). These additional enterprises contribute INR 7.4 trillion (USD 114 billion) to the increase in the overall debt demand.

### Overall Finance Demand by the MSME Sector – 2017 (INR trillion)\(^9\)

<table>
<thead>
<tr>
<th>Total Debt Demand</th>
<th>Working Capital Demand</th>
<th>Capex Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>69.3 (1.07)</td>
<td>48.5 (0.75)</td>
<td>20.8 (0.32)</td>
</tr>
</tbody>
</table>

\(^9\)Figure in brackets is in USD trillion

Source: IIP, MOSPI, WBG-Intellecap Analysis, Primary Research

### Addressable Debt Demand by the MSME Sector

Not all enterprises seeking financing can be served in the immediate to near term (1-2 years) by the formal financial sector. In order to estimate the near-term addressable debt demand, this study excludes enterprises that exclusively seek informal finance and thus cannot be served by formal institutions or enterprises that would also not qualify for near-term formal credit because they are either too young in their vintage and therefore lack operational track record that lenders can evaluate for credit appraisal, or entail risk of imminent closure due to sickness. The table below provides the exclusions and their share of the debt demand.

---

\(^*\) Based on then prevailing USD-INR exchange rate of 50

\(^+\) USD INR exchange rate of 65 has been used for all conversions of latest numbers

\(^\text{\#IIP, MOSPI, WBG-Intellecap Analysis, Primary Research}\)

\(^\text{\# Based on data taken from the MSME Annual Report (2015) and Primary Research}\)

\(^\text{\# Subsequent to enactment of the Micro, Small and Medium Enterprises Development Act, 2006 the then, Ministry of Agro and Rural Industries and Ministry of Small Scale Industries were merged into a single Ministry, namely, —Ministry of Micro, Small and Medium Enterprises. Small-Scale Industrial units were identified as those where fixed investment in plant and machinery, whether owned or held on lease / hire purchase basis did not exceed INR 10 million (USD 154,000)}\)

\(^\text{\# Central Bank of India (2015)}\)
Exclusions from Overall Debt Demand

<table>
<thead>
<tr>
<th>Details</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average percentage of new enterprises every year</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Implied average rate of yearly closures</td>
<td>16%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>% of Micro units that opt for voluntary exclusion</td>
<td>25%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total exclusions</td>
<td>61%</td>
<td>36%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Source: UAM registrations, MSME AR-17, WBG-Intellecap Analysis*

As seen in the table, 36 percent of the overall debt demand for small and medium enterprises is not considered creditworthy as it comprises sick and redundant enterprises and new businesses with limited operational history**.

In addition to these exclusions, almost a quarter of micro enterprises, which typically fall into the services sector such as small retail trade and repair shops, prefer financing from informal sources even though it is expensive in comparison to formal financing. This preference is due to ease of access, speed of disbursal, and need for minimal documentation that is consistent with informal sources of debt finance. For these specific micro enterprises, the urgency for credit often outweighs the high difference in cost between informal and formal financing***.

In fact, a majority of MSMEs seek credit from moneylenders and friends because it is easy to get loans from these sources without any loss of time. Our research with business owners shows that many entrepreneurs do not even attempt to apply for bank loans, given the image of formal financial institutions of being inaccessible as compared to informal suppliers of credit due to the stringent collateral requirements; although this is not necessarily true.

Banks and NBFCs are also perceived to have bureaucratic and opaque processes that do not favor MSMEs. Additionally, the impression is that banks do not understand the nuanced needs of the MSME sector and fail to treat them as a viable and lucrative customer segment on par with larger corporates. For instance, MSMEs are not always able to scale up, especially in the food, handicrafts, and parts manufacturing industries; however these enterprises can still make sizeable profits. Because enterprises with scalable business models are the ones considered reliable borrowers in the traditional credit assessment process, MSMEs who do not fit these criteria believe they are not evaluated fairly by the formal financial sector****.

Factoring in the above exclusions, it is estimated that formal financial institutions***** can address 53 percent of the overall debt demand. This amounts to INR 36.7 trillion (USD 0.57 trillion).

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* Refer Annexure for details and assumptions
** MSME Annual Report 2015, WBG-Intellecap Analysis, Primary Research
*** Primary Research
**** Primary Research, WBG-Intellecap Analysis
***** MSME Annual Report 2015, WBG-Intellecap Analysis, Primary Research
It is important to note that the addressable demand does not represent the inherent preferences of all credit providers. For instance, there is nothing to stop a differentiated niche lender from lending to startups or to units turning sick due to lack of timely capital infusion. However, such type of lending is negligible for the purpose of analysis.

In practice, lending decisions are based on the lender's assessment of an enterprise's creditworthiness as well as willingness to repay loans. Most lenders prefer to rely on an evaluation of an enterprise's historical financial performance for assessing its ability to repay future loan obligations. Often, lenders fall back upon the narrow criteria of how the enterprise has fared in servicing its past loans. This past history is typically distilled to a credit rating.

Still, niche NBFCs and a handful of banks are using new methodologies to assess the creditworthiness of MSMEs. They are doing this by building sector-specific value chain scenarios, cash flow analysis, sensitivity analysis, enterprise owners’ network analysis, and psychometric tests. In the next few years, lenders are likely to adopt and use these tools widely for credit assessment of MSMEs. A big trigger for this will be the growing digital

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*Figure in brackets is in USD trillion
Source: MSME Annual Report 2017; WBG-Intellecap Analysis, Primary Research

Refer Appendix for details
Rubique, Economic Times (July 2015), Primary Research
SME Times (Jan 2016)
Addressable Debt Demand by Registered versus Unregistered Enterprises

Unregistered enterprises, which comprise approximately 85 percent of the MSME sector, account for INR 31.34 trillion (USD 480 billion) of the total addressable debt demand, while registered MSMEs comprise the remaining demand of INR 5.4 trillion (USD 80 billion). Please note that these estimates do not take into account the demand for finance by the unorganized sector, whose credit demand is difficult to assess given the lack of available data.

Addressable Debt Demand by Size of Enterprise

Micro, small, and medium enterprise segments account for INR 11.9 trillion (USD 183.6 billion), INR 21.65 trillion (USD 333 billion), and INR 3.22 trillion (USD 50 billion) respectively of the addressable credit demand. Together, micro and small enterprises account for 91 percent of the addressable debt demand. The respective demand of the three segments is —

Addressable Debt Demand by Size of Enterprise – FY 2017 (INR trillion)

Source: MSME Census, MSME Annual Report 2017, WBG-Intellecap Analysis

Note: Figure in brackets is in USD billion
Source: WBG-Intellecap Analysis

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*All enterprises engaged in the activities of manufacturing or in providing / rendering of services, not registered permanently or not filed EM with State Directorates of Industries / District Industries Centres. (MSME Annual Report – 2015)

Unorganized sector consist of all unincorporated private enterprises owned by individual or households engaged in the sale and production of goods and services operated on a proprietary basis and with less than 10 total workers (NCEUS, 2007)

*MSME Annual Report 2015, WBG-Intellecap Analysis

*WBG-Intellecap Analysis
Even though the micro and small enterprises segment dominate the addressable demand, only less than half of micro units are considered part of the addressable segment, indicating the potential growth of demand from this category. The limited number of micro enterprises in the addressable financing segment is because these tend to operate in businesses such as retail trade, repair and maintenance workshops, restaurants, and textiles. These businesses have significant and immediate working capital demands that are often not addressed by institutional channels which do not have the capacity to approve and disburse loans in under 30 days. Additionally, these enterprises tend to transact in cash, making it difficult to track their financial details and assess their creditworthiness. Finally, given their small sizes and often makeshift infrastructure, these enterprises are usually unable to offer immovable collateral that most banks and NBFCs require. Therefore, they do not qualify for raising credit from formal sources.

Demonetization of large denomination

On 8th November 2016, the Government of India announced the demonetization of all INR 500 and INR 1000 bank notes in circulation. One of the intended objectives behind this move from the government was to curtail the shadow economy by inhibiting use of cash, and promote digital transactions instead. While this led to immediate cash crunch for many MSMEs, once the initial setback phase is over and businesses streamline their processes and accounting, it is expected that digital transactions will allow MSMEs to access credit markets more efficiently and at better prices, thus lowering their cost of funding in the long run.

Bigger enterprises, on the other hand, are often more sophisticated and formalized in their operations. For that reason, they are able to secure collateral for bank and NBFC loans and are better in seeking out formal finance. Mature small and medium enterprises also tend to have stable cash flows, qualified management and more awareness about financing options, making them more likely to access debt from formal financial institutions.

According to our estimate, at the addressable financing segment, is made up of 26.1 million of the 53.6 million micro enterprises, 1.67 million of the 2.17 million small enterprises, and 0.03 million of the 0.04 million medium enterprises.

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57 Primary Research
58 Society of Interdisciplinary Business Research (2014)
59 Primary Research
60 MSME Annual Report 2015, WBG-Intellecap Analysis
Addressable Financing Segment as a percentage of Number of Enterprises

Medium Enterprises: 64%
Small Enterprises: 64%
Micro Enterprises: 39%

Addressable Debt Demand by Type of Enterprise

The manufacturing sector accounts for 47 percent of the addressable debt demand at INR 17.4 trillion (USD 268 billion), while the services sector accounts for the remaining 53 percent at INR 19.3 trillion (USD 297 billion)⁶¹.

MSMEs in the manufacturing sector contribute nearly 33 percent of the overall manufacturing output in India°², which makes them a critical stakeholder in the overall economic development of the country. The average debt requirement for enterprises in the manufacturing sector²¹ is estimated to be INR 1.5 million (USD 23.1 thousand). Financial institutions direct more loan schemes and higher loan ticket sizes toward the manufacturing sector as it is easier to assess tangible assets held by manufacturing MSMEs. With higher ticket size loans, it is easier for the lenders to build a sizeable book and also monitor the accounts more effectively. In addition, manufacturing enterprises have more complex and longer value chains compared to those of service

°² WBG-Intellecap Analysis
° MSME Annual Report 2017
²¹ PWC (2013), WBG-Intellecap Analysis, Primary Research
enterprises, and they tend to have higher working capital needs. The graphic below illustrates the addressable debt demand of the top five MSME manufacturing industries:

**Addressable Debt Demand of Top Manufacturing Sectors – 2017 (INR trillion)**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Addressable Debt Demand (INR trillion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Products and Beverages</td>
<td>9.3 (143)</td>
</tr>
<tr>
<td>Textiles</td>
<td>4.9 (76)</td>
</tr>
<tr>
<td>Basic Metals</td>
<td>1.6</td>
</tr>
<tr>
<td>Other Non-Metallic Mineral Products</td>
<td>1.5</td>
</tr>
<tr>
<td>Wearing Apparel</td>
<td>1.5</td>
</tr>
</tbody>
</table>

*Figure in brackets is in USD billion
Source: WBG-Intellecap Analysis, Primary Research

Our primary interviews indicate MNCs will likely increase outsourcing to MSMEs, particularly in the information technology industry. The Ministry of MSME and the Ministry of Skill Development are focusing on greater MSME participation in innovation-based industries such as biotech. As a result, the services sector will see more MSMEs that provide knowledge and advisory services in conjunction with these rising industries. The top five MSME service industries and their addressable debt demands are presented below:

**Addressable Debt Demand of Top Service Sectors – 2017 (INR trillion)**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Addressable Debt Demand (INR trillion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>13.4 (206)</td>
</tr>
<tr>
<td>Other Service Activities</td>
<td>5.0 (77)</td>
</tr>
<tr>
<td>Supporting &amp; Auxiliary Transport and Travel Agents Activities</td>
<td>(37)</td>
</tr>
<tr>
<td>Other Business Activities</td>
<td>(31)</td>
</tr>
<tr>
<td>Repair and Maintenance of Motor Vehicles</td>
<td>(25)</td>
</tr>
</tbody>
</table>

*Figure in brackets is in USD billion

**Note:**
Other Service Activities includes – Agriculture, Hunting and Related Service Activities, Supporting & Auxiliary Transport & Travel Agents Activities, Forestry, Logging & Related Service Activities, and Computer & Related Activities.
Other Business Activities refers to activities covered under Division 74 as per NIC 2004 and includes services such as legal, accounting, consultancy, advertising, labor recruitment, photography, packaging etc.
Addressable Debt Demand by Geography

Low income states (LIS) and Northeastern states (NES) have a credit demand for INR 8.7 trillion (USD 133 billion) and INR 0.5 trillion (USD 8 billion) respectively that can be addressed by financial institutions in near term. This represents about 25 percent of the overall debt demand that can be addressed by financial institutions in near term.

<table>
<thead>
<tr>
<th>Geography</th>
<th>% of Total Addressable Debt Demand</th>
<th>% Share in Total GDP of the Country(a)</th>
<th>% of Total Population of the Country(b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income States</td>
<td>24%</td>
<td>34%</td>
<td>53%</td>
</tr>
<tr>
<td>Northeastern States</td>
<td>1%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Rest of India</td>
<td>75%</td>
<td>63%</td>
<td>43%</td>
</tr>
</tbody>
</table>

\(a\) WBG-Intellecap Analysis  
\(b\) Based on 2013-14 GDP Data  
\(c\) Based on 2011 Census Data
Low Income States
Within the low income states, West Bengal presents the biggest demand, accounting for 30 percent of the segment’s addressable debt demand and 7 percent of the overall addressable debt demand. West Bengal leads the way in the country in its government initiatives to support MSMEs. For instance, the state’s SYNERGY program assisted nearly 40,000 entrepreneurs in its first year of operation in 2013 and sanctioned loans to more than 1,800 enterprises. As a result of the substantial work the state carried out in the information technology (IT) sector, several IT parks are operating in the state (end 2016). Seven new IT parks are expected to start over the next five years. The state government is looking at developing Tier II cities like Haldia, Durgapur & Siliguri and also suburban areas around Kolkata as the next IT hubs. In addition, West Bengal is also focusing on other manufacturing industries such as iron & steel, textiles, leather, and food processing.

Among other leading states in the LIS category are Uttar Pradesh with 25 percent of the addressable demand, Rajasthan with 17 percent, and Orissa with 15 percent of the debt demand. Jharkhand, Bihar, Chhattisgarh, and Madhya Pradesh have shown a low demand for financing, all together accounting for only 14 percent of the addressable debt demand in the region.

Northeastern States
Assam has the largest number of MSMEs — nearly 1.3 Million — and accounts for an estimated 71 percent of the addressable debt demand in the region. Tripura and Nagaland account for another 12 percent and 9 percent respectively of the in Northeastern states’ addressable debt demand. Key sectors and areas for growth in the regional MSME sector include khadi and village industries, coir, and bamboo businesses. A concerted cluster-based approach carried out through a partnership between the MSME Ministry and state governments has helped support these.

Rest of India
In the rest of the country, Maharashtra, Delhi, Tamil Nadu, Punjab, Gujarat, and Andhra Pradesh together account for 86 percent of the addressable debt demand. These states push registration of enterprises continuously and closely monitor and evaluate the progress of the sector across industries.

Maharashtra is the second-largest state in India in population and the largest geographically. The state has 5.5 million MSMEs and therefore accounts for the highest share at 20 percent of the overall addressable debt demand by MSMEs in India. Region-wise, it accounts for more than a quarter of the addressable debt demand. Apart from the auto industry which has played a key role in the industrialisation of the state, the state is emerging as a leader in the biotechnology sector and also attracts a host of ancillary players in the pharma industry.
Tamil Nadu accounts for nearly 16 percent of the addressable debt demand in states other than the Low income and Northeastern states. The Textile Industry and its sub-sectors, such as handloom, powerloom, spinning, processing, knitwear and garment production is dominant in the state.

Haryana, Karnataka, and Kerala follow with 10 percent of the Rest of India’s addressable demand. Footwear, home furnishing, cane & bamboo, agarbatti (incense sticks), food processing, and furniture are some of the important businesses that engage a substantial number of MSMEs in these states.

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**Top State / Territory Debt Demand in the Rest of India – FY 2017**

<table>
<thead>
<tr>
<th>State / Territory</th>
<th>Percent of Overall Debt Demand</th>
<th>Percent of Debt Demand in Rest of India Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>20%</td>
<td>26%</td>
</tr>
<tr>
<td>Delhi</td>
<td>18%</td>
<td>25%</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Punjab</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Gujarat</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>66%</strong></td>
<td><strong>86%</strong></td>
</tr>
</tbody>
</table>
Chapter 2

Supply of Finance in MSME Sector
Supply of Finance in MSME Sector

The supply of credit to the sector is the credit that has been directly disbursed to MSMEs for working capital or their longer-term fixed-asset expenditure. Credit supplied indirectly, such as for refinancing purposes, has not been included in this assessment. For the assessment of formal sources of credit to the sector, data has been derived from the yearly figures reported by RBI, SIDBI, and financial institutions in their annual reports. Informal sources of credit have been identified through mostly primary research with informal credit suppliers, as well as finances reported by registered entities such as chit funds. Please refer to annexure for details on the estimation methodology.

Overall Supply of Credit to the MSME Sector

The overall debt supply to the sector, through informal and formal sources, is estimated at INR 69.3 trillion (USD 1.1 trillion)\(^7\). Informal sources cater to INR 58.4 trillion (USD 898 billion) of the debt demand, while formal sources account for INR 10.9\(^8\) trillion (USD 168 billion) of the MSME debt demand.

Banking institutions account for INR 9.4 trillion (USD 144.3 billion) of the overall formal finance supply, where commercial banks are the largest formal sources of finance to MSMEs, contributing INR 8.8 trillion (USD 135.6 billion).

Estimates suggest that informal sources of debt account for INR 58.4 trillion (USD 898 billion) or ~84 percent of credit supply to the sector. Informal sources include both institutional sources such as money lenders and chit funds\(^8\) and non-institutional sources such as family, friends, and family businesses.

Flow of MSME Debt Finance from the Informal Sector

Informal debt dominates the flow of credit to both registered and unregistered MSMEs, but it is difficult to quantify this with certainty. This is because of the varying definitions of informal sources, unavailability of documented data on most informal sources of credit, and the general lack of oversight.

The size of the registered chit fund market in India is estimated to be INR 0.35 trillion (USD 5 billion)\(^9\), while the unregistered chit fund market is approximately 100 times bigger!

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\(^7\) MSME Census, Bank and NBFC Annual Reports, SIDBI, RBI, NABARD, Primary Research, WBG-Intellecap Analysis

\(^8\) Total loans outstanding to MSMEs at the end FY '17 was INR 13.7 trillion as per WBG – Intellecap analysis

\(^9\) A Chit Fund company is the one which manages, conducts or supervises, as foremen, agent or in any other capacity, chits as defined in Section 2 of the Chit Funds Act, 1982. Such schemes can be conducted by organized financial institutions or these may be unorganized schemes between friends and / or relatives. According to Section 2(b) of the Chit Fund Act, 1982, “Chit means a transaction whether called chit, chit fund, chitty, committee, kuri or by any other name by or under which a person enters into an agreement with a specified of persons that every one of them shall subscribe a certain sum of money (or a certain quantity of grain instead) by way of periodical instalments over a definite period and that each such subscriber shall, in his turn, as determined by lot or by auction or by tender or in such other manner as may be specified in the chit agreement, be entitled to the prize amount.”

Assumed that 50% of this goes to MSMEs

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Supply of Debt to the MSME Sector – 2017 (in INR Trillion)\(^*)

<table>
<thead>
<tr>
<th></th>
<th>Supply</th>
<th>Formal Sources</th>
<th>Informal Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>69.3</td>
<td>10.9</td>
<td>58.4</td>
</tr>
<tr>
<td></td>
<td>(1066)</td>
<td>(168)</td>
<td>(898)</td>
</tr>
</tbody>
</table>

*Figure in brackets is in USD billion
Source: RBI, Primary Research, WBG-Intellecap Analysis
The overall chit fund market is expected to grow 10 percent – 15 percent annually in the short term. Studies estimate that 40 percent–45 percent of the members of chit funds are proprietors or MSME owners\textsuperscript{83}.

Just about 1 percent of the informal supply of credit to the MSME sector comes from registered chit funds; the remaining 99 percent that is largely unaccounted for\textsuperscript{84} comes from unregistered chit funds, moneylenders, and non-institutional sources such as family, friends, and family businesses.

In fact, most available data on the informal lending sector is about community institutions such as chit funds. These institutions form an effective source of credit and typically cater to micro and small business that are usually unregistered and do not have formalized processes in place. These enterprises largely cover service industries such as retail trade, and repair and maintenance. Almost all informal loan products are unsecured, making it more suitable to the many MSMEs who do not have immediate access to immovable collateral\textsuperscript{85}.

The average ticket size and duration of a loan from chit funds is INR 0.25 million (USD 4,000) and 25 months respectively, though the range of the loan sizes is broader — from INR 0.1 million to 50 million (USD 1,500 to 0.8 million)\textsuperscript{86}. The interest cost in a chit fund is typically in the range of 12 percent–14 percent annually. This is lower than bank rates, which are about 12 percent–20 percent, as well as rates offered by moneylenders, which can be anywhere starting form 36 percent going all the way up to 200 percent\textsuperscript{87}. However, the time taken to disburse loans is usually at least two to three months for chit funds and between 2–4 weeks in case of banks, while moneylenders are usually able to grant and disburse loans immediately\textsuperscript{88}. Friends and family are an important source of financing and support for MSME enterprises. They have a personal relationship with enterprise owners and provide funds almost immediately at little or no cost, without any collateral, especially if the financing demand is small. This is particularly common during the early stage of an enterprise. For larger ticket sizes, MSMEs turn to moneylenders who have high finance costs and unclear terms of lending. But because they usually provide funds no matter the business model, MSMEs turn to them for loans. Businesses prefer the certainty of finances in the short-term even if the lack of familiarity with formal financing and high burden of repayment in the long-term may render MSMEs uncompetitive in the mainstream market\textsuperscript{89}.

\textsuperscript{83} IFMR (2010), All India Association of Chit Funds (2015), WBG-Intellecap Analysis, WBG-Intellecap Analysis
\textsuperscript{84} All India Association of Chit Funds (2015), WBG-Intellecap Analysis
\textsuperscript{85} International Journal of Management and Social Sciences Research (Nov 2014)
\textsuperscript{86} All India Association of Chit Funds (2015)
\textsuperscript{87} International Journal of Management and Social Sciences Research (Nov 2014), All India Association of Chit Funds (2015), Primary Research
\textsuperscript{88} International Journal of Management and Social Sciences Research (Nov 2014), All India Association of Chit Funds (2015), primary Research
\textsuperscript{89} YES Bank, Primary Research
Supply of Informal Debt to the MSME Sector – 2017 (in INR Trillion)*

<table>
<thead>
<tr>
<th>Source</th>
<th>Formal Debt Supply</th>
<th>Informal Supply</th>
<th>Registered Chit Funds</th>
<th>Unregistered Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCBs, RRBs, and UCBs</td>
<td>9.4 trillion (144)</td>
<td>58.4 (898)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| The SCBs, together with RRBs and UCBs, make up the INR 9.4 trillion (USD 144 billion) of credit supply to MSMEs from formal banking institutions. The balance INR 1.5 trillion (USD 24 billion) of formal debt comes from both non-banking finance companies (NBFCs) and government institutions, such as the Small Industries Development Bank of India (SIDBI)° and State Financial Corporations (SFCs)°°.

Formal Debt Supply to the Sector

The MSME sector received INR 10.9 trillion (USD 168 billion) in debt from banking and non-banking institutions. Scheduled Commercial Banks, comprising public sector banks, private banks, and foreign banks, contribute the largest share of formal debt to the MSME sector – they are estimated to provide INR 8.8 trillion (USD 136 billion) to these enterprises.

Most of the public and private sector banks among the 91 Scheduled Commercial Banks have an MSME portfolio. Not surprisingly, these banks, according to the RBI data, contribute nearly 97 percent of the SCB’s debt supply to the sector, while foreign banks contribute only 3 percent to the sector°°. This is because foreign banks have limited presence in smaller towns and rural areas; they focus on larger corporate clients in cities with lower cost of credit.
Despite the recent growth of NBFC lending in this space, banks continue to be the dominant player, contributing 86 percent of the total debt financing that comes to MSMEs. The high share of banks can be attributed primarily to two key reasons. First, Priority Sector Lending guidelines set by the Reserve Bank of India require banks to provide debt to credit-strapped sectors such as MSMEs and agriculture. These lending norms have compelled banks to take a closer look at the MSME sector than previously done and develop strategic initiatives around lending to different industries and geographies within the sector and loan products that are best suited to the needs of different MSMEs. Secondly, with the growing government attention and media focus, highlighting the contribution of MSMEs to the economy and their huge market potential, banks in general, and private banks in particular, are pivoting their strategy from focusing on the corporate segment to serving MSMEs in order to grow their balance sheets.

Two innovative examples of the State Bank of India and Dena Bank – both public sector banks – highlight how banks have implemented new initiatives and bolstered existing programs to develop solutions for MSME financing.

**State Bank of India – Supply Chain Finance**

The State Bank of India, with a 200-year history, is the largest commercial bank in India in terms of assets, deposits, profits, branches, customers and employees. Through its online platform, the bank has been focusing on financing the supply chain partners of various prominent corporates. The bank leverages technology for the convenience of customers and provides credit to both vendors and dealers through an online platform accessible from its online portal.
The bank offers separate products to cater to the needs of both vendors and dealers:

- **Electronic Vendor Financing Scheme (e-VFS)**: This scheme provides for financing receivables of vendors (suppliers) of well-known corporates / Industry majors with whom the bank has entered into a tie-up. It is an entirely web-based solution that requires minimal branch intervention, providing instant credit into vendors account electronically. All that the corporate buyers have to do is to upload the details of invoices raised by their vendors on the bank’s online platform. This is useful for both Industry majors as well as their vendors to accomplish Just-In-Time production, or lean manufacturing.

- **Electronic Dealer Financing Scheme (e-DFS)**: This scheme provides for financing purchases of dealers from corporates / Industry majors with whom the bank has a tie-up. This too is completely web based, with customized MIS provided to the stakeholders. Large corporate sellers make online requests for debiting dealer’s account by providing details of invoices raised from them. This results in immediate credit to the corporate sellers’ accounts. Thus SME dealers have access to immediate credit for procuring goods from large corporate sellers for their trading and distribution business.

Under e-DFS, SBI has tied up with 130 large corporates across industry verticals, such as auto, oil, steel, power, fertilizer, FMCG, and textiles. As a result, nearly 2,000 vendors and more than 7,900 dealers across the country were migrated to the e-DFS / e-VFS platform as at the end of FY 2015. The bank is focusing on adding more corporates to its e-DFS portfolio across sectors like steel, oil, petroleum, textile and garment, FMCG, and consumer electronics. The performance of SBI’s supply chain finance under the scheme has been robust during the past three years, as is illustrated alongside.

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*Source: SBI annual Report 2014-15*
**State Bank of India – Online Seller Financing[^96]**

Capitalizing on the 500,000 and growing sellers on Indian e-commerce sites, State Bank of India is the country’s first bank to formally launch financial products targeting the online seller market. As the nation’s largest lender since 2015, SBI has looked to expand its loan offerings and reach out to MSMEs through partnerships with e-commerce companies.

In May 2015, SBI tied up with Snapdeal for the first time as a lender to its online sellers through its e-commerce platform, Capital Assist. Under the partnership, the bank launched its e-Smart SME program with Snapdeal in January 2016 to provide working capital loans to online e-commerce sellers in real time. What distinguishes this program from any other bank financing initiative for MSMEs is SBI’s use of technology-backed data analytics to assess creditworthiness of sellers in place of traditional metrics such as balance sheets and income tax returns.

The partnership with Snapdeal provides SBI with real-time data to appraise the business model and cash flow of online sellers so as to calculate an alternative credit score without collateral. Under the e-Smart SME program, SBI instantly approves loans up to INR 1 million (USD 0.02 million) without any collateral. However, for loans ranging from INR 1 million – INR 2.5 million (USD 0.02-0.4 million), collateral is necessary. This program also seeks to target and serve women entrepreneurs by providing them discounted loan rates. SBI is also looking to establish such partnerships with Flipkart, Paytm, and Amazon.

**Dena Bank – Startup Financing**

Dena Bank is a Public Sector Bank constituted under the Banking Companies (Acquisition & Transfer of Undertakings) Act, 1970, after it was nationalized along with 13 other major banks. The bank provides banking and other financial services primarily to retail and corporate clients in India.

Dena Bank has opened a ‘smallB Branch for Innovation & Start-up Finance’ in Mumbai under the guidance of Department of Financial Services (Ministry of Finance, Government of India). The designated branch provides loan facilities of up to INR 10 million which is mandatorily covered under the CGTMSE scheme. In case of scaling of business and further Debt requirement, same may be considered by the normal branch of bank based on merit.

[^96]: SBI (2016)
Details of the smallB branch

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Details</th>
</tr>
</thead>
</table>
| Eligible Enterprises                     | • New MSME businesses set up by promoters experienced / qualified in the line or early stage MSME units, which have commenced operations (not necessarily profitable but have potential to break even in near future)  
• Start-up / early stage businesses where a business model has emerged (with customer acceptance) even though they may not have turned profitable. However, business should ideally turn cash profitable (EBDTA positive) within a year of debt infusion by the bank  
• Service / technology businesses that are making profits but are still unable to attract adequate financing from formal banking system / VCs because of lack of assets for their growth |
| Nature of credit facilities offered      | • Normal Term Loan for Innovative Projects including working capital facility  
• Need-based working capital limit in the form of CCH selectively if sufficient stock and book-debts available  
• Non-fund based facilities wherever required within the overall credit limit of INR 10 million |
| Pre-condition for financing              | Businesses that have previously been funded by:  
• Angel Investors (part of networks such as Indian Angel Networks, Mumbai Angels, etc.)  
• Venture Capital Fund (registered with SEBI) |
| Margin                                   | Minimum 30 percent of the project cost must be brought by:  
• Angel Investor / Venture Capital Fund  
• Subordinate debt from SIDBI  
• Promoter’s own contribution |
| Rate of Interest                         | 12.50 percent (fixed) |
| Processing Fee                           | 0.12 percent |
| Repayment Period                         | • **Term Loan:** up to 7 years (maximum moratorium of 3 years)  
• **Cash Credit:** one year (subject to renewal) |

Breakdown of Debt Supply by Type of Banking Institution

Banks account for 86 percent of formal debt supply to the MSME sector. Scheduled commercial banks comprising public banks\(^n\), private banks and foreign banks\(^n\) supply INR 8.8 trillion (USD 135.6 billion) of debt to the sector, while smaller banks such as Regional Rural Banks and Urban Cooperative Banks supply INR 0.56 trillion (USD 8.7 billion) of debt\(^o\).

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\(^n\) Dena Bank smallB Branch Blog  
\(^n\) Banks in which Government of India has majority shareholding  
\(^n\) Foreign Banks in India operate as branches of parent bank  
\(^o\) RBI; NABARD Annual Report 2017; Primaries; WBG-Intellecap Analysis
Banking Institution Supply to the MSME Sector – 2017 (in INR trillion)*

<table>
<thead>
<tr>
<th>Banking Institution Supply</th>
<th>Public Banks</th>
<th>Private Banks</th>
<th>Foreign Banks</th>
<th>Small Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.4 (144)</td>
<td>5.4 (84)</td>
<td>3.1 (47)</td>
<td>0.29 (4.5)</td>
<td>0.56 (8.7)</td>
</tr>
</tbody>
</table>

*Figure in brackets is in USD Billion
Source: RBI; NABARD Annual Report 2017; Primaries; WBG-Intellecap Analysis

Analysis of MSME credit portfolios of banks suggests that Public Banks account for 58 percent of banking sector debt to the sector, while the private and foreign banks together account for 36 percent of the banking supply of finance. This study estimates that banking institutions serve approximately 22 million MSMEs. The estimate is arrived at after adjusting for the fact that medium and small enterprises may have multiple banking relationships — on average about two to three bank accounts per enterprise — while micro enterprises who do have formal banking relationships typically only maintain one account.

Supply of Finance by Scheduled Commercial Banks
Public Banks have better access to MSMEs, leading in lending to the sector as compared to private and foreign banks. This is due to the extensive branch network of public banks that provides unparalleled outreach across the country – public banks account for more than 65 percent of the Indian bank branch network. This is driven by the government’s obligation to ensure the entire country is covered with banking infrastructure, including even the low income and the Northeast states that private sector institutions find not as amenable to banking and business.

Statistics on Branch Network – 2017

<table>
<thead>
<tr>
<th>Type of Bank</th>
<th>Number of Branches</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Banks</td>
<td>91,445</td>
<td>65.8%</td>
</tr>
<tr>
<td>Private Banks</td>
<td>24,661</td>
<td>17.8%</td>
</tr>
<tr>
<td>Small Banks</td>
<td>22,482</td>
<td>15.1%</td>
</tr>
<tr>
<td>Foreign Banks</td>
<td>288</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128,835</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: RBI; NABARD Annual Report 2016-17

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* RBI; MSME Annual Report – 2015, SIDBI; WBG-Intellecap Analysis
RBI STRBI Table 17, 2017; Primary Research, WBG-Intellecap Analysis
Primary Research, WBG-Intellecap Analysis
Source: Dept. of Financial Services, Ministry of Finance, Government of India, Primary Research
Supply of Finance by Other Banks (RRBs & UCBs)

Other banks such as Regional Rural Banks and Urban Cooperative Banks have a significant branch network across the country that is comparable with the branch network of private banks. These banks focus on serving the underdeveloped and rural areas that are hard to reach unlike metros and urban centers where sophisticated banking infrastructure is ubiquitous. Analysis suggests that these banks have approximately 22,482 branches across India as of 2017\textsuperscript{105}.

Despite their branch outreach, these banks account for only 6 percent of the formal banking debt supply to the MSME sector as against private banks contributing 33 percent of the banking supply of debt to the sector\textsuperscript{106}. This is incongruent because unlike other banks, these banks were established to serve weaker sections and micro and small units in rural and backward areas. However, low loan recovery rates and commercial unviability prompted many of them to diversify into a range of other areas, including jewelry and deposit-linked loans, consumer loans, and home loans.

Part of the reason these banks have not been able to serve the sector well is their bureaucratic processes and a lack of adequate training of banking personnel to specifically cater to the needs of these businesses. Onerous compliance requirements have further stifled the growth of these banks. Given their poor track record, a number of RRBs have been gradually merged with their sponsor banks\textsuperscript{107}. Consequently, the number of RRBs has reduced from 196 in 1990 to 56 in 2016.

However, there is a great potential for these banks to expand their outreach and credit supply to the sector. They have a strong presence in low income states such as Uttar Pradesh, Jharkhand, Madhya Pradesh, and West Bengal, where banking infrastructure is typically limited. Therefore, these banks have a better ability to gain first-hand knowledge of changes and trends in MSME financing and prepare a greater network of local enterprises that need and seek funding\textsuperscript{108}.

To tap into this potential, primary interviews reveal that SIDBI has committed resources to conduct training for small banks across the country to assist them in developing strategies around supplying credit to the sector, particularly using a cluster-based approach\textsuperscript{109}. Additionally, the training is meant to empower banks to prepare their staff on how to serve MSMEs better. Customer meeting is a part of the training, which helps small banks get feedback on ways to improve their outreach and loan processes for the sector so that they can proactively assist MSMEs that run the risk of default.

SIDBI estimates that small banks typically provide loans ranging from INR 50,000 (USD 770) to INR 1 million (USD 15,000) per enterprise, which can go a long way for MSMEs usually located in smaller resource-poor markets. Improving governance, credit assessment and disbursement processes of small banks are other areas of focus. This will help bank branches be better prepared to make more informed credit decisions and develop innovative loan offerings. SIDBI is working along these lines, brainstorming with small banks to develop loan products tailor-made for rural and resource-strapped MSMEs\textsuperscript{110}.

\textsuperscript{105} NABARD Annual Report 2016-17; RBI
\textsuperscript{106} RBI; MSME Annual Report – 2015, SIDBI, WBG-Intellecap Analysis
\textsuperscript{107} Centre for Policy Research
\textsuperscript{108} IICA National MSME Conclave (2014), SIDBI, Primary Research
\textsuperscript{109} IICA National MSME Conclave (2014), SIDBI, Primary Research
\textsuperscript{110} Primary Research
Specialized Credit Institutions-SFBs

RBI’s decision to launch Small Finance Banks, which have a mandate to ensure that at least half of their loans should constitute advances less than INR 2.5 million, is an endeavor to bring specialized institutions that can profitably cater to this segment through appropriate business models. Most entities that have received an ‘in-principle’ nod to set up SFBs are therefore micro-finance institutions that specialize in small-ticket loans.

The brief for these banks is also to ensure that at least 75 percent of their loans qualify for Priority Sector Lending. Executives from some of these institutions have clearly stated that their target customers would mainly comprise marginal or tenant farmers, among others, and they would lend for purposes such as agriculture, animal husbandry as well as housing. Additionally, the attempt will also be to focus on shopkeepers as such businesses are mostly micro enterprises.

It is estimated that starting 2017, Small Finance Banks will contribute to an additional INR 130 billion (USD 2 billion)11 credit flow to the MSME sector. This will be over and above the CAGR of 50 percent10 of their existing gross loan portfolio. However, these banks will have to spend time and effort in generating required awareness amongst small businesses of their presence as credit institutions. Additionally, in order to compete effectively with established incumbent banks for mobilizing low cost deposits, SFB’s have been trying to lure customers with higher interest rates on deposits parked with them. This has currently constrained them from offering loans at lower rates to the target segments113.

Specialized Credit Institutions-MUDRA Bank

In April 2015, the Government of India launched the MUDRA (Micro Units Development and Refinance Agency) Bank for primarily refinancing micro businesses with loan requirements in the range of INR 50,000 to INR 1 million.

All loans up to INR 1 million sanctioned on or after April 08, 2015 for non-farm income generating activities will be branded as MUDRA loans. Even though the quantum of MUDRA loans disbursed in the coming years will be significantly larger — the government has met the target of INR 1.8 trillion for FY 16-17 — the maximum additional credit flow to the MSME sector is estimated to be INR 50 billion per annum only over the next three years. This is because the additional loans will be constrained by size of the refinancing corpus which is currently INR 200 billion spread over four years.

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11 WBG – Intellecap Analysis
10 MFIN Annual Report, 2014-15
11 Note: Future credit supply estimations from SFBs and MUDRA is based on primary research and WBG-Intellecap Analysis
Payments Bank

Payments bank is a new model of banking conceptualized by the Reserve Bank of India (RBI). These banks cannot offer credit, but can operate current and savings accounts. On 19 August 2015, RBI gave ‘in-principle’ licenses to eleven entities to launch payments bank. As on date, four payments bank have started operations.

While payment banks cannot provide credit, these banks will likely explore innovative partnerships with lenders to create joint value proposition for each other. For instance, some Payments Bank can help rural suppliers on its ecommerce platform in meeting their credit needs by connecting them with suitable fintech companies. The credit from such fintech NBFCs may be routed to the suppliers through the Payment Bank.

Supply of Finance by Government Institutions

Key Government Institutions

SIDBI, India’s apex financial institution for the promotion and development of MSMEs was established in 1990 by the Indian government to act as an intermediary organization that provides key research and facilitation necessary for the growth of the sector. Ranked as one of the top development banking institutions in the world, SIDBI directly lends to the MSME sector as well as advises and supports lending to MSMEs by other financial institutions. As the country’s leading organization in steering the sector and ensuring innovative products and services reach businesses through channels created by robust, multi-stakeholder strategic partnerships, SIDBI does everything — from encouraging the promotion of a cluster-based approach, to innovation, and pioneering the well-known Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) guarantee program, and finally lending.

State Financial Corporations came to be organized in individual states after the enabling Central Act came into force in August 1952. These are state-level organizations meant to provide term finance to medium and small-scale industries. SFCs provide financial assistance by way of term loan, subscription to equity / debentures, guarantees, discounting of bills of and seed / special capital. They also operate a number of schemes on behalf of IDBI and SIDBI, in addition to the schemes for artisans, and special target groups such as women and physically handicapped.

State Industrial Development Corporations provide not only finance but also perform a variety of functions, such as arranging for land, power, roads, licenses for industrial units, sponsoring the establishment of such units, especially in backward areas, among others. They were set up entirely by individual state governments, unlike SFCs that were set up jointly by state governments with the RBI (responsibility now transferred to IDBI) and other financial institutions.
Government institutions such as SIDBI and State Financial Corporations make up 0.3 percent of the overall credit disbursement to the sector — with INR 14.5 billion (USD 0.2 billion) comes from SIDBI and INR 20.7 billion (USD 0.3 billion) from SFCs. SIDBI plays a much more important role as an ecosystem enabler. While it does provide longer-term loans to MSMEs directly, it also channels a larger proportion of its funds towards refinancing of other financial institutions, and towards training programs for financial institutions and MSMEs.

For the most part, SFCs and SIDCs across the states have suffered great losses due to poor implementation and poor investment strategies. Consequently, many are now defunct and only those states where industrialization and MSME activity is high as in Maharashtra, SFCs and SIDCs play an active role in guiding the government strategy on growing the sector. Additionally, a constant rise in non-performing assets over the past few years and poor credit policies have resulted in a majority of SIDCs and SFCs becoming inactive. Those SFCs that are active are heavily controlled directly by their respective state government and heavily factor into the state agenda for promoting MSMEs. Cases in point are SFCs in Kerala and Karnataka and SIDC in Maharashtra.

Supply of Finance by NBFCs

Debt supply from NBFCs to the MSME sector is estimated to be INR 1.5 trillion (USD 22.8 billion), or 14 percent of the overall supply to the MSME sector. In the past few years, NBFCs have been increasingly turning to MSMEs as an avenue for growth based on the higher margins of the sector and inadequate bank service penetration to the sector. Banks usually have a spread of 4 percent-5 percent, but NBFCs can charge higher interest on loans and can thus have spreads as high as 8 percent. MSMEs are willing to pay higher rates to NBFCs because they are able to disburse loans faster and more efficiently and have tailored their marketing campaigns to the sector more closely than banks.

Our study indicates that NBFCs will become a serious player for the MSME sector because they are nimble in their structure and can easily adapt to serving a niche market segment better than banks can. Even in the past few years, NBFCs have increased the credit supply to the sector considerably. For instance, from 2010 to 2015, NBFCs’ loans-against-property portfolio to MSMEs has grown three-fold to INR 0.6 trillion (USD 9.2 billion) from INR 0.2 trillion (USD 3 billion). Part of this growth has been fueled by the alternative credit assessment processes NBFCs use. This is a key distinguishing factor between banks and NBFCs. Banks largely look at enterprise balance sheets and accounts, as well as collateral to make a credit decision. On the other hand, NBFCs also factor in cash flows, future potential of the company, and assets other than immovable collateral. Still, they incur higher costs in many cases if they have to serve MSMEs in distant locations that are not well-connected. Additionally, NBFCs keep higher provisions for defaults since they are not protected by any guarantee schemes.
Most mainstream NBFCs primarily target and serve small and medium enterprises given that they have more stable cash flows. Also, typically owners of these enterprises are more aware and approach NBFCs themselves\(^{114}\).

Microfinance NBFCs (MFI-NBFCs) focus on serving the micro enterprise population. In 2012, regulations were made to formally bring MFIs into the purview of NBFC regulations so that RBI can keep a check on their lending rates and capital inflow. According to RBI regulations, 85 percent of the loan portfolio of an NBFC-MFIs should be to borrowers whose annual income does not exceed INR 60,000 (USD 923) in rural areas, and INR 120,000 (USD 1846) in semi-urban areas, with loans being capped at INR 50,000\(^{117}\). As there is no restriction on the way an NBFC-MFI can hold the balance 15 percent of the assets, many of these MFIs are looking to scale up their business by tapping into the credit needs of the micro enterprises\(^{112}\).

Micro enterprise loans account for 6% of the loan book of Utkarsh Microfinance\(^{9}\) – a leading Indian MFI-NBFC

Currently MFI-NBFCs serve 87 percent of the total MFI customer base, and are at the forefront of providing innovative loan products with flexible payment plans and micro-insurance to the micro enterprise segment\(^{113}\).

Priority Sector Lending Norms for the Sector

PSL guidelines, applicable to only banks and not NBFCs, have undergone changes from time to time. In 2013, PSL norms required banks to allocate a sizeable share of their credit portfolio directly or indirectly to the MSME sector. Specifically, all banks had to commit 40 percent of their Adjusted Net Bank Credit (ANBC) to the defined priority sectors. These mandates were taken from recommendations developed by the widely disseminated and referred Report of the Nair Committee on Priority Sector Lending, published in 2012. In 2015, the RBI revised the PSL guidelines based on the committee’s recommendations. These revisions require 7.5 percent of a bank’s total loan book to be disbursed directly to micro enterprises or indirectly to microfinance institutions, which largely serve this segment, in a phased manner by March 2017. Primary and secondary research indicate that while many banks in the current scenario of the sector will find this a difficult target to achieve, what will help them is the flexibility given for treating indirect lending through MFIs as priority sector lending. With this leeway, banks should be able to deploy larger amounts of debt capital to MSMEs\(^{114}\).

Breakdown of Debt Supply by Size of Enterprise

Based on the analysis of the data from RBI and various other financial institutions, the supply of debt to micro, small, and medium enterprise segments is estimated to be INR 3.9 trillion (USD 59.3 billion), INR 4.8 trillion (USD 74.5 billion) and INR 2.2 trillion (USD 34 billion), respectively\(^{115}\).

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\(^{114}\) NBFC Annual Reports, Primary Research, WBG-Intellecap Analysis

\(^{117}\) Cap on the borrowing limit of MFI clients is INR 100,000 which implies an individual borrower can now take loans up to INR 100,000 from two MFIs at the most

\(^{112}\) Times of India news article (2015), Link

\(^{113}\) RBI, India Microfinance (2014)

\(^{115}\) Priority Sector Lending-Targets and Classification – RBI (2015), Master Circular-Lending to Micro, Small & Medium Enterprises (MSME) Sector – RBI (2015), Primary Research, WBG-Intellecap Analysis

\(^{116}\) RBI, NABARD AR 17, Primary Research, WBG-Intellecap Analysis
Debt Supply to Micro, Small and Medium Enterprise Segments – 2017 (in INR trillion)*

Analysis of current supply of debt suggests that the average outstanding credit to micro, small and medium enterprises is INR 0.2 million (USD 3,082), INR 3.3 million (USD 51,340) and INR 37.1 million (USD 0.6 million), respectively.*

In general, financial institutions prefer serving small and medium enterprises, as higher average debt demand and lower cost of transaction make them an attractive customer segment to financial institutions. However, given that 95 percent of all MSMEs are micro enterprises, they account for a significantly higher overall credit demand than medium enterprises. Hence, even though a large percentage of micro enterprises do not have access to bank credit, supply to these enterprises exceeds that provided to medium enterprises.*

### Debt Supply by Type of Enterprise

Debt supply in manufacturing and services is estimated to be INR 4.6 trillion (USD 70.4 billion) and INR 6.3 trillion (USD 97.4 billion), respectively. While it is commonly believed that the supply of debt to service enterprises would be lower in the absence of any financing benchmarks similar to those in the manufacturing sector (Nayak Committee Recommendation†), the fact is that service enterprises accounts for 58 percent of the debt supply‡. This is because some of these enterprises tend to have significant primary security and assets or collateral to secure financing, and therefore, make for good candidates for bank loans. For instance, transport operators tend to have vehicles or garages as a primary security. Service enterprises that are unable to provide a collateral typically opt out of applying for formal finance, looking instead to informal sources.

### Debt Supply to Manufacturing and Service Sectors – 2017 (in INR trillion)*

*Figure in brackets is in USD Billion
Source: RBI, SIDBI, Primary Research, WBG-Intellecap Analysis

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*Figure in brackets is in USD Billion
Source: RBI, NABARD Annual Report 2016-17, Primary Research, WBG-Intellecap Analysis

†RBI, Statistical Tables Relating to Banks of India, Primary Research, WBG-Intellecap Analysis
‡WBG—Intellecap Analysis, Primary Research
††The Nayak Committee’s recommendations regarding provision of 20 per cent of the annual projected turnover as working capital is being recommended to the Financial Institutions and Banks for enterprises in manufacturing sector
§WBG-Intellecap Analysis
∥Primary Research
Breakdown of Debt Supply by Geography

Low income states and Northeastern states together receive only 27 percent of the supply of debt finance — estimated at INR 2.8 trillion (USD 42.8 billion) and INR 0.2 trillion (USD 2.5 billion), respectively. The Rest of India receives the balance 73 percent — INR 8 trillion (USD 122.4 billion) — of the total credit coming to the sector.

### Debt Supply to LIS, NES, and Rest of India – 2017 (in INR trillion)

<table>
<thead>
<tr>
<th>Share of Debt Supply</th>
<th>Northeastern States</th>
<th>Low Income States</th>
<th>Rest of India</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5%</td>
<td>0.2 (2.54)</td>
<td>2.8 (42.8)</td>
<td>8 (122.4)</td>
</tr>
</tbody>
</table>

*Figure in brackets is in USD Billion
Source: RBI, WBG-Intellecap Analysis

The flow of debt to a region can be explained by the availability of banking infrastructure, industrialization, and the type of MSMEs operating in the region, both in terms of size and sector focus.

In the Northeast, bamboo is the major MSME industry served by the financial sector. Otherwise, the sector is extremely credit-deficient, thanks to the low levels of banking penetration and poor debt-servicing track record in the region. Additionally, poor infrastructure in the region — in terms of road and power — has prevented alternative lenders from also serving the region.

The MSME Ministry is making effort to bolster infrastructure, technology, skill development for the sector and increase the overall business registration of, and tax collection from, MSMEs in the region. The idea is that by improving the enabling ecosystem and driving innovation, the Northeast can eventually attract the credit resources needed.

Additionally, the Ministry has also announced a framework for the revival and rehabilitation of MSMEs that are struggling to survive, but this program is yet to be implemented fully in the region.

Finally, based on evidence of the success of the microfinance industry in resource-poor areas, Public Sector banks, such as the State Bank of India and Central Bank of India, are supporting women entrepreneurs in the Northeast to fulfill priority sector requirements.

In Low income states, the scenario is better as compared to the Northeast, but is still quite challenging. Many of the key industries in the region focus on regional crafts. These include marble and stone idols, handloom carpets and mats, ceramics and pottery, brassware, and leather accessories and more. While they are prevalent in the area, financial institutions do not feel comfortable lending to these enterprises because they believe there is not much scope for them to scale up and grow. Many of the

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*RBI, WBG-Intellecap Analysis*
enterprises are micro in nature, with no or limited access to collateral or technical knowledge.

The poor road and power infrastructure in the region further compound the problem, discouraging larger enterprises, including banks, from establishing their presence in the region. The consequent lower banking penetration and the lack of adequate and affordable transportation also mean that banks find it difficult to attract or service large number of enterprises.

To combat both these challenges, institutions like SIDBI are trying to promote credit financing to support MSMEs in the region in partnerships with banks. These partnerships seek to build a more robust loan service and distribution network in credit-strapped areas. SIDBI believes that there will be an increased credit flow to MSMEs in the long run if banks increase their branch networks and digital infrastructure in underserved regions.

It is in the Rest of India region that most of the credit supply to the MSMEs is directed because of greater urbanization, development, and connectivity and access to resources. However, the situation between states varies. Maharashtra with 26 percent of the regional supply to the sector, Tamil Nadu with 15 percent, and Gujarat with 10 percent, have state governments that have made concerted efforts to develop the sector and build financial infrastructure. Consequently, the supply of credit here is greater. Resource-poor states that have a limited presence of MSMEs — Sikkim with 0.1 percent of the region’s credit supply to the sector, Jammu & Kashmir with 1 percent, and Uttarakhand with 2 percent — lag behind considerably.

To address these disparities and supply-side challenges, the Ministry of Finance and the Ministry of MSMEs had set up a committee in November 2015. Comprised of private sector banking experts, the committee brief is to brainstorm how to build MSME financing equitably across the country. The MSME Ministry’s Cluster Development Program is also working to set up robust supply-chain financing initiatives in credit-strapped areas of the country.

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52 CAFRAL (2015), SIDBI, State Level Cluster Data, WBG-Intellecap Analysis
Low Income States (LIS)
INR 2.8 trillion (USD 42.8 billion)

Northeastern States (NES)
INR 0.2 trillion (USD 2.5 billion)

Rest of India
INR 8 trillion (USD 122.4 billion)

The RBI regulations on asset classification specify different duration for NPA in agriculture crop loans. The details are given in ‘Master Circular-Prudential norms on Income Recognition, Asset Classification and Provisioning pertaining to Advances’ issued by RBI.

NPA Analysis

According to RBI, an asset becomes non-performing when interest or instalment of principal remains overdue for a period of more than 90 days\(^4\). Banks are required to classify non-performing assets into three main categories based on the period for which the asset has remained non-performing. These categories are substandard assets, doubtful assets, and loss assets.

There are various factors which may cause a loan to turn into an NPA. The table below summarizes some of the more common reasons.

<table>
<thead>
<tr>
<th>External Factors</th>
<th>Internal Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slowdown in the economy / industry</td>
<td>Cost overrun in project implementation</td>
</tr>
<tr>
<td>Shortage of critical inputs</td>
<td>Product obsolescence</td>
</tr>
<tr>
<td>Accidents / natural calamities</td>
<td>Diversion of funds</td>
</tr>
<tr>
<td>Changes in government policies</td>
<td>Strained labor relations</td>
</tr>
<tr>
<td>Inadequate credit appraisal</td>
<td>Poor financial planning and management</td>
</tr>
</tbody>
</table>

\(^4\) The RBI regulations on asset classification specify different duration for NPA in agriculture crop loans. The details are given in ‘Master Circular-Prudential norms on Income Recognition, Asset Classification and Provisioning pertaining to Advances’ issued by RBI.
Contrary to common perception, primary interactions with various banks did not present a negative picture of NPAs in MSME portfolio. Barring a few public sector banks that continue to adopt a cautious approach towards the sector citing asset quality concerns, most banks concur that the MSME portfolio is comparable, if not better, than their overall portfolio. These findings need to be looked at in the light of the following:

- While it is possible to assess the asset quality directly from the NPA numbers across different categories—MSME, priority sector, and the overall loan portfolio — a better measure is to compare both, the level of NPAs as well as restructured assets. In this regard, research indicates significantly lower instance of restructuring in the MSME portfolio of banks when compared to their larger borrower accounts.

- Private sector banks have mostly focused on catering to the short-term liquidity requirements of MSMEs by way of cash credit or bank overdraft facilities. This financing is typically extended against full collateral. Thus, they primarily cater to the short-term credit needs of those MSMEs that are stronger and therefore have lower than average credit risk.

Data on NPAs in the MSME portfolio of banks is not available\(^\text{15}\). The observations are therefore based on available data for Micro and Small Enterprises (MSEs).

### Rising NPA Ratios across MSE and Overall Portfolios of SCBs

A comparison of NPAs ratios across the Scheduled Commercial Banks overall portfolio vis-à-vis their MSE portfolio between 2012 and 2014 indicates that the NPAs ratios increased in both. This trend is explained by external factors such as overall slowdown in the economy during this period which adversely affected the repayment capacity of both large and small borrowers. India’s overall NPA numbers compared favourably against the global average during the same period.

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\(^{15}\) MSME NPA data wasn’t available on RBI website; it was sourced from MSME Committee Report, 2015.
Admittedly, the gross NPA percentage outside the MSE portfolio that is not reflected in the NPA numbers.

As the charts above indicate, analysis of data at an aggregated level does not reveal any clear trend between growth in loan book and NPA ratios.

The graph below indicates that a considerable restructuring takes place in the loan portfolios of large corporate accounts. Therefore, accounting for such restructuring, it can be seen that MSEs demonstrated better business prudence as well as credit discipline than their larger counterparts.

**Stress in SCB MSE Portfolios**

It appears from the previous graph that the NPA ratio is higher in the MSE segment. However, considering that restructuring and write-offs are predominant in the large corporate portfolio, the credit risk in the MSE segment seems exaggerated.

**Stress Levels (%) across SCBs in various portfolios**

Source: CII Banking Summit, 2016
**MSE Portfolios in Private Banks**

A comparison of the MSE and the overall portfolio of Public Sector banks with those of the private banks suggests that NPA ratios in case of private banks are significantly lower than those in the case of Public Sector banks. In fact, in case of private banks, the MSE portfolio performs better than the overall loan portfolio. Part of this could be attributed to the fact that private banks are able to take away better performing customers from public sector banks by offering them superior services.

Additionally, Public Sector banks face some specific challenges such as inadequate staff strength, made worse by the fact that these banks are unable to invest in specialised staff focused on MSMEs, thanks to their frequent rotation and transfers. Moreover, bureaucratic procedures in the case of many of these banks often result in lack of timely intervention when there are sign of incipient sickness. These factors partially account for the underperformance in their loan portfolio.

![Graph showing comparison of Gross NPA in Overall Portfolio and MSE Portfolio for Private Sector Banks and Public Sector Banks](source: RBI, WBG - Intellecap Analysis)

**Effect of NPAs on Bank Lending**

Insights from our research reveal that in case of MSEs, once an account becomes NPA, lenders tend to take a tough stance towards the struggling enterprise instead of helping them revive. This is often borne out of preconceived notions regarding the cause of non-payment — the starting assumption being that of willful default.

The classification of an account as NPA by itself should not result in withdrawal of support for viable accounts. Financial institutions should follow established guidelines for drawing a distinction between willful defaulters and non-cooperative borrowers on one hand, and borrowers defaulting due to circumstances beyond their control on the other.


SARFAESI has enabling provisions for eligible financial institutions to take possession of the secured assets in case of default, and recover their dues from the sale thereof. When a borrower defaults in repayment, the account is

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As per Budget 2017, the government has provided for tax concession by proposing increase in allowable provisions for NPAs from 7.5 percent to 8.5 percent.
classified as NPA. Thereafter, the secured creditor has to issue a notice to the borrower giving him 60 days to pay his dues. As per the provisions of SARFAESI, if the borrower is unable to clear the dues within this time, the bank can take possession of the assets as well as sell or lease them out in order to recover its dues.

The other legal measures available to banks for recovering their loans or part thereof are:

- **Debt Recovery Tribunals (DRTs)** for expeditious recovery in case of defaulters above INR 10 lac expeditiously
- **Lok Adalats** which seeks to resolve cases through arbitration and settlement

Analysis of RBI data on loans recovered through various channels indicates that NPAs recovered under the SARFAESI Act formed almost 63 percent of the total NPAs recovered between FY ’14 & FY ’17.

<table>
<thead>
<tr>
<th>Recovery of NPA by SCBs through various channels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FY 14</strong></td>
</tr>
<tr>
<td>Amt Recovered (as % of amt filed)</td>
</tr>
</tbody>
</table>

Source: RBI

The increase in number of cases referred to Lok Adalats pose additional challenges to an already overburdened legal system. On the other hand, number of cases referred to DRT has largely remain flat over the last four years while number of cases referred under SARFAESI Act has actually declined at a CAGR of 20 percent during the same period.

### NPA Update

NPA rates in the MSME portfolio continue to remain lower than those for the large corporate segment. The overall NPA rate in MSME portfolio was ~10.5 percent in 2017 compared to 16.7 percent in large and medium accounts\(^{138}\). This can also be evaluated against the backdrop of overall NPA rate for the commercial lending portfolio which was in the range of 14 percent–15 percent during this period.

Entities with credit exposure in the range of INR 10 lac to INR 5 crore demonstrated lower NPAs (~8 percent) compared to other entities (~11 percent) classified as MSMEs based on their credit exposure.

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\(^{137}\) NPA data w.r.t. MSME portfolio was not available. The findings here are presented based on SIDBI-TransUnion CIBIL study (Mar 2018) of 5 mn MSME accounts which were identified on the basis of loan size. Thus, micro segment was defined as those with aggregate credit exposure (at entity level) of less than INR 1 crore, and SME segment was defined as those with entity level credit exposure between INR 1 crore and INR 25 crore. While this does not align with the Government’s existing definition of MSMEs, the findings here are presented for directional reference since the credit exposure mentioned above align with typical loan ticket size of MSME units.

\(^{138}\) The study defines medium accounts as those with credit exposure between INR 25 crore and INR 100 crore whereas large accounts are those with credit exposure greater than INR 100 crore.
Private Banks and NBFCs demonstrated lower NPAs compared to Public Sector Banks. The MSME portfolio NPAs in the case of private sector banks and NBFCs were in the region of 3.5 percent to 5 percent whereas the same stood in the range of 10 percent–12 percent in case of public sector banks.
Chapter 3

Credit Gap in the MSME Sector
Credit Gap in the MSME Sector

In 2010, the overall credit gap to the MSME sector was estimated to be INR 2.9 trillion (USD 58.6 billion) with the addressable demand estimated as INR 9.9 trillion (USD 198 billion). Fast forward to 2017, the addressable debt demand is pegged at INR 36.7 trillion (USD 565 billion), growing at a CAGR of 21 percent. This growth can be partly attributed to the recent growth in credit demand from small enterprises as a result of economic conditions, as well as more small enterprises being considered viable for financing.

More interestingly, the addressable credit gap to the sector has grown at a CAGR of 37 percent to INR 25.8 trillion (USD 397 billion). This is in spite of the fact that the sector has evolved in the last five years to address MSMEs’ need for credit. With new players entering the market and new approaches to credit assessment, the supply-side of the sector, as a whole, is growing stronger in its ability to finance the MSME sector. However, it is not growing as fast as the number of MSMEs requiring and qualifying for formal credit. As a result, formal financial institutions are still not able to meet the credit gap. This chapter seeks to highlight and explain the present and forthcoming trends of the financing gap for the MSME sector from both a quantitative and qualitative perspective.

The data is derived from an analysis of the previously mentioned credit supply and demand of the sector, detailed in earlier chapters of this report. Primary research with key players that included financial institutions on the supply side, enterprises on the demand side, and ecosystem enablers such as intermediaries and government institutions, has driven much of the insights included in this chapter. The thrust areas are new sources of finance, growth opportunities for the sector, and recent approaches and trends.

**Overall Credit Gap in MSME Sector**

The total addressable demand for external credit is estimated to be INR 36.7 trillion (USD 565 billion), while the overall supply of finance from formal sources is estimated to be INR 10.9 trillion (USD 167.8 billion)\(^\text{19}\). Therefore, the overall addressable credit gap in the MSME sector is estimated to be INR 25.8 trillion (USD 397.5 billion).

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*Figure in brackets is in USD billion
Source: WBG-Intellecap Analysis, Primary Research*
The addressable credit demand is estimated to be INR 36.7 trillion (USD 565 billion) after excluding demand from new enterprises, closed enterprises\(^{140}\), and micro enterprises that do not seek formal financing\(^{141}\).

Yet, almost 75 percent of the addressable credit demand from micro enterprises and 80 percent of the addressable credit demand from small enterprises is currently unmet by formal financial sources\(^{142}\). The disproportionately larger gap in case of small enterprises can partly be attributed to the fact that the micro sector is much better served by MFIs than the small-scale sector, which continue to be primarily, but insufficiently, serviced by banks.

On the demand side, there are several reasons why enterprises are not able to access formal credit or prefer not to do so.

**Information asymmetry**: There is a large gap in the information available on the lending processes and enterprises are overwhelmingly unaware of how to procure a loan. Many times, they also are unable to meet documentation protocols to qualify as loan applicants to financial institutions. Not just that, MSMEs often seem to have discrepancies between their reported financial data and the actual state of financial affairs. Due to the preponderance of cash transactions, the reported data of micro enterprises in particular is often different from actual sales and profitability figures. In a lot of cases, these differences arise due to the inability to document transactions when there is a large volume of small-ticket transactions in cash. The problem is common for small and medium enterprises too due to the lack of organized and formalized book keeping systems. This effectively results in enterprises qualifying for much smaller loan amounts than what is needed.

\(^{140}\) Enterprises with less than one year of operating history

\(^{141}\) WBG-Intellecap Analysis

\(^{142}\) WBG-Intellecap Analysis, Primary Research
Clearly, MSMEs are not aware of the correlation between accurate documentation and proper maintenance of financial data on the one hand and increased ease in procuring finance on the other. Financial institutions and ecosystem enablers for MSMEs can create more awareness in this regard. This will directly enhance their capacity to make better credit assessment and, in turn, better serve these enterprises.

**Inadequate collateral:** Micro and early-stage small enterprises typically do not have adequate access to immovable collateral that meets the criteria of financial institutions. This increases the credit risk perception of MSMEs.

While banks and most NBFCs continue to insist on collateral requirement, MSMEs overwhelmingly prefer a loan option that does not require collateral when given the choice.

**Limited equity base:** On account of their inadequate equity base, MSMEs often take loans from multiple lenders, overextending themselves financially and making them vulnerable to defaulting. Additionally, these enterprises also access credit from informal sources, which are not reported to credit bureaus. Hence, financial institutions continue to err on the side of caution and are discouraged from providing debt finance to MSMEs.

On the supply side, financial institutions also face severe challenges that limit their ability to provide financing solutions to MSMEs.

**High transaction cost and lower margins:** For banks and NBFCs, financing MSMEs is both an expensive and a high-risk proposition. Constantly monitoring and engaging with MSMEs is considered too high a cost of business. Analysis suggests that the average size of credit demand from micro and small
enterprises, respectively, is INR 567,753 (USD 8,735) and INR 15.6 million (USD 239,567). The average size of credit extended by formal financial institutions based on assessed repayment capacity is even lower\textsuperscript{144}. On account of factors such as smaller ticket size, high cost of due diligence and collections, the profit margin from MSME loans is generally low, especially for traditional financial institutions. These are therefore inherent challenges for these institutions from pursuing MSME accounts actively.

**Low-risk appetite:** Financial institutions typically perceive MSMEs as a high-risk segment on account of their incomplete understanding of MSME businesses. Given their limited operations and resources, when banks do invest in providing loans to enterprises, they prefer to work with medium enterprises. That is because these businesses have more stable cash flows, formalized operational processes, and adequate collateral, affording a greater margin of safety and less resource-intensive due diligence to understand their business model. Risk aversion is topmost concern in the case of Public Sector banks due to the prospect of officers facing investigation from the Central Vigilance Commission and Central Bureau of Investigation when loans go bad.

**Outdated underwriting process:** The issue of higher risk aversion in the case of MSME loans, especially loans to micro and small enterprises, is further exacerbated by outdated standards of credit evaluation that place too much emphasis on collateral and do not truly paint an effective picture on a borrower’s ability to repay a loan\textsuperscript{145}. Because many financial institutions do not spend adequate time on the ground with MSMEs, understanding their business models and monitoring their performance, traditional lenders are unable to create loan underwriting systems that are more relevant to MSMEs. In most cases, institutions rely more on evaluation parameters that focus on past performance of the enterprise rather than future opportunities.

**Lack of Product Innovation:** Traditional lenders continue to lack understanding of the MSME sector, and, therefore, they have not changed their approach to lending. They still rely on loan products that often seem misaligned to the needs and capabilities of MSMEs. Their loan products require specific types of immovable collateral, and are inflexible in terms of their tenure and payment structure, forcing MSMEs to seek finance through other avenues. A grassroots approach to developing novel methods to serve MSMEs with debt finance is necessary for banks and other institutions in order to advance the growth of the sector.

Various other factors also contribute to the size of the gap. For instance, credit bureaus in India only have a limited amount of data on MSMEs currently. Additionally, the slew of laws that govern insolvency in India have resulted in a slowing of the process of judicial remedy. The recent changes in the Insolvency and Bankruptcy Law, however aim to address these concerns, and its implementation will be key for the MSME sector\textsuperscript{146}.

Even in cases of government schemes created to enhance credit flow to the MSME sector, financial institutions have chosen to take the safe route, lending...
only when enterprises meet the criteria set out in a specific scheme. Thus, enterprises not part of the focus sectors for which banks are mandated to offer specific loan products continue to remain where they are, failing to get the much-needed boost.

The addressable finance gap in micro, small and medium enterprise segments is estimated to be INR 8 trillion (USD 123.3 billion), INR 16.8 trillion (USD 258.6 billion) and INR 1 trillion (USD 15.6 billion), respectively.

**Analysis of Credit Gap by Size of Enterprise**

The micro enterprise segment accounts for 31 percent of the total addressable credit gap in the MSME sector, with a gap-to-demand ratio of 68 percent. Analysis suggests that the gap in the micro enterprise segment is due to the fact that micro enterprises are mostly part of the service sector and most entrepreneurs in the sector do not have access to immovable collateral to secure finance.

More importantly, although government agencies have multiple products and schemes targeting micro enterprises, the awareness among entrepreneurs about these products and schemes is very low. Combined with the fact that micro enterprises find it extremely difficult to maintain proper documentation and accounts owing to financial as well as manpower resource crunch, the lack of verifiable financial information about these enterprises is hardly surprising.

Finally, micro enterprises prefer the informal sector for their financing need because of hassle-free processes, personal relationships and shorter turnaround time. These factors are particularly relevant in their case on account of the nature of their operations, size of credit required as well as background of promoters.

The small enterprise segment accounts for the largest proportion of the addressable credit gap as a percentage of addressable demand at 77.6 percent. Part of this is explained by the fact that the credit demand from this segment does not automatically exclude itself from the formal sector unlike in the micro enterprise segment.

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*Figure in brackets is in USD billion
Source: WBG-Intellecap Analysis, Primary Research

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*WBG-Intellecap Analysis, Primary Research

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*WBG-Intellecap Analysis, Primary Research
The large gap in the small enterprise segment is also accentuated on account of increased working capital requirements due in part to factors such as general economic slowdown as well as GST requirements. Enterprises in this segment have witnessed longer than usual working capital cycles on account of delayed realization of payments from buyers. Primary research indicates that this segment increasingly relies on loan products such as Loan against Property in order to fulfill its working capital needs.\(^{149}\)

Medium enterprises are the best-served segment in the MSME sector and account for INR 1 trillion (USD 15.6 billion) of the addressable debt gap. Because of the larger size of these enterprises as well as their more formalized processes, medium enterprises are viewed as more stable and creditworthy.\(^{150}\) Also, given their scale of operations and need for market accessibility, these enterprises tend to be located in bigger cities where banks and sophisticated NBFCs have a branch network and skilled manpower. They are therefore in a better position to do the necessary due diligence and underwrite loans for such businesses.

### Analysis of Credit Gap by Type of Enterprise

The addressable finance gap in the manufacturing sector is estimated to be INR 12.8 trillion (USD 197.5 billion), while that in service sector is estimated to be INR 13 trillion (USD 200 billion).\(^{151}\) This is consistent with prevailing lending practice which places emphasis on immovable collateral for sanctioning loans to the sector. Within the services sector, credit demand for trading activities largely remains unmet for potential borrowers who cannot offer eligible collateral for securing loans. This is driving an increasing number of fintech companies to tap into this opportunity by partnering with e-commerce platforms for financing suppliers on such platforms.

#### Credit Gap by Type of Enterprise – 2017 (INR trillion)\(^{65}\)

<table>
<thead>
<tr>
<th>Type of Enterprise</th>
<th>Total Credit Gap</th>
<th>Credit Gap in Manufacturing Sector</th>
<th>Credit Gap in Services Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing</strong></td>
<td>25.8 (397.5)</td>
<td>12.8 (197.5)</td>
<td></td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td>13 (200)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{65}\) Figure in brackets is in USD billion

Source: WBG-Intellecap Analysis, Primary Research
Analysis of Credit Gap by Geography

Low income states and Northeastern states account for 24 percent of the addressable debt gap. In both the regions, low levels of industrialization and bank penetration have constrained the scale of MSMEs. As a result, the number of enterprises that would be viable to receive formal finance is considerably low. For that reason, financing to these geographies is bound to be lower.

Addressable Credit Gap by Geography – 2017 (INR trillion)*

<table>
<thead>
<tr>
<th>Region</th>
<th>Addressable Credit Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit Gap</td>
<td>25.8 (397.5)</td>
</tr>
<tr>
<td>Low Income States</td>
<td>5.9 (90.6)</td>
</tr>
<tr>
<td>Northeastern States</td>
<td>0.4 (5.6)</td>
</tr>
<tr>
<td>Rest of India</td>
<td>19.6 (301)</td>
</tr>
</tbody>
</table>

*Figure in brackets is in USD billion

Source: WBG-Intellecap Analysis

The addressable credit gap in LIS is estimated to be INR 5.9 trillion (USD 90.6 billion), accounting for 23 percent of the overall addressable credit gap in the MSME sector. The state of West Bengal alone accounts for 30 percent of the region’s addressable credit gap.

For the most part, the LIS region is plagued with poor banking infrastructure which can be partly attributed to deficiencies in the market and in physical infrastructure such as roads, electricity, and telecommunication. Additionally, due to low levels of financial literacy, entrepreneurs of micro and small enterprises are not aware of formal sources of finance and prefer self-financing or informal source of finance.

Banking penetration, defined as number of branches per hundred thousand people, is 3.26 in the LIS region, which is about 20 percent lower than in the Rest of India region. Not surprisingly, the credit-to-deposit ratio in the LIS region is 46 percent compared to 86 percent in Rest of India. Part of this can be attributed to the lower risk propensity of the banks in the region.

A substantial portion of the finance demand in this region comes from service enterprises, which struggle to access credit for meeting their working capital requirements because of limited collateral. Outside of services, the food products and beverages business contribute to nearly 15 percent of the region’s debt demand. The food business has heavy working capital need. The working capital cycle also tends to be

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*Source: WBG-Intellecap Analysis

1. WBG-Intellecap Analysis
2. WBG-Intellecap Analysis, Primary Research
3. RBI, Census 2011, WBG-Intellecap Analysis
4. WBG-Intellecap Analysis
longer, necessitated by upfront cash payment to farmers for basic agro inputs, storage of seasonal inputs for continuous processing and elongated sales and distribution cycles. Primary analysis reveals that the average working capital cycle in this industry is about six months. Financial institutions have an inherent preference for funding businesses with shorter working capital cycles. Additionally, most of the immovable collateral available to these businesses tends to be earmarked against term loans, leaving little to be offered as a surety for getting working capital loans.

With much of the region being rural, there is a great potential to provide greater access to much-needed goods and services through the promotion of MSMEs. Research indicates that public finance institutions such as public sector banks and SIDBI have the greatest reach in these areas and as a result, the greatest ability to affect change by addressing the credit gap for enterprises in the region. Recommendations for innovative loan products and loan extension services have been called for by state governments and there has been a focus on bolstering existing manufacturing skill development, especially for women, in these regions. Efforts are being made to address credit access and skill development of MSMEs associated with the following industries: leatherwork, metal, steel, and brass work, food products, engineering, and marble, gem and stone crafts including jewellery.

In the NES region, the viable and addressable debt gap is estimated to be INR 0.4 trillion (USD 5.6 billion), accounting for about 1.4 percent of the overall credit gap in the MSME sector. With the exception of Assam, which accounts for 71 percent of the credit gap in the region, there are much fewer MSMEs in the region, resulting in even poorer banking infrastructure than LIS – a banking penetration ratio of 3.13 per hundred thousand people. Apart from the infrastructural bottlenecks, particularly transport, fragile law and order conditions due to insurgency in the region are also a reason for the poor banking penetration ratio. The credit-to-deposit ratio in NES region is the lowest in the country at 37 percent and reflects how risk-averse banks are in the region.

<table>
<thead>
<tr>
<th>Details</th>
<th>NES</th>
<th>LIS</th>
<th>RoI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking Penetration Ratio</td>
<td>3.13</td>
<td>3.26</td>
<td>4.00</td>
</tr>
<tr>
<td>Credit Deposit Ratio</td>
<td>37%</td>
<td>46%</td>
<td>86%</td>
</tr>
</tbody>
</table>

Source: WBG-Intellecap Analysis, RBI Basic Statistical Returns (2017)

Again, food products and beverages is a major industry in the region, contributing close to 25 percent of the addressable credit demand in the region. A highly fragmented and unorganized retail sector also contributes to the gap. To address this, the MSME ministry has recommended that loan products such as guarantee-backed collateral-free loans are offered to enterprises in this region at a discounted rate. The region holds great potential for developing MSME growth in the handicraft sector particularly; most enterprises are micro in nature and need resources to be able to grow and scale up.

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95 WBG (2015), LIS Government webpages, WBG-Intellecap Analysis based on data from State SLBC, SFC, and SIDC MSME cluster webpages, Development Commissioner Reports 2010 (MSME Ministry), and UNIDO identified Clusters (2011)
96 WBG-Intellecap Analysis, Primary Research
97 MSME Ministry, Indian Chamber of Commerce (2014)
Among the major bottlenecks impeding the growth of the MSME sector in NES are land acquisition, poor availability of power and energy, transport, logistics, skilled labor, deficient market linkage, informal taxation, and an underdeveloped banking sector. Our research reveals that financial institutions have reservations against the region because of infrastructural issues and insurgency concerns; they fear that this impacts the long-term viability of the MSMEs as well as the financial institution’s ability to recover loans.

There is, therefore, a clear need for disruption in the region and MSME sector as a whole. Concerted efforts by local and national governments to address the weaknesses in the sector have been started in Assam, Manipur, Nagaland, and Tripura. In these states, efforts have been made to develop the credit access and skill development of MSMEs associated with the handmade textile and bamboo industries.

The addressable credit gap in the Rest of the country region is estimated to be INR 19.6 trillion (USD 301 billion), accounting for 76 percent of the overall credit gap in the MSME sector. Tamil Nadu, Maharashtra, Andhra Pradesh, and Delhi alone account for 74 percent of the region’s credit gap. Owing to better developed banking and industrial infrastructure and higher density of manufacturing MSMEs, states in Rest of India account for a higher share of debt supply. Commercial banking presence in the region is directly proportional to the industrial activity in the region. ROI accounts for the majority of the country’s total bank branches and has the highest banking penetration rate at four branches per hundred thousand people. The credit-deposit ratio at 86 percent is the highest of all the regions and indicates that financial institutions want to capitalize on lending to units in these states.

Additionally, due to higher levels of literacy, greater urbanization, and deeper internet penetration, micro and small enterprises are relatively more aware of the formal sources of finance available to them and are better able to access finance in the region.

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158 NES Government webpages, WBG-Intellecap Analysis based on data from State SLBC, SFC, and SIDC MSME cluster webpages, Development Commissioner Reports 2010 (MSME Ministry), and UNIDO identified Clusters (2011)

159 WBG-Intellecap Analysis, Primary Research
**Cluster Analysis**

In an effort to better address the growing gaps in credit, knowledge, and resources faced by MSMEs, SIDBI and the Ministry of Micro, Small & Medium Enterprises have adopted a cluster-based approach. The approach came to the forefront of strategic initiatives by the Ministry to help enterprises get better access to credit in 2010. This approach aggregates MSMEs by geography and industry, making it simpler to develop and implement wide-scale interventions and credit services catering to the demand-driven needs of MSMEs.

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Cluster Development Program – MSME Ministry (2010)
The main objective of these cluster-based initiatives is to address problems faced by MSMEs, such as improving access to credit and technology or increasing skills and market access through the establishment of facilities and peer groups. Through MSME clusters, SIDBI in particular, aims to create physical and strategic spaces for MSMEs to collectively develop community-tailored and community-owned solutions to their combined challenges. The idea was that clustering MSMEs improves their ability to access credit, which is a prerequisite in meeting four critical needs: sector-specific knowledge, skill development training, advocacy capabilities, and improving infrastructure.

Cluster-Specific Financing Schemes: Through its research, SIDBI found that the link between access to technology and access to credit is often not well understood. Clusters need assistance with deciphering how to leverage technology to meet their specific financing needs. Accordingly, SIDBI launched a platform that is available to 15 clusters and highlights tailored policy and technology recommendations to improve credit access for clusters. For instance, in the Kolhapur textile cluster (Maharashtra), this platform has encouraged the consolidation of units and enabled the NPA-free cluster to receive increased subsidies for power looms for micro and small enterprises.
Three Year Intervention – Addressing Financial Needs: SIDBI has begun a three-year pilot program focused on bringing together global thematic experts to assess and meet financial needs at a cluster-level and help develop concrete solutions that are owned and implemented by clusters without the aid of external organizations or partners. Five clusters have been selected for this pilot: Agartala bamboo cluster (Tripura), Coimbatore engineering cluster (Tamil Nadu), Ludhiana knitwear cluster (Punjab), Rajkot engineering cluster (Gujarat), and Bhagalpur textile cluster (Bihar).

While more than 650 clusters have been identified by state governments, these 30 spotlighted clusters were meant to be a representative sample of the country’s MSMEs and provided detailed quantitative accounts on capital requirements of enterprises. SIDBI used these reports as a framework for bringing together stakeholder partners to craft several pilot initiatives and test different methods of aiding MSMEs gain better access to credit at a cluster level. Analysis of the published reports as well as interviews with SIDBI reveal that the credit gap across the country does not follow a distinct, rational pattern. Within states, regions, and industries, access to credit differs widely. In many cases, research indicates factors as simple as personnel changes within local bank branches can have a deep impact on the same enterprise’s ability to access credit. Of the 30 clusters covered by SIDBI, the following table lists the ten clusters with the relative lowest credit gaps.

<table>
<thead>
<tr>
<th>Cluster Location</th>
<th>Industry</th>
<th>Credit Gap as % of Overall Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mysore</td>
<td>Furniture</td>
<td>1%</td>
</tr>
<tr>
<td>Kolkata</td>
<td>Leather</td>
<td>17%</td>
</tr>
<tr>
<td>Indore</td>
<td>Pharmaceutical</td>
<td>23%</td>
</tr>
<tr>
<td>Chennai</td>
<td>Leather</td>
<td>32%</td>
</tr>
<tr>
<td>Ludhiana</td>
<td>Knitwear</td>
<td>41%</td>
</tr>
<tr>
<td>Vatva</td>
<td>Dyes &amp; Chemical</td>
<td>52%</td>
</tr>
<tr>
<td>Kolhapur</td>
<td>Foundry</td>
<td>56%</td>
</tr>
<tr>
<td>Gangtok</td>
<td>Tourism</td>
<td>56%</td>
</tr>
<tr>
<td>Ankleshwar</td>
<td>Chemical</td>
<td>62%</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>Engineering</td>
<td>64%</td>
</tr>
</tbody>
</table>

Source: SIDBI Cluster Reports, WBG-Intellecap Analysis

[163] Primary Research, WBG-Intellecap Analysis
[164] SIDBI Cluster Reports, WBG-Intellecap Analysis

Detailed study on 30 clusters conducted by SIDBI

Given the ministry's interests and its own ongoing involvement in supporting clusters, SIDBI published a series of 30 cluster-focused reports in 2014 to serve as a quantitative and qualitative landscape study on the benefits of, and potential growth areas for, a cluster-based approach for MSMEs in India. Each report highlighted one of the 30 clusters across the country, handpicked by SIDBI as an example of a typically neglected group that needs self-sustainable short-term and long-term initiatives to meet financial, knowledge, and infrastructure challenges.
However, qualitative data on MSME clusters at national level suggests that for large parts of the country, MSMEs are generally more likely to have access to finance from formal sources in clusters than outside it.\(^{66}\)

Furthermore, of the 30 clusters covered by SIDBI, the following table lists the ten largest clusters.\(^{66}\)

<table>
<thead>
<tr>
<th>Cluster Location</th>
<th>Industry</th>
<th>Number of MSME Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coimbatore</td>
<td>Engineering</td>
<td>26,690</td>
</tr>
<tr>
<td>Ludhiana</td>
<td>Knitwear</td>
<td>14,000</td>
</tr>
<tr>
<td>Faridabad</td>
<td>Mix Engineering</td>
<td>11,680</td>
</tr>
<tr>
<td>Alleppey</td>
<td>Coir Products</td>
<td>9,900</td>
</tr>
<tr>
<td>Tirupur</td>
<td>Textile</td>
<td>5,875</td>
</tr>
<tr>
<td>Rajkot</td>
<td>Engineering</td>
<td>5,605</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>Tourism</td>
<td>5,500</td>
</tr>
<tr>
<td>Jamnagar</td>
<td>Brass</td>
<td>4,700</td>
</tr>
<tr>
<td>Kolkata</td>
<td>Leather</td>
<td>4,023</td>
</tr>
<tr>
<td>Delhi-Mumbai-Bangalore</td>
<td>Start-up &amp; Innovation</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Source: SIDBI Cluster Reports, WBG-Intellecap Analysis

Similar analysis of qualitative data on MSME clusters in these industries across the country suggests that a good number of clusters have access to some form of credit, though that might not be adequate to meet the gap. While NES clusters are again not well-represented within these industries, the overall qualitative data indicates that clusters provide a distinct advantage to MSMEs seeking debt capital. Consequently, more efforts should be applied to build cluster growth and sustainability and ensure cluster leaders have the resources and training they need to be self-sustainable.\(^{67}\)

Looking to the future, the cluster approach looks like it will only continue to grow and scale as pilot initiatives turn into full-fledged schemes. Clusters will also expand across sectors and industries. Currently, MSME clusters fall generally into the manufacturing sector. However, primary research reveals that the number of service clusters, such as tourism, IT, and innovation, are typically found in Tier II cities where real estate is inexpensive. These will mushroom, paving the way for new cluster initiatives that meet the distinct lending needs of the sector.\(^{68}\)

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\(^{66}\) SIDBI Cluster reports, State Level Cluster Data, WBG-Intellecap Analysis

\(^{66}\) SIDBI Cluster Reports, WBG-Intellecap Analysis

\(^{67}\) WBG-Intellecap Analysis

\(^{68}\) Primary Research, WBG-Intellecap Analysis
Chapter 4

The Rise in Digital Finance
The Rise in Digital Finance

Rise in Digital Finance Models for MSME Lending

While banks remain the undisputed leader in providing formal debt to MSMEs in India, alternative lending models backed by technology and big-data have come up in recent years, helping MSME lending evolve to some extent. Capitalizing on the need to address the serious lack of formal credit to these businesses in general, the new models are disrupting the way enterprises are assessed for credit risk, and presenting new methods of financing them in timelines that are relevant for them.

The global financial crisis of 2007-2008 resulted in a pull-back in overall credit availability, heightened regulations for SMEs in particular, increasing capital and borrowing costs as a whole\(^{170}\). Together, these factors created a more challenging environment for young and growing enterprises to secure credit.

The slew of programs announced in recent years in the form of Digital India, Start-Up India and Smart Cities, among others, have started to make the climate conducive for financial technology – or fintech – models to emerge in the MSME lending space.

Mirroring the global trend, credit in India had become harder than ever to access, and banks are finding it a challenge to meet the escalating demands of individuals and enterprises alike. Conventional modes of bank credit are slowly being replaced by alternative lending models. For most years between 2006 and 2013, NBFCs outgrew the banking sector with an average credit disbursal growth rate of 24.3 percent a year as compared to 21.4 percent for banks\(^{171}\). The growth of alternative lending models during this period set the stage for the rise of fintech firms. The growing focus on e-commerce firms, mobile governance and digital economy in general have helped to catalyze the process. The bad shape of informal banking has only helped underscore the need for technology disruption in debt financing.

As reported by the World Bank in 2014, nearly 47 percent of Indians are excluded from the formal financial system, and they depend on informal credit channels\(^{171}\). These credit channels provide immediate funds without any collateral, but charge exorbitant interest rates and debilitating borrowers’ sustainability and competitiveness in the long run. Consequently, there is an opportunity to cater to serious entrepreneurs who would prefer formal channels of credit if these could be accessed as easily and swiftly as informal credit.

There is further impetus to the fintech movement. The rise of e-commerce has led more service providers and small businesses to go online to increase the reach of their products and services, driving lending models to do the same in order to cater to these merchants.

According to a study by Goldman Sachs, India’s e-commerce market will cross the USD 100-billion mark by 2020, offering a lucrative and much-needed platform for both smaller sellers and lenders alike to establish their presence\(^{172}\).

Finally, with 5 million additional\(^{173}\) Indians accessing the internet every month and mobile usage penetrating almost every corner of the country, lending models that can be easily adapted for digital ecosystem have become a natural progression for the sector\(^{174}\).

\(^{170}\) WEF (2015)  
\(^{171}\) RBI (2014)  
\(^{172}\) WEF (2015)  
\(^{173}\) Goldman Sachs (2015)  
\(^{174}\) The number of Internet users was 432 million in December 2016 (Report from the Internet and Mobile Association of India and market research firm IMRB International)  
\(^{174}\) IAMAI (2014)
A number of fintech business models and products have appeared, and have been growing globally by 176 percent between 2010 and 2014. In general, these models offer five key benefits, fueling the rise and continued growth of the fintech MSME lending sector:

**Unsecured Loan Products:** The overwhelming majority of fintech lenders offer unsecured loan products, requiring no collateral. Enterprises that have stable cash flows but no collateral, such as MSMEs in the services sector, are typically rejected by banks and NBFCs. Fintech lending model can be potentially a boon for them.

Source: IAMAI (2016)

Source: WEF (2015), WBG-Intellecap Analysis

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6 WEF (2015)
Comfort with Higher Risk Profile: Most fintech models are devoid of the usual risk associated with lending as they simply act as an intermediary between lenders and borrowers. Consequently, they are able to identify and partner with more risk-taking investors and cater to the financing needs of enterprises that typically remain underserved.

Alternative Credit Assessment Methods: Perhaps the most distinctive aspect of marketplace models is their innovative approach to credit assessment on the basis of technology-enabled data analytics. Banks and traditional NBFCs base their appraisal on collateral and credit scoring, primarily carried out by CIBIL, as the principal way of assessing an applicant’s credit score. Without either of these two, an applicant is immediately written off from the loan application process. That’s not all. Often, the parameters by which a borrower is appraised are not clearly disclosed by banks and NBFCs. New-age technology companies are cashing in on this gap, updating this method of credit assessment to leverage technology and offer a wider population access to credit. Based on the social, behavioral, and financial data, including even a potential customer’s social media traction, these models give a more substantive picture of an enterprise’s ability to repay a loan. This enables them to offer credit more swiftly and resourcefully to a wider selection of borrowers.

Minimal Operational Requirements: Fintech lenders’ lean processes are the antithesis to banks’ often cumbersome bureaucracy – little paperwork, no physical branches and automated processes that do not need in-person visits. Loans can be disbursed in a matter of days or even few hours in some cases, offering enterprises almost immediate credit access and cutting into the ability of formal credit suppliers to compete effectively.

Low Regulatory Obligations: Currently, minimal regulatory compliance for non-bank entities provide an advantage to fintech companies to disburse loans to MSMEs rapidly. Enterprises do not need to submit documentation in person or worry about personal visits from loan officers.

While most fintech business models offer these aforementioned advantages to create a seamless lending experience for customers, a variety of individual business models have emerged, each catering to a distinct MSME financing need.

MSME fintech lenders can be broadly categorized into five distinct archetypes: Marketplace Lending, Balance Sheet Lending, Marketplace Hybrid Model, Invoice Lending, and Supply Chain Finance.

Marketplace Lending
Marketplace lending involves lending money to borrowers without going through a traditional financial institution, such as a bank. Instead, in most instances, the lender acts as the intermediary, connecting borrowers to institutional or even retail credit suppliers and facilitating the assessment, disbursal, and recovery of credit.
The biggest advantage of such models is that they eliminate the geographical barriers for both the lenders as well as borrowers. The strength of the model is however dependent on platform’s ability to leverage traditional and alternate sources of data and score the customer effectively, matching them to the risk appetite of the investor. The ability to price this risk is the key differentiating factor.

Marketplace Lending Model

Individuals or businesses who are in need of capital and do not have the collateral which is generally requested by the traditional institutions, can borrow using fintech lending platforms.

• Lenders register on the platform along with various criteria like maximum loan amount, exposure (single or multiple loans), eligibility criteria (Age, qualification etc.), loan tenure, interest rate etc.
• Borrowers register on the platform indicating their profile and loan requirements (credit score, debt-to-income ratio, salary, employment status and credit history and other details as deemed necessary)
• The marketplace platforms serve as “matchmakers”, pairing borrowers with investors who are willing to invest. along with the regular credit appraisal parameters, these platforms usually develop proprietary algorithms that analyze consume behavior, transactional data and other information.

Any individual / FIS residing / established in the country where the models are operative and seeking long term returns can invest. Entities generally include institutional investors. The investors set the criteria based on their investment outlook and preferred borrowers. For example: Threshold for the credit rating.

*Source: Intellecap Analysis

The more well-known a marketplace lender, the better its ability to match riskier loan segments to investors who can afford to take the corresponding risk. Loans are typically disbursed for working capital needs and aimed at solving temporary liquidity challenges. For that reason, these are small-term loans for 3-18 months\(^\text{16}\).

Types of Marketplace Models\(^\text{17}\)

Traditional
• These models allow lenders to interact with the borrowers directly and own the loans while the platform functions as an intermediary.
• The profile of a borrower is platform where lenders can assess these profiles to determine the credit worthiness of the borrower.
• The loan availed can also be financed by multiple lenders.

Notary
• In this model, the online platforms act as an agent to bring together creditors and borrowers, with banks or other financial institutions originating all fintech loans.
• These models are popular in countries with stringent regulations.

Guaranteed
• These platforms provide guarantees on the principal and / or interest on loans.
• These models have however, not tasted success in recent times.

Invoice Trading
• In these type of models, the platforms trade the invoices or receivables with third parties to maintain liquidity.
• However, existence ‘trust’ based issues remains the key challenge for these type of models.

\(^{16}\) WEF (2015)  
\(^{17}\) Fintech Credit Report published by FSB & CGFS – May 2017
The first fintech marketplace lending model emerged globally in 2005. This model currently makes up the majority of fintech MSME lenders, both abroad and in India. India’s marketplace lending models emerged around 2008, with most gaining recognition starting in 2014. Despite marketplace lending gradually picking up over the past few years, the size of India’s marketplace lending ecosystem is still largely unknown.

<table>
<thead>
<tr>
<th>Lendingkart</th>
<th>Innoviti</th>
<th>Faircent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: Ahmedabad</td>
<td>Location: Bangalore</td>
<td>Location: Gurgaon</td>
</tr>
<tr>
<td>Known for its credit evaluation platform that helps its NBFC partners assess creditworthiness and disburse loans within 48 hours even in Tier II and Tier III cities, Lendingkart focuses on start-ups and SMEs offering loans from INR 0.1-1 million (USD 2-15 thousand)</td>
<td>Established originally as a payments transaction platform to improve operational efficiency, Innoviti’s SME lending business connects enterprises to both banks and NBFCs, disbursing almost INR 3.8 billion (USD 60 million) to 10,000 SMEs in 20 cities.</td>
<td>A peer-to-peer (P2P) lending platform, Faircent brings together individual borrowers and lenders, curating the enterprises seeking loans to reduce risk for investors. With 20,000 borrowers and 5,000 lenders, Faircent processes INR 1 million (USD 15 thousand) in loans every month.</td>
</tr>
</tbody>
</table>

Marketplace lenders differ from one another in their partnerships with different types of investors, institutional and retail, and also in the actual flow of funds from investor to borrower. For instance, in a mediated flow model, marketplace lenders raise money from investors, hold it for a set period of time, and then subsequently deliver it to the enterprise. In some cases, platforms even set aside provisioning funds to spread potential credit losses across investors. In a direct flow model, the marketplace lender never has access to the funds, which are channeled directly from the investor to the borrower.

Marketplace loans are usually more expensive than the classic bank term loans; interest rates are rarely disclosed, but often range from below 10 percent to more than 45 percent a year. However, given the benefits of the lending and the fact that rates are usually lower than those charged by informal moneylenders, enterprises are usually willing to forego the pain point of higher interest rates. As the market for these alternative lending platforms and the data available on borrowers increase, credit is expected be issued at a lower rate.
The objective of Indian marketplace lenders currently is to incorporate technology into, and automate, all aspects of the loan process: sourcing of borrowers, assessing borrower creditworthiness, matchmaking borrowers to lenders, disbursing loans, and facilitating the repayment of loans. Primary research indicates that different marketplace lenders have incorporated technology into different aspects of their business depending on the niche target market they are serving. For instance, platforms targeting online, tech-savvy sellers, source digitally while platforms serving micro enterprises in limited connectivity areas still keep their sourcing offline.

Globally, marketplace lending accounted for INR 3.9-4.6 trillion (USD 60-70 billion) of credit disbursals in 2014 with more than 50 percent of MSME marketplace lending volumes coming from China, the United States and the United Kingdom. In Kenya, Ghana, Tanzania and Zambia, and Francophone Africa, digital finance company, Microcred, gives loans to both formal and informal SMEs, starting at amounts as low as INR 1.5 (USD 100)\(^{81}\).

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**Faircent-Brief Profile**

There is a fundamental difference in the credit assessment approach of Faircent.com vs. other financial institutions offering unsecured loans in the country. Most financial institutions in India at present rely on a lot of ‘hard policy rules’ for making credit decisions. This ends up excluding a lot of potential borrowers such as MSMEs without past borrowing history or those without tangible assets to offer as collateral.

Faircent’s credit assessment algorithm, on the other hand, uses multiple data points such as social, financial, personal data and very few ‘hard’ policy rules. This is aided by the fact that as a business it is not bound in a narrow interest rate band like most financial institutions and can price the borrower at as low as 12 percent p.a. and as high as 36 percent p.a. Lenders invest their surplus funds through the platform – hence, the opportunity cost of these funds decides the rate at which they are willing to invest in a borrower.

Faircent's business model is completely online and paperless which enables anyone from any part of the country to apply for an unsecured loan. There is no need for the borrower to visit any physical branch to submit copies of their documents. This ensures wider geographical coverage as well as lower cost of operations\(^{82}\).

**Case study:** Furniture manufacturer in Bhatinda, Punjab

Mr. P Kanwal owns a furniture business in Bhatinda, Punjab. He needed funds for business expansion but since most of his business is in cash, he was unable to get a credit line from banks. After he registered on faircent.com, his credit profile was evaluated based on alternative data points and although his transactions via formal banking channels were found to be weak, his business profile was strong and he also owned a house and factory.

Faircent facilitated an unsecured loan to meet his personal and business fund requirements. Although, the initial credit facility offered to him is comparatively small, the credit limit can be increased based on servicing history of the existing loan\(^{83}\).

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\(^{81}\) WEF (2015)
\(^{82}\) ET coverage; Social Impact Report, Faircent.com, Feb ’18
\(^{83}\) Social Impact Report, Faircent.com, Feb ’18
Balance Sheet Lending

Unlike marketplace lending, where the online platform typically acts as a matchmaker between borrowers and institutional or retail lenders, balance sheet lenders take on the risk of lending themselves, most often as an NBFC\(^{184}\). They lend to borrowers directly from their own capital base, taking credit risk themselves. Like marketplace lenders, balance sheet lenders also offer short-term working capital loans. However, because they take on the risk of credit disbursement directly, and not as an intermediary, they are able to offer revolving lines of credit with more flexible terms to borrowers. Globally, U.S.-based Kabbage is the most notable fintech balance sheet lender, with a credit facility of more than INR 13.8 million (USD 900 million)\(^{185}\).

In India, the sector is still very young, and new players are constantly emerging. Capital Float, established in 2013, has risen to become the face of balance sheet SME lending in India. The company has disbursed more than INR 2 billion (USD 0.03 billion) since 2013, offering loans in the range of INR 200,000-10 million (USD 3,000-0.2 million). Capital Float’s key differentiator is its ability to disburse loans to small business owners even in Tier II and Tier III cities within days. As a balance sheet lender, Capital Float uses its equity and loans from banks and other lenders to finance loans, earning revenue from borrower interest and processing fees\(^{186}\).

Spotlight on Balance Sheet Lenders in India

<table>
<thead>
<tr>
<th>Instakash</th>
<th>Capital Float</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: Bangalore</td>
<td>Location: Bangalore</td>
</tr>
<tr>
<td>An online lending marketplace for SME loans, offering working capital loans to small businesses looking to sell their goods on online marketplaces. Loans are disbursed within 72 hours, and all borrowers are charged with a 2% monthly interest.</td>
<td>Capital Float is an online platform that provides working capital finance to SMES. Borrowers can complete an online application within minutes, selecting preferred repayment terms and receiving funds in their bank accounts within seven days.</td>
</tr>
</tbody>
</table>


Marketplace Hybrid Model

A hybrid between marketplace lending and balance sheet lending, hybrid model lenders lend to a majority of their portfolio companies directly on their own balance sheets, while offering marketplace funding options to the remaining portfolio companies. Hybrid models allow for the platform to algorithmically determine the creditworthiness of a borrower and subsequently find the best lender in the marketplace for the borrower. Most hybrid models start out as either balance sheet lender or marketplace model and then pivot to a hybrid model in order to create more options and value for their...

\(^{184}\) Balance sheet lenders are generally registered as Non-Banking Financial Corporation registered under the Companies Act, 2013

\(^{185}\) Kabbage (2015)

\(^{186}\) Livemint (2015), Capital Float (2016)
customers or reap the benefits of direct lending. Depending on a hybrid model's own risk appetite and target customer segment, these models will choose to lend directly to a borrower or pass the borrower on to another lender.

Globally, U.S.-based OnDeck, established in 2006, is the market leader and one of the oldest fintech SME lenders in the United States. In India, there are very few hybrid model platforms as the ecosystem is yet to fully develop given how nascent the sector is. Our research reveals that many current NBFCs and marketplace models are planning to evolve into hybrid models in the next three to five years.

**Invoice Lending**

Invoice lending is an example of the aforementioned models being tailored to solve a specific pain point of MSMEs: delayed customer payments. The need for invoice lending arises most commonly when MSMEs allow customers to defer payments for a period of time after delivery of goods or services. As a result, customers become creditors of the often smaller seller, a phenomenon referred to as trade credit.

A delay in payment is a large incentive for customers to efficiently purchase goods or services on more flexible terms. However, for MSMEs, this becomes a great challenge, especially during starting up when margins are small and rigid. Consequently, alternative lending models have arisen that are able to finance enterprises with short-term working capital upfront within a matter of days or even hours based on a verified invoice.

Ideally, after a series of on-time payments, the invoice lender is able to offer an MSME credit at a diminishing lower rate. Additionally, the stronger the credit rating of the buyer, greater is the ability of the lender to offer a discounted rate of credit to the supplier. Typically, invoice lenders follow a marketplace model rather than grant loans off of their own balance sheet.

**Spotlight on Invoice Lenders in India**

<table>
<thead>
<tr>
<th>LOANZEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founded: 2015</td>
</tr>
<tr>
<td>Location: Bangalore</td>
</tr>
<tr>
<td>LoanZen provides SMEs that are less than three years old and do not have collateral with short term (up to 120 days) working capital loans against their pending invoices to MNCs and listed companies. LoanZen will be serving Bangalore, Mumbai, and Chennai by April 2016.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KredX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founded: 2015</td>
</tr>
<tr>
<td>Location: Bangalore</td>
</tr>
<tr>
<td>KredX is a marketplace platform for invoice lending, connecting MSME borrowers with lenders willing to invoice. With over 500 MSMEs on its platform, KredX achieved a gross trade value of INR 400 million (USD 6 million) in its first year.</td>
</tr>
</tbody>
</table>

Supply Chain Finance

Like invoice lending, supply chain finance is focused on providing short-term, immediate working capital to enterprises. The idea is to offset the adverse impact of delayed payments. However, unlike invoice lending, supply chain finance involves the buyer, and in fact, is typically initiated by the buyer, which is usually a larger company or aggregator of MSME sellers.

In a supply chain finance model, MSMEs can receive an earlier payment for their invoice upfront. The earlier payment is financed by a third-party credit provider that has a partnership with the buyer. Whether an NBFC or a marketplace lender, the third-party approves the financing based on the credit rating of the buyer company at the head of the supply chain. While supply chain finance has existed in India informally and formally for the past few decades, digitization of supply chain finance is a recent phenomenon.

Current models in India are using technology to source and assess credit applicants as well as disburse loans. Ideally, in the next few years, complete, end-to-end digitization of supply chain finance models will come into existence. The digital platform is expected to be provided by an invoice discounting marketplace. For example, KredX helps enterprises achieve short-term working capital by discounting their unpaid invoices raised against bluechip companies to a network of buyers / financiers including banks, NBFCs, wealth managers, and retail investors. Similarly, Receivables Exchange of India Limited (RXIL), a joint initiative between SIDBI and NSE, has launched India’s first Trade Receivables Discounting System (TReDS) – an online platform for financing of receivables of MSMEs. TReDS Platform of RXIL is expected to be a catalyst in the growth of MSMEs by bringing in transparency in the business ecosystem and addressing the issue of delayed payments for MSMEs.

Source: WBG-Intellecap Analysis
Supply chain finance is relevant only in a minute part of the overall contexts of B2B buyer-seller relationships, where the seller has a limited bandwidth to cater to larger customers. Despite the benefits it provides to MSMEs, both online and offline supply chain finance makes up only a minute part of the overall receivables finance market, accounting for less than 4 percent of global market value. However, India is believed to have the potential to be the highest-growth market for this digital product in the coming years.

### Innovative Fintech products for funding MSMEs

<table>
<thead>
<tr>
<th>Marketplace (P2P) Lending</th>
<th>Merchant / e-commerce Finance</th>
<th>Invoice Finance</th>
<th>Supply Chain Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Facilitating financing to SMEs without going through banks, by adopting innovative credit scoring models and a lean operational set-up that reduce risk and make the lending process cost-effective and convenient</td>
<td>• Players such as e-commerce platforms, payment processors and telecom companies are facilitating cash advances to small merchants that accept cashless payments for working capital needs</td>
<td>• Online receivables finance companies allow SMEs to monetize outstanding receivables quickly and easily by integrating the accounting software to the invoice finance platform</td>
<td>• A modern Fin Tech supply chain finance solution is a way for corporations to use 3rd party cash to pay suppliers. These fintech companies also provide dynamic discounting for early invoice payments</td>
</tr>
</tbody>
</table>

### E-commerce Partnerships Fueling Growth

In 2012, global e-commerce players such as Amazon, eBay, and Alibaba began offering small business loans to sellers on their online platform. Driven by the overall move to a digital economy, e-commerce players conduct a large number of transactions that are growing every year. As mentioned earlier in this chapter, India’s e-commerce market will cross INR 6.5 trillion (USD 100 billion) by 2020, indicating a need for lenders alike to establish their presence and serve the growing number of sellers needing financing. In response, many fintech lenders in India have partnered with e-commerce platforms such as Flipkart, Snapdeal, and Amazon India as a third-party credit provider to enterprises.

Founded in 2010 in Mumbai, NeoGrowth is an NBFC offering loans to SMEs offline and online through its partnerships with Flipkart and Snapdeal. Disbursing loans between INR 200,000-7.5 million (USD 3,000-USD 0.1 million) since 2014, NeoGrowth has disbursed more than 1,500 loans, totaling INR 1.5 billion (USD 23 million) across the country’s metro cities.

E-commerce and digital payment gateways are an ideal platform to provide financing to online sellers, given their direct point-of-sale access to sellers as well as their unique ability to assess credit through in-depth data available on merchants’ customers, transactions, and product stock timelines.

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91 WEF (2015)  
93 WEF (2015)  
94 Economic Times (2015)  
Digital Finance: Expanding the Number of Creditworthy Borrowers

From the perspective of financial inclusion, financial technology holds the potential to level the playing field for MSMEs and entrepreneurs from all socio-economic backgrounds and geographies. Both through their digitally-backed reach and novel approach to understanding creditworthiness, fintech lenders offer MSMEs a robust alternative to banks and mainstream NBFCs. This willingness to take risk stems from the fact that the digital finance and alternative lending businesses have recognized the need to evolve the traditional credit assessment approach that has largely remained unchanged over years. Leveraging technology-enabled data analytics to draw up a social, behavioral and financial portrait of borrowers, digital lenders are better informed about the borrowing and repayment ability of a customer.

The rise in financial technology is expanding financing options for MSMEs and pushing traditional lending players to diversify and build their capabilities in borrower outreach, credit assessment and data analytics. In order to harness the full potential of this transformation, the enabling environment, including the regulatory framework, investor capital and technology intermediaries, should also be strengthened.
invoicing and more comprehensive credit bureau data could enable a more robust credit assessment. Better regulatory clarity and simplified processes such as KYC verification and collateral registration can also encourage banks and NBFCs to deepen their lending to MSMEs – while also incentivizing new digital players to channel finance to small businesses more effectively.

2. Greater Awareness of Financial Technology

In order to encourage lenders and borrowers to be a part of fintech platforms, implementation of successful and reliable platforms must be demonstrated to spread awareness amongst stakeholders and to also increase competition. Lower interest rates, better customer service, and a broader range of loan products on the customer side, and lower operating costs, more transparent credit assessment tactics, and clearer communication and turnaround timelines for investors would go a long way to establish financial technology as an option of choice. It is also important for fintech providers to recognize that a large proportion of MSMEs are not tech-savvy and may require handholding and separate solutions to drive adoption.

3. Intermediaries to Shape and Facilitate the Growth of the Sector

The growing role of intermediaries in strengthening the ecosystem and guiding it to be seamlessly convenient for borrowers is of utmost importance.

- For borrowers, intermediaries can help to educate enterprises on the availability of, and the eligibility requirements for, loan products and provide third-party services related to documentation and KYC verification.
- Intermediaries can help foster cooperative partnerships to expand the reach of fintech lenders and vouch for the regulatory environment needed to advance MSMEs' access to credit lent digitally. The Indian ecosystem is lacking in holistic intermediaries. Nevertheless, companies such as Perfios, a financial data mining and organizing platform, and Transerv, which provides a digital payment API to customers and is backed by several banks, including RBL and SBI, are aiding digital finance companies to target and serve customers better.

Digital Finance Globally

Whether in India or in other developing countries, such as Europe and the United States, fintech has emerged – in varying degree – as an important tool to facilitate additional flow of credit to MSMEs.

As India’s own fintech ecosystem evolves, it is useful to learn from other models around the globe to ensure that the sector is sustainable and inclusive.

In emerging markets, three distinct trends have emerged to guide public and private sector players to work together for SME debt financing:
China: As one of the world’s largest fintech ecosystems, China’s rise to global digital finance dominance was led by technology giants who took advantage of recent regulatory changes. Realizing that the traditional banking sector was not meeting the needs of consumers and SMEs, the government established private banks. Companies such as Baidu, Alibaba, and Tencent expanded their mobile wallet and lending practices under this private bank framework; Alibaba led the way through its financial arm, Ant Financial, in providing working capital loans to SMEs online.

Philippines: Despite more than 25 percent of the population owning a smartphone and an internet penetration higher than 50 percent, only 20 percent of Filipinos are banked. To combat this, the government partnered with USAID and the banking sector and created E-Peso, a public sector, B2B, B2C, and P2P e-payments system that is creating the infrastructure to enable digital payment and credit solutions. The E-Peso system is expected to ensure transparency and efficiency in the use of public funds, promote interoperability across e-payment transaction accounts, lower the barriers to digital payments for the people and serve as an on-ramp for the unbanked to transact online.

1. The need to create accurate data reserves and develop data analytics that reflects the need and creditworthiness of SMEs;
2. The role of e-commerce and online marketplaces such as Snapdeal, Flipkart, and Amazon India as a convenient platform to reach a multitude of SMEs and collect data on them; and
3. The growing digital payment and banking infrastructure to facilitate fintech lending.

197 Let’s Talk Payments (2016)
**Mexico:** Mexico is unique in that much of its fintech ecosystem has been prompted by the dire social and financial inequity affecting the country and its MSMEs. Consequently, the country has seen a burgeoning of social impact fintech enterprises, catering mostly to the micro enterprise segment unlike most of the world that focuses on SMEs. Among key players are the government’s National Institute of Entrepreneurship program, which disbursed almost INR 46 billion (USD 700 million) to entrepreneurs in 2014, in addition to lending platforms such as Aspira and Knofio, and P2P lender Prestadero.

**United Kingdom:** Since 2008, the United Kingdom has grown in stature to be the global Fintech capital. Many new fintech firms have been created in the country that have helped companies reduce set-up costs and enter the market. Established banks are investing in fintech start-ups via incubators that provide office space and networking, and accelerators that offer short mentoring and investment programs. Consumers have readily adopted fintech services because of lower costs and the convenience of digital financial services. What has helped it to thrive is also the widespread use of smartphones and the internet, and the reducing consumer confidence towards traditional banks after the financial crisis. Estimates suggest that in 2015, UK Fintech was worth roughly £6.6bn in annual revenue, employed around 61,000 people, and attracted approximately £524m worth of investment.

The strength of the UK policy environment is due to the support and accessibility of the Financial Conduct Authority (FCA), effective tax incentives and numerous government programs designed to promote competition and innovation which indirectly support fintechs, of which Open API and Mandatory Referrals are examples. Fintech is also becoming increasingly mainstream in the United Kingdom with 14 percent of the digitally active consumers identifying themselves as fintech users.

UK digital finance had a total transaction volume of £3.2bn in 2015. The largest areas were peer-to-peer lending to businesses (47 percent market share), consumers (28 percent), and crowdfunding (10 percent). Factors driving the development and use of digital finance include demand from consumers and businesses for new funding, a lack of other investment opportunities, and the speed of online services. Some information about these two fintech segments is covered as follows:
Peer-to-peer lending: Also, called P2P lending, it’s a method of debt financing that enables individuals or businesses to borrow and lend money via an online platform, such as Zopa or RateSetter. The idea is to remove the middleman from the process – in this case an official financial institution as an intermediary. Peer-to-peer lending has been regulated by the Financial Conduct Authority (FCA) since 2014. Typically, administering loans through these online platforms is cheaper than through traditional banks, and platforms may use non-traditional data sources to assess credit risk. Interest from peer-to-peer loans is eligible for tax relief through the Innovative Finance ISA, and investors can offset losses incurred against income received for tax purposes.

Crowdfunding: Businesses or individuals can raise money from multiple funders who typically contribute a small sum. This gives them a new way of generating funds for their businesses, projects or charitable ventures, and provides funders with access to a new market. Crowdfunding can be classified by the returns funders receive:

- Equity crowdfunding (e.g. CrowdCube or Seedrs) – Funders receive shares in a business
- Rewards crowdfunding (e.g. Kickstarter) – Funders receive a non-financial reward such as an acknowledgement
- Donation crowdfunding (e.g. Spacehive) – Funders receive no material reward

Part of the resources guided to the fintech sector has been a direct result of UK government’s initiatives. The Enterprise Finance Guarantee program launched in 2008 and the Funding for Lending Scheme, established in 2012, are two of many initiatives aimed at increasing the overall working capital availability for SMEs through low-cost funding to financial institutions. This is directly tied to the enterprises and sectors they lend to.\textsuperscript{198, 199}

The government has also used technology-enabled direct lending, in the form of Start-Up Loan scheme. The scheme created an end-to-end digital platform where SMEs could apply online, free of cost, to the government for a loan by presenting a business plan. Government officials would then evaluate the plan and match SMEs with a private sector lender, most often a bank, who would digitally approve and disburse the loan. SMEs also got access to mentorship and free access to cash flow, in addition to business plan templates among other services. The intention of this program was to use technology to serve SMEs that typically would not have the time or connections to physically meet a bank and complete a successful loan application.

**The Role of Regulation in the Digital Finance Sector**

Clearly, government support and regulatory frameworks is critical for the fintech ecosystem to grow. As Indian MSMEs increasingly turn to financial technology as an avenue for financing, two key regulatory challenges must be addressed.
Firstly, as many fintech players are organized as NBFCs, more incentives are needed for them to lend to MSMEs. For instance, while the establishment of the MUDRA Bank is a positive step as a refinance scheme to spur lending to MSMEs, the feedback we that got from NBFCs is that that the high operating and credit costs involved in unsecured lending may restrict the potential refinancing through MUDRA if interest margin is low\(^{200}\). Funds at more affordable rates and easier lending rate norms would assist NBFCs in expanding their lending to MSMEs.

Secondly, there is a need to regulate P2P lending, to protect retail investors and borrowers alike. The sector is growing rapidly in India, with 20 of the 30 existing P2P platforms being established in 2015 alone. In April 2016, RBI released a discussion paper detailing potential areas for reforming the sector\(^{201}\). These include no assured returns to lenders, requirement of brick-and-mortar facilities in certain cases, and a minimum capitalization of INR 20 million (USD 0.3 million). Also, safety provisions for a digital transaction platform or for credit risk profiling of borrowers are lacking. Given the high interest rates associated with uncollateralized loans, borrowers could claim usury (under section 21A of the Banking Regulation Act) and seek judicial assistance to waive or reduce their repayment terms\(^{202}\). Usury laws result in risk for P2P lending and, as a result, for the platform itself. It exposes one side of the platform (lenders) to the risk of having their investments held in dispute. Additionally, it would also create intermediary liability concerns under the Indian Information Technology Act. Therefore, P2P platforms need to create additional levels of diligence to ensure compliance with local law.

Consequently, regulations are needed that protect borrowers and drive fintech platforms to monitor borrowers and lenders alike to ensure that risk is adequately and accurately assessed\(^{203}\). Also, the recommendation in the discussion paper that loans be directly transferred from lender to borrower without the use of an escrow account may not be practically feasible in the P2P business model. It may also be a good idea to prescribe leverage ratio given that these platforms are intermediaries and do not disburse credit themselves. A revision of these recommendations could be considered to ensure alignment with the specificities of the P2P business model\(^{204}\).

### The Role of Technology in Driving Digital Finance

Technology-driven solutions will prevail in the next few years and continue to change the way enterprises access finance. Two key ecosystem changes will most likely take place to ensure fintech continues its trajectory of expanding access to formal credit.

Following the example of banks in more developed fintech ecosystems such as Europe and the United States, banks will most likely partner with fintech companies\(^{205}\). While existing banks still hold the advantage of a large volume of customers, greater information on borrowers and the sector, and access to developed banking infrastructure, they would still gain from partnering with fintech firms because of their agility and innovation.

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\(^{200}\) Religare Capital Markets (2015)
\(^{201}\) RBI (2016) Link
\(^{202}\) YourStory (2016)
\(^{203}\) RBI (2016), Livemint (2016)
\(^{204}\) RBI (2016)
\(^{205}\) Let’s Talk Payments (2015)
Consequently, banks in India will most likely look to acquiring fintech companies, setting up venture funds to invest in fintech, establishing startup programs to incubate fintech companies, partnering with fintech companies to source borrower applications, assess creditworthiness, and disburse loans, and even launch their own fintech subsidiaries.

Data suggests that SMEs are typically the primary focus group of fintech lenders; micro enterprises are excluded. This is because not much data related to past borrowing history has been recorded about this segment and because internet connectivity is not as ubiquitously and reliably accessible to micro enterprises. To tap into this market, as technology access and digital payment infrastructure grow for this segment and Small Finance Banks focus on serving this group, more fintech players are likely to start serving micro enterprises. Examples of two NBFCs currently using technology to better serve bottom-of-the-pyramid micro enterprises are given as follows:

Serving the bottom of the micro enterprise segment, Vistaar Finance in Bangalore has attempted to use technology to make its credit scoring model more objective, creating online sector-specific credit rating templates for the businesses it serves. Additionally, it has a digital branch option for those businesses who wish to transact online and have access to technology to do so. Pune-based Kudos Finance is taking part of the business online. While all applicant sourcing and credit assessment and disbursal is carried offline since customers do not have access to smart phones and need in-person communication channels with lenders, the company uses technology to store its credit data and documents, making communication within the NBFC more efficient, ensuring disbursal within 5-7 days.

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Primary Research
Chapter 5

Enabling Environment for Growth of MSMEs and MSME Finance
Enabling Environment for Growth of MSMEs and MSME Finance

Enabling Environment

A well-developed enabling environment is critical for the growth and development of the MSME sector. It implies a set of mutually consistent and complementary interventions that aid entrepreneurial zeal and creativity and at the same time provide necessary confidence to the institutional credit system to act with greater impunity. Thus, an effective enabling environment for MSMEs is one which comprises of policies and regulations that simultaneously encourage the growing workforce to establish their own ventures and also helps existing entrepreneurs to scale their operations seamlessly.

Schematic Key Elements of the Enabling Environment

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**Legal & Regulatory Framework**

- MSME (Amendment) Bill 2015
- SARFAESI Act, 2002
- Priority Sector Lending
- Regulation of Factor (Assignment of Receivables) Bill, 2011
- Companies Act 2013
- Insolvency and Bankruptcy Code 2016
- The Constitution (122nd Amendment) Bill 2014, (CST) / The Constitution (101st Amendment) Act 2017

**Direct Government Support**

- Subsidy based support
- Public Procurement Policy
- Credit Guarantee Scheme

**Infrastructure Support**

- Credit Information Companies
- Collateral Registry
- Asset Reconstruction Company of SME
- Trade Receivables Discounting System (TRe DS)

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*Source: WBIC-Intellecap Analysis*

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*Regulatory changes that are in effect since FY’16*
1. Legal and Regulatory Framework

An effective legal & regulatory framework for MSMEs has no room for numerous and complicated procedures. With programs such as Digital India\(^\text{208}\), the government has signaled a strong move from manual processes to automatic approvals through the use of a robust IT back bone. Further impetus has come by way of income tax relief. Budget 2017 has proposed to reduce the income-tax rate for MSMEs with turnover of less than INR 500 million to 25 percent from 30 percent previously.

It is also important to focus on reduced cost of compliance, both in terms of time and money, which will encourage more entrepreneurs to formalize, allowing the government to take more targeted measures for the sector. In this context, some of the important regulatory measures are assessed below.


The MSME Development Act was notified in 2006 to address policy issues affecting MSMEs. It specified threshold limits for classification of MSMEs, removing ambiguity and laying the ground for targeted measures.

But over time, it began to get outdated with no revision to the definition of MSMEs or to the investment thresholds since its introduction in 2006. In fact, the existing thresholds (refer to table below) started proving detrimental for the growth of the sector. High inflation rates over the years meant that the cost of plant & machinery as well as other equipment went up substantially. Enterprises could not adopt newer technologies as it entailed investment in new machinery. They could do that only by crossing the investment thresholds for MSMEs or risk losing the benefits available to them.

Given the demands for change in the investment limits, the Micro, Small and Medium Enterprises (Amendment) Bill, 2015 was introduced in the Lok Sabha on April 20, 2015\(^\text{209}\).

Key provisions of the Bill include:

- The limit of investment in plant or machinery (manufacturing enterprises) or equipment (service enterprises) has been increased.
- The central government may change these investment limits, up to three times the specified limits, through a notification.
- Under the Act, the central government may classify micro, tiny or village enterprises as small enterprises. The Bill seeks to extend this to allow the classification of micro, tiny or village enterprises as small as well as medium enterprises.
- The bill also contains provisions relating to the revival of MSMEs as there was a felt need for special dispensation towards bankrupt or insolvent enterprises so that they could get a chance to reorganize / rehabilitate their operations.

\(^{208}\) http://www.digitalindia.gov.in/

\(^{209}\) PRS India
However, it is pertinent to note that the bill does not introduce additional criteria, such as the turnover of an enterprise or the number of people employed, for classification of MSMEs.

Proposed change of criteria for defining MSMEs

In February 2018, the Union Government approved a proposal to redefine MSMEs based on their annual revenue, replacing the current definition that relies on self-declared investment on plant and machinery.

According to the government’s new definition, businesses with revenue of up to INR 5 crore (USD 0.8 million) will be called a micro enterprise, those with sales between INR 5 crore (USD 0.8 million) and INR 75 crore (USD 1.2 million) will be deemed as small and those with revenue between INR 75 crore (USD 1.2 million) and INR 250 crore (USD 4 million) will be classified as medium-sized enterprises.

Classifying MSMEs based on turnover rather than investment in plant and machinery is likely to result in more reliable MSME classification due to easier availability of revenue data as well as possibility of verifying this against data available from GST platform. Further, it will also help align MSMEs to the new indirect tax regime (GST) as well as sops on direct tax front that are available to enterprises below a certain revenue threshold. Additionally, it will also help in better mapping of prevailing MSME credit situation as most lenders typically classify enterprises internally based on enterprise’s revenue numbers.

The bill for amendment of the MSME Act, 2006 on the above mentioned lines will be placed in the Parliament for debate and approval.


The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI) empowers banks and financial institutions to attach pledged assets of the borrower in case of non-repayment by the borrower. Till recently, only banks and financial institutions had recourse to the SARFAESI law. Through the finance bill 2015-16, the government has allowed NBFCs with asset size greater than INR 5 billion (USD 77 million) to be treated as ‘financial institution’ in terms of the SARFAESI Act, 2002. The changes in the Act also provide that the collateral takeover process will have to be completed within 30 days by the district magistrate.

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**Table:**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Existing Investment Limit (INR)</th>
<th>Proposed Investment Limit (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manufacturing</td>
<td>Service</td>
</tr>
<tr>
<td>Micro</td>
<td>2.5 mn</td>
<td>1 mn</td>
</tr>
<tr>
<td>Small</td>
<td>2.5 mn–50 mn</td>
<td>1 mn–20 mn</td>
</tr>
<tr>
<td>Medium</td>
<td>50 mn–100 mn</td>
<td>20 mn–50 mn</td>
</tr>
</tbody>
</table>

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Hindustantimes (Link)
Hindu Business Line
Moneycontrol, Aug 2016 (Link)
By making loan recovery easier, the expectation was that the move will enhance NBFC lending to the MSME sector. Prior to this, NBFCs could only approach civil courts and follow a long-drawn legal process to recover NPAs. More importantly, NBFCs can themselves initiate legal proceeding for recovery rather than engaging third-party service providers.

However, the rider to the move is that NBFCs can take recourse to the SARFAESI law only for loans less than INR 10 million (USD 150,000). Since such ticket size loans would largely comprise borrowers outside the MSME ambit, the rider offers little practical relief to NBFCs in pursuing the MSME portfolio more aggressively.

1.3 Priority Sector Lending Norms
Priority Sector lending is an important role that RBI confers upon banks by directing them to lend a minimum percentage of their portfolio to certain segments that may otherwise not get adequate and timely credit. ‘Priority Sector’ includes agricultural loans, export credit, education loans and others. Importantly, the MSME sector is also included in the list.

RBI stipulates that banks lend 40 percent of the Adjusted Net Bank Credit (ANBC) or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher, to the priority sector. Banks are further required to meet various sub-limits within the overall limit for their priority sector loans. Some of the PSL norms that directly affect lending to MSMEs are as follows:

1.3.1. Sub-target for micro enterprise loans
Domestic Commercial Banks are required to achieve a sub-target of 7.5 percent of ANBC or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher, for lending to micro enterprises in a phased manner i.e. 7 percent by March 2016 and 7.5 percent by March 2017. While the sub target is not applicable to foreign banks with less than 20 branches, those with 20 branches and above operating in India would be covered under the revised norms from 2018.

These sub-targets are likely aimed at ensuring that micro enterprise loans are not systematically crowded out, especially in view of two other regulatory changes that pertain to adequate and timely credit. ‘Priority Sector’ includes agricultural loans, investments for inclusion of enterprises export credit, education loans and others. Importantly, the MSME sector is also included in the list.

RBI stipulates that banks lend 40 percent of the Adjusted Net Bank Credit (ANBC) or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher, to the priority sector. Banks are further required to meet various sub-limits within the overall limit for their priority sector loans. Some of the PSL norms that directly affect lending to MSMEs are as follows:

1.3.2. Medium enterprises included in the ambit of PSL
RBI has also proposed to allow scheduled commercial banks to treat lending to medium enterprises as priority sector lending. Given the preference of banks to lend to medium enterprises, this move is meant to channel additional credit to medium enterprises.
1.3.3. Larger ticket size loans to MSMEs in the service sector not to be covered under PSL

Bank loans above INR 5 crore per borrower/unit to micro and small enterprises and INR 10 crore to medium enterprises will not be considered part of the stipulated Priority Sector lending\textsuperscript{\textsuperscript{16}}. This provision is aimed to ensure that lenders do not overleverage certain enterprises at the cost of excluding others. It will also serve to protect MSMEs from overleveraging themselves with improved access to credit.

1.3.4. Quarterly assessment

Failure to meet Priority Sector lending norms will be assessed every quarter from 2017 onwards, instead of the annual basis as at present. This implies that banks have to ensure timely availability of credit to the priority sector when the sector needs it. As a result, banks no longer will be driven to undertake the bulk of PSL lending as a year-end exercise; instead they will actively engage with the sector and provide financing at the time of actual need.

1.3.5. Guideline on Priority Sector Lending Certificates (PSLC)

In 2016, RBI issued guidelines on PSLC as an eligible tradable instrument for achieving priority sector targets. According to the guidelines, banks can issue four different kinds of PSLCs — for shortfall in agriculture lending, shortfall in lending to small and marginal farmers, for lending to micro enterprises and for overall lending targets\textsuperscript{\textsuperscript{17}}. The innovative move from the regulator will promote priority sector lending by providing for a viable business out of it. Banks will now have an incentive to specialize in the area of their competence. For instance, a bank with significant presence in rural areas and that has gained traction with farmers can now specialize in agri loans and meet its PSL sub-targets in other areas by buying PSLCs from others banks that specialize in those categories.

PSL norms typically cast onerous responsibilities on banks, even though these are meant to safeguard the interest of strategically important sectors in the economy. The priority sector lending certificates might offer banks some respite in this regards but it remains to be seen whether these concerns will be addressed in the longer run.

1.4. The Regulation of Factor (Assignment of Receivables) Bill, 2011

The Insurance Regulatory and Development Authority of India proposed to allow issue of trade credit insurance policy to RBI-registered entities for conducting factoring business in line with the Factoring Act, 2011. Trade credit insurance is generally offered for short-term receivables in business and is aimed at protecting businesses from sudden or unexpected customer insolvency. Until now such credit insurance policy could not be issued to banks, financiers, and lenders\textsuperscript{\textsuperscript{18}}.

One of the biggest problems for MSME businesses has been the delay in payments from their larger corporate customers that causes liquidity crunch. As of now, factoring has not made much progress in India due to various reasons, such as lack of awareness about such products among MSMEs, absence of a consolidated legal framework with specific provisions for every aspect of factoring transactions, legislative and regulatory hurdles like high stamp duty

\textsuperscript{16} FAQs on PSL norms issued by RBI in May 2016 (Link)
\textsuperscript{17} RBI notification issued in April 2016 (Link)
\textsuperscript{18} Hindu Business Line (Link), IRDA Exposure Draft Amendment to Guidelines on Trade Credit Insurance
on assignment of debt, inadequate legal recourse for enforcement of claims by factors / clients among others\textsuperscript{19}.

The RBI circular titled “Provision of Factoring Services by Banks” issued in July 2015 recognizes three types of factoring: (a) with recourse, (b) without resource, and (c) with limited recourse. Much of the factoring business in India is done on recourse basis.

A well-developed factoring ecosystem can help in better serving the MSME segment. Therefore, the proposed move can further boost short-term institutional credit to the MSME sector.

It is also pertinent to note here that Indian MSMEs contribute nearly 45 percent\textsuperscript{20} to the overall exports from the country. Well-developed factoring ecosystem can therefore also tap into the huge credit opportunity in this space and considerably ease operations for export oriented MSMEs in the country.

This, in turn, can give a major fillip to the government’s target of doubling India’s exports to USD 900 billion by 2020. Therefore, role of Export-Import Bank of India (EXIM Bank) also becomes important in this context.

\subsection*{1.5. Rehabilitation in MSME Sector}

In March 2016, RBI carried out certain changes to the ‘Framework for Revival and Rehabilitation of Micro, Small and Medium Enterprises’ notified by Ministry of MSME in May 2015. The objective behind these changes was to provide a simpler and faster mechanism to address stress in MSME accounts. Banks were mandated to put in place an operational policy for the framework by June 30, 2016.

According to the revised guidelines, every bank is required to form Committees for stressed MSMEs to enable faster resolution of stress in MSMEs as following:

- All banks with exposure to the MSME sector shall constitute a Committee in each district where they are present, or at Division-level, or Regional-Office level, depending upon the number of MSME units financed in the region. These will be Standing Committees and will resolve the reported stress of MSME accounts of the branches falling under their jurisdiction.

- For MSME borrowers with credit facilities under a consortium of banks or multiple banking arrangement, the consortium leader, or the bank having the largest exposure to the borrower under MBA, shall refer the case to its Committee if the account is reported as stressed either by the borrower or any of the lenders under this framework. This Committee will also coordinate between the different lenders.

The main aspects of the framework that complement the features of the existing RBI notification of 2012 and 2014 are as follows\textsuperscript{21}:

- It shall be applicable to MSMEs with loan limits of up to INR 25 crore including accounts under consortium or multiple banking arrangement.

- It classifies three categories in Special Mention Account (SMA) to identify incipient stress in the accounts of MSMEs in case of Non-Performing Assets:

  A. SMA-o: Principal or interest payment not overdue for more than 30 days but account showing signs of incipient stress

\textsuperscript{19} Journal on Banking Financial Services & Insurance Research, 2012
\textsuperscript{20} MSME Annual Report, 2017
\textsuperscript{21} RBI (Link)
B. SMA-1: Principal or interest payment overdue between 31-60 days

C. SMA-2: Principal or interest payment overdue between 61-90 days

- On the basis of the above early-warning signals, the branch maintaining the account should consider forwarding the stressed accounts with aggregate loan limits above INR 10 lac to the Committee for Stressed MSMEs within five working days for a suitable Corrective Action Plan.

- As regards accounts with aggregate loan limits up to INR 10 lac identified as SMA-2, the account would have to be mandatorily examined for CAP by the branch itself under the authority of the branch manager/designated official as decided by the bank.

- In order to enable faster resolution of stress in an MSME account, every bank shall form Committees for Stressed MSMEs

- The option under CAP may include Rectification, Restructuring and Recovery, among others.

- If the Committee decides on options of either 'Rectification' or 'Restructuring', but the account fails to perform as per the agreed terms under these options, the Committee shall initiate recovery.

- Restructuring cases shall be taken up by the Committee only in respect of assets reported as Standard, Special Mention Account or Sub-Standard by one or more lenders of the Committee. Willful defaulters shall not be eligible for restructuring.

Earlier, MSMEs did not have access to a suitable mechanism for credit restructuring when the business ran into trouble for reasons beyond the control of the entrepreneur, unlike larger corporations that had the option of corporate debt restructuring. Hence, the revamped regulations are aimed at addressing this gap and providing a more favorable environment for both lenders and borrowers by taking suitable steps before distress.

1.6. Insolvency and Closure in MSME Sector

In the World Bank’s Ease of Doing Business 2017 rankings, India ranks 137 on the 'resolving insolvencies' parameter whereas China ranks 53. As of now, bankruptcy proceedings in India are governed by multiple laws — the Companies Act, SARFAESI Act, Sick Industrial Companies Act, to name a few. The entire process of winding up is long drawn and can take several years with the involvement of courts, debt recovery tribunals and the Board for Industrial and Financial Reconstruction. In addition, the delayed proceedings lead to systemic losses for both the owners as well as the creditors as claims mount (interest cost) and market value of residual assets decrease with time.

In order to address these issues, the Insolvency and Bankruptcy Bill 2015, (the Bankruptcy Code) was tabled in the Lok Sabha last year. The Bill was subsequently referred to a joint parliamentary committee for further scrutiny where it was cleared in April 2016 and finally cleared by the Upper House of the Parliament in May 2016.

The new Code streamlines and consolidates existing laws to make the process simpler. Key provisions include:\n
- The Bill envisages a new regulator — the Insolvency and Bankruptcy Board of India.
Insolvency Resolution Process (IRP) can be initiated by a business or debtor who has defaulted on dues. Additionally, creditors, secured or unsecured, can initiate the proceedings too.

The Bill sets a 180-day time frame for insolvency resolution (provides a 90-day extension where necessary), following which liquidation is mandatory.

It confers substantial powers to insolvency professionals tasked with the resolution process. Criminal charges will apply if they notice any asset stripping by promoters or responsible parties.

The change is anticipated to facilitate quicker exit for insolvent and sick firms, and allow entrepreneurs to make a fresh start, giving the required impetus to both businesses as well as lenders. According to the existing practice, when an account turns into NPA, banks immediately start recovery proceedings under the SARFAESI Act. The asset recovered through such proceedings would drive banks to offer it for sale under distress as buyers for such assets might not be available at all times. This is a loss-making proposition for both the borrower as well as the lender.

Under the new regulations, the borrower can approach the designated forum and seek relief to bring back the unit to viability. The relevant authority may order to mitigate the debt load and make the unit viable with better debt terms. This could provide breathing space to the enterprise as it is not burdened with repayment obligations during an initial period of resuming operations. Additionally, the value of enterprises is protected even while it is undergoing Insolvency proceedings. This in turn encourages more lenders to enter the market and cater to the segment.

1.7. Companies Act, 2013

Companies Act, 2013, which replaced Companies Act, 1956, had made it illegal for private limited companies to accept loans and deposits from shareholders and relatives. Earlier private companies were allowed to take such loans. The new act brought such loans from shareholders and relatives under the definition of deposits and made them illegal.

In the absence of favorable outlook of formal lending institutions towards the sector, most SMEs rely on loans from friends and family to bridge any gap in working capital requirements. The original provision in the new Act had shut down this route of raising funds for MSME units structured as private limited companies. However, the Ministry of Corporate Affairs amended the rules in Sep 2015 to allow private companies to raise deposits from directors or their relatives subject to certain conditions, bringing relief to the sector.


An ideal GST regime is one with a harmonized system of taxation which subsumes all indirect taxes under one tax. It seeks to address challenges with the erstwhile indirect tax regime by broadening the tax base, eliminating cascading of taxes, increasing compliance, and reducing economic distortions caused by inter-state variations in taxes.
Goods and Services Tax (GST)\(^{224}\) is an indirect tax which was introduced in India on 1 July 2017 and was applicable throughout India. It replaced multiple cascading taxes levied by the central and state governments. It was introduced as The Constitution (One Hundred and First Amendment) Act 2017,\(^{[1]}\) following the passage of Constitution 122nd Amendment Bill.

GST is likely to make compliance much easier eventually, and therefore encourage a wider section of enterprises to comply with the provisions.

<table>
<thead>
<tr>
<th>Positive Impact</th>
<th>Negative Impact</th>
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<tbody>
<tr>
<td>Multistate operations will become easier</td>
<td>Lower threshold limits for exemption</td>
</tr>
<tr>
<td>Business with multi state operations need to follow varied tax rules applicable to different states. This creates accounting complexity as well as casts burdensome fees on price sensitive MSMEs.</td>
<td>For GST, the exemption threshold is INR 2 million (INR 1 Million for Northeastern states). This is lower than the threshold limits under the erstwhile indirect tax laws (for e.g. threshold limit under central excise law was INR 15 million).</td>
</tr>
<tr>
<td>Interstate transportation costs will reduce</td>
<td>Due to this, some enterprises that did not come under the ambit of indirect taxation earlier might now be liable to pay GST. However, the impact of such tax is likely to be offset by increasing ease of doing business as well as reduction in transaction costs that the GST system seeks to achieve.</td>
</tr>
<tr>
<td>GST will facilitate smooth transit of goods between states as it is likely to eliminate cumbersome state border tax procedures. Logistical cost savings due to this could be as high as 20(^{225}).</td>
<td></td>
</tr>
<tr>
<td>Helpful for businesses offering goods &amp; services</td>
<td></td>
</tr>
<tr>
<td>A large number of MSMEs that offer both goods and services will benefit immensely as GST will not distinguish between sale of goods and services. Thus, taxation system will be simplified and clarity will encourage greater compliance.</td>
<td></td>
</tr>
</tbody>
</table>

Thus, while GST is expected to create a level playing field for all businesses, and expected to be beneficial for the MSME segment as well, the actual impact on MSMEs is too early to quantify. On one hand, it may encourage compliance (due to reduced compliance costs) and decrease incidences of systematic under-reporting aimed at evading taxes. Increased transparency in reporting can eventually allow lending institutions to extend higher credit to MSMEs due to greater availability of data. On the flip side, it may deter growth of MSMEs by taking away the exemptions that they have been entitled to under the different existing tax codes.

\(^{224}\) Goods & Services Tax Law in India is a comprehensive, multi-stage, destination-based tax that will be levied on every value addition

\(^{225}\) CRISIL analysis

\(^{226}\) MSME Schemes, National Institute of MSMEs (ni-MSME), GoI

2. Direct Government Support

The government has been targeting the MSME sector through various policies and schemes over the past few decades. Currently there are over 150 different schemes for MSMEs in one form or the other, from 18 different ministries under the central government alone.\(^{226}\)

In addition, each state has its own set of policy support measures for MSMEs to grow and flourish.
2.1. Subsidy-Based Support

The support framework for MSMEs in India depends largely on a subsidy regime. Undoubtedly, subsidy support in areas such as market linkage, technology and skill upgradation, performance and credit rating, among others, can be crucial for enterprises in the early stages of their development. However, it can be argued that the subsidy regime has, at times, worked negatively for MSMEs as they are mostly focused on doing what is needed to continue enjoying the subsidy benefits\(^2\). An illustrative list of schemes being promoted by the Ministry of MSME is outlined below\(^3\):

- Credit Linked Capital Subsidy Scheme for technology upgradation of Micro and Small enterprises
- Lean Manufacturing Competitiveness Scheme for MSMEs
- Promotion of Information & Communication Tools (ICT) in MSME sector
- Technology and Quality Upgradation Support to MSMEs
- Design Clinics scheme for MSMEs
- Enabling Manufacturing Sector to be Competitive through Quality Management Standards and Quality Technology Tools
- Marketing Assistance and Technology Upgradation Scheme for MSMEs
- National campaign for building awareness on Intellectual Property Rights
- Support for Entrepreneurial and Managerial Development of SMEs through Incubators
- Bar Code under Market Development Assistance scheme

2.2. Public Procurement Policy

The Policy mandates that every Central Ministry / Department / Public Sector Undertaking shall set an annual goal of procurement from micro and small enterprises with the objective of achieving a minimum procurement of 20 percent of total annual purchases from products and services of the micro and small enterprises. The minimum 20 percent annual procurement from MSEs has become mandatory from April 1, 2015. The Policy also earmarks a sub-target of 4 percent, out of the 20 percent, to be from MSEs owned by SC / ST Enterprises. Further, micro and small enterprises are provided with tender sets free of cost. They are also exempted from payment of earnest money in such cases.

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\(^2\) MSME promoters are often known to float a new entity as soon as they start approaching the specified revenue limits for availing tax benefits. This leads to the presence of multiple small entities, all with common management. This inhibits scale as well as greater degree of financial access.

\(^3\) For details on these as well as other schemes promoted by the MSME Ministry, please refer to the report titled ‘MSME at a Glance 2016’ published by the Ministry (Link). Brief summary of some schemes is included in the Appendix Section of this report for ready reference.
so as to reduce their transaction cost. In addition, 358 items (such as air coolers, dust bins, fire extinguishers) are reserved for exclusive procurement from micro and small enterprises.

The policy is aimed at improving market access for micro and small businesses. Demand for MSME goods and services by way of large-scale purchases from the public sector can potentially help them in scaling up their operations. However, for the policy to be truly successful it is essential that there are no delays in payment flows from the government institutions / corporations to MSME suppliers.

2.3. Credit Guarantee Scheme for MSE Finance

Perhaps, the most important and targeted support directed at improving the access to finance for MSMEs comes from the credit guarantee scheme. The Ministry of MSME launched the scheme to strengthen credit delivery systems and facilitate flow of credit to the sector. The scheme guarantees credit facilities up to INR 20 million (USD 300 thousand) extended by Member Lending Institutions (MLIs) to those MSE loans, which are not backed by collateral security and / or third party guarantees. To operationalize the scheme, the Government of India and SIDBI set up the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) in August 2000 with a committed corpus of INR 25 billion. The central government and SIDBI (Small Industries Development Bank of India) contributed to the fund in the ratio of 4:1.

![Performance of CGTMSE Scheme](image)

*Source: CGTMSE*
The Credit Guarantee scheme seeks to make good the loss incurred by the lender in the event of an MSE unit that availed collateral-free credit fails in repayment. Through the Guarantee Trust, the MSE lender can recover up to 85 percent of the credit facility, depending upon certain pre-specified guidelines.

The central idea of the scheme is to encourage lenders to make loans based on project viability rather than collateral security and for the borrower to be able to use the primary security of the assets financed. The other objective is that lenders availing the guarantee should be able to provide a comprehensive credit facility to their borrowers — both term loan as well as working capital credit from a single institution.

Lending institutions eligible to participate in the scheme include all scheduled commercial banks and specified Regional Rural Banks, NSIC, NEDFi, and SIDBI — those who have entered into an agreement with the Trust for the purpose. The eligible lending Institutions, on entering into an agreement with CGTMSE, become Member Lending Institutions of CGTMSE.

Borrowers eligible to benefit from the scheme include new as well as existing micro and small enterprises. It is important to note that any facility given on the basis of collateral security or even a third-party guarantee is disqualified for coverage under the scheme.

Despite an important role to play in supporting the sector, the impact of the scheme has remained limited. By 2014, total cumulative credit approved under the scheme was INR 85.6 billion. Annual disbursals under the scheme have been rising steadily in the past five years and currently constitute 2 percent of the formal credit to the sector. Ratio of cumulative guarantees approved as of 2011 and Nominal GDP (2011) stood at 0.4 percent, which remains lower than outstanding guarantees-to-GDP ratio of countries such as Japan (7.3 percent), Korea (6.2 percent), and China (3.6 percent).

Primary discussions with industry practitioners indicate that the credit guarantee scheme has not achieved optimal scale due to several reasons, including:

- In the event of claim being made by member lending institution (MLI), the Trust pays only 75 percent of the guarantee amount upfront while the balance is payable after the conclusion of recovery proceedings against the entity in default. Recovery proceedings in India are long-drawn and can take several years. This deters MLIs from aggressively pursuing the credit guarantee scheme.
- The guarantee cover is not available for loans under multiple banking arrangements.
- The scheme is silent on whether the guarantee cover continues to remain in force if the originating bank sells the underlying portfolio to another lending institution. Pending clarification, MLIs refrain from buying and selling portfolios covered under the guarantee and this acts as a deterrent when lenders adjust their portfolios to meet PSL norms.
- The maximum guarantee coverage under the current scheme was restricted to INR 10 million until recently. This was limiting, particularly for setting up of manufacturing units, and there were demands from MLIs to increase the limits on loan size.
In December 2016, it was announced that the credit limit under CGTMSE will be enhanced to INR 20 million. Subsequently, the Ministry of MSME allocated an additional sum of INR 30 billion to the Trust in the current budget after adding INR 20 billion last year, raising the total CGTMSE corpus to INR 75 billion.

In 2017, the Government of India also decided to increase the coverage of the loans covered under the scheme from INR 10 million to INR 20 million. Further, it also envisaged augmenting the corpus of the fund by INR 50 billion to INR 75 billion.

An effective guarantee scheme can be a great enabler in the MSME lending ecosystem and can significantly augment the credit supply to the sector. This is because the financial leverage achieved with a small allocation to the guarantee fund can be significant, which in turn can lead to a sizeable increase in the supply of loanable funds to MSMEs. It is therefore important that the issues affecting the scheme are carefully evaluated and addressed at the earliest.

3. Financial Infrastructure

3.1. Credit Information Companies

In March 2013, RBI constituted a committee to strengthen the infrastructure for sharing of credit information. Based on the committee’s recommendations, a number of policy instructions were issued. An important outcome was that data formats for reporting corporate, consumer and MFI data by all credit institutions were standardized. This streamlined the process of data submission by credit institutions to credit information companies.

Effective April 15, 2015, the RBI also stipulated that all credit institutions, including NBFCs and co-operative banks, are required to be members of all CICs, and submit data — including historical data — to them.

Prior to this notification, every credit institution was required to be a member of at least one CIC. As such, a CIC could turn only to its members for credit information. If the borrower had a current or a past exposure with non-member credit institution, the CIC could not get the entire credit history of the client.

To boost credit coverage, industry bodies have suggested the addition of periodic utility bill payments — electricity, telecom — and periodic insurance premium payments into information bureau records. The suggestion is that this would increase the bureau coverage from current 20 percent to almost 70 percent and would also give a boost to low-ticket borrowers by presenting their credit eligibility. Formal financial institutions, in turn, could rely on alternative payment data for prospective borrowers who do not have any past or present credit lines with formal financial institutions.

However, NGO-MFIs, including Section 25 Section 8 companies under the new Companies Act, 2013, are not yet mandated to share their data with credit bureaus, leading to gaps in borrower data.

3.2. Collateral Registry

The union government has made it compulsory for all banks, NBFCs and
housing finance companies to register details of all equitable mortgages with the ‘Central Registry of Securitisation Asset Reconstruction and Security Interest of India’ (CERSAI), within 30 days of the mortgage. This compulsory sharing of mortgage information is applicable to all loans facilitated after March 31, 2011.

Not just that, according to a January 2016 notification, all mortgages now need to be registered with CERSAI. Earlier, only secured creditors were required to register equitable mortgages created in their favor with the CERSAI. The Rules also require registration in case of hypothecation of plant & machinery, book debts receivables, and charge on intangible property. This compulsory registration stands at INR 3.4 trillion as of Sep ’15, of which the MSE portfolio is estimated to be ~INR 500 billion. The volume of stressed asset sale has a potential to increase significantly over the next few quarters. This will happen on two counts. One, the central bank’s thrust in getting banks to clean their balance sheets which is anticipated to substantially increase supply of asset offered for sale. Two, the new insolvency code recently cleared by the Parliament is anticipated to make resolutions easier and therefore drive demand for distressed assets from ARCs.

**3.3. Asset Reconstruction Company for SME**

According to the RBI notification issued in August 2014, asset reconstruction companies (ARCs) are required to invest more in the security receipts (SRs) issued by them. Consequently, ARCs now pay up 15 percent of the value of the asset to the bank, while issuing SRs for the rest. ARCs were required to pay only 5 percent earlier.

The latest stipulation is aimed at ensuring that ARCs play a more active role in reviving their portfolios or recovering their dues in order to generate sufficient income that seems acceptable return warranted by the additional investment, rather than rely passively on generated management fees alone for their income. Research suggests the legislation could have discouraged ARCs, as an immediate impact, from acquiring such assets from banks and other lending institutions.

This will need to be looked at in the medium term.

ARCs purchased ~30 percent of the assets banks put up for sale in Q3 FY ’16. Gross NPA of the 39 listed Indian banks stood at INR 3.4 trillion as of Sep ’15, of which the MSE portfolio is estimated to be ~INR 500 billion. The volume of stressed asset sale has a potential to increase significantly over the next few quarters. This will happen on two counts. One, the central bank’s thrust in getting banks to clean their balance sheets which is anticipated to substantially increase supply of asset offered for sale. Two, the new insolvency code recently cleared by the Parliament is anticipated to make resolutions easier and therefore drive demand for distressed assets from ARCs.

A well-developed asset reconstruction business can lead to increased credit flow in the system as sale of bad loans can free up capital for further lending. Also, ARCs are supposed to be specialists in loan recovery and the asset reconstruction process, and therefore boost the overall efficiency in the system. Hence all efforts in this direction will be crucial.

**3.4. Trade Receivables Discounting System (TReDS)**

In November 2015, RBI granted an ‘in-principle’ approval to three companies to set up and operate the TReDS system. TReDS is an institutional setup that will allow MSMEs to post their receivables on the system and get them financed at a competitive rate.

There are three direct participants involved in the TReDS — MSME Sellers, Corporate Buyers and Financiers. The TReDS platform brings these
As per Budget 2018, GoI plans to link TReDS system with GST database through GSTIN. With the potential access to GST data, financial institutions can check the authenticity of the invoice that is put on TReDS. This can potentially eliminate duplication in various compliance related matters during the credit assessment and sanction process and is expected to expedite credit flow to enterprises.

A functional TReDS system will be helpful for MSMEs in accessing credit on two counts. First, the onus of collecting payments from buyers, or large corporates, will rest with the financier and not the MSME seller. Second, the rate of interest charged by the financier is based on the credit rating of the corporate buyer and not the MSME seller. This will likely facilitate better rates for MSMEs as corporates tend to enjoy comparatively better rating grades.

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**Brief Details on TReDS**

**TReDS** is an electronic platform that allows auctioning of trade receivable. The process is also commonly known as ‘bills discounting’. A financier, typically a bank, buys a bill (trade receivable) from a seller of goods before it is due or before the buyer credits the value of the bill. The discount is the interest paid to the financier.

**Platform’s operating mechanism**

A seller has to upload the invoice on the platform. It then goes to the buyer for acceptance. Once the buyer accepts, the invoice becomes a factoring unit. The factoring unit then goes to auction. The financier then enters their discounting (finance) rate. The seller or buyer, whoever is bearing the interest (financing) cost, gets to accept the final bid. TReDs then settle the trade by debiting the financier and paying the seller. The amount gets credited the next working day into the seller’s designated bank account through an electronic payment mode. The second leg of the settlement is when the amount is repaid to the financier.

**Current discounting platform providers**

RBI has given license to three entities and they are governed by the Payment and Settlement Systems Act. These are

- Receivables Exchange of India (RXIL), a JV between National Stock Exchange and SIDBI
- A TReDS, a joint-venture between Axis Bank and Mjunction Services
- Mynd Solution

RXIL was the first one to go live on January 9, 2017.

**Main Challenges**

All the transactions undertaken on the TReDS have to be registered with the Central Registry of Securitization and Asset Reconstruction and Security Interest of India. The registration charge goes up to INR 750, which discourages small-ticket sellers from using the platform. Also, TReDS providers want the KYC (Know Your Customer) regulation to be streamlined. They also want more players to be allowed as financiers. Currently, only banks and certain NBFCs are allowed to be financiers. Other participants like HNIs (high networth individuals) may be allowed to act as financiers in order to expand the market.

So far, 34 private companies have registered on the platform. It appears that large companies are somewhat uncomfortable in uploading invoices online due to the fear that their rival companies will be able to identify details of their MSME suppliers.
3.5. Common Services Centers (CSC)

The Common Services Center Scheme is a part of the National e-Governance Plan (NeGP). The Scheme envisages the setting up of 100,000+ IT-enabled access points to be implemented in a Public-Private Partnership (PPP). The Common Service Centers (CSCs) have been positioned as front end delivery outlets for delivery of Government as well as Private Sector services.

Under the CSC Scheme, a Special Purpose Vehicle (SPV) was formed, so that the Government can progressively migrate to an e-Governance platform and enable services through the CSC network. The CSC SPV which is named as CSC e-Governance Services India Ltd was incorporated under the Companies Act 1956 on 16th July, 2009. The primary role of the CSC SPV is to monitor the CSC Scheme and its outcomes on behalf of the Government at the National and State levels.

Based on the assessment of CSC scheme, GoI launched the CSC 2.0 scheme in 2015 to expand the outreach of CSCs to all Gram Panchayats across the country. Under this scheme, at least one CSC will be set up in each of the 2.5 lac Gram Panchayats across the country by 2019. CSCs functioning under the existing scheme will also be strengthened and integrated with the additional 1.5 lac CSCs to be set up.

Potential role of CSC in advancing micro credit in rural India

There are close to 1.5 Lac CSCs operating in India which are run by Village Level Entrepreneurs (VLEs). These CSCs can be leveraged by banks and other Financial Institutions to source and service potential borrowers efficiently for the purpose of extending loans to micro and small businesses.

CSC website (link)
Chapter 6

Potential Interventions to Increase Access to MSME Credit
Potential Interventions to Increase Access to MSME Credit

Potential Interventions

As outlined in the chapters above, there are several policies and schemes to support the MSME sector, and MSME finance in particular. However, despite substantial support from the government and the regulator, the MSME financing landscape continues to raise concern from both lenders and borrowers. In the last 4-5 years, there have been more targeted policy interventions directed towards removing the bottlenecks in the system and facilitating credit flow to the sector. Areas where specific and targeted action has already been taken, or is currently under process, include—the passage of a long-awaited comprehensive framework on insolvency laws, institution of a framework on rehabilitation and revival of MSMEs, an IT-enabled platform to facilitate factoring and reverse factoring of trade receivables, among others.

Then, there are certain areas which have been the focus of policymakers but which continue to be ongoing challenges for the sector and need to be addressed:

- Addressing the challenge of human capital at financial institutions, such as recruitment of right staff, training of the staff specifically with skills to target the sector, ensuring continuity of the trained staff, and accountability.
- Introducing a comprehensive set of regulations to encourage factoring and securitization of trade receivables as well as to promote movable asset-based lending. This is a more viable product for most MSMEs that lack access to land and property as collateral.
- Expanding the scope of information that credit information bureaus collate and process to reflect the payment track record for important transactional data like utility bill payments. These can provide as additional data points for credit behavior, especially for those MSMEs that do not currently access formal financial services.

In addition to these well-established focal areas for increasing credit flow to the MSME sector, this chapter seeks to highlight interventions that could allow lenders to effectively meet the credit demands of the MSMEs. It also delves into aspects of a supporting infrastructure and regulatory framework that could aid the financial inclusion process.
1. **Proactive steps from suppliers to be able to meet the demand**

1.1. **Revamp the Credit Appraisal Process**

Lenders engage in an in-depth credit analysis to determine the risk associated with making a loan. Credit analysis has traditionally been governed by the ‘5 Cs’ — character, capacity, condition, capital and collateral. Within this framework, assessment of borrower’s ability (capacity) to pay as well as his willingness (character) to pay is critical to the credit appraisal process. What has gradually started to change is the way the capacity and character of the business owner is assessed. It is absolutely vital that lenders pivot to contemporary systems, processes, and acquire requisite skills in order to be able to adopt these practices and lend to the sector successfully.
1.1.1. Adopt alternative methods to assess repaying capacity

Globally, lenders who have been able to pivot their business models using alternative evaluation methods have not only been successful in extending credit to the marginalized enterprises, but they have also managed to ensure that their portfolios outperformed traditional lenders in terms of provisioning and loan loss.

For example, instead of relying purely on financial statements, lenders have started to rely more on the record of banking transactions. Others have started placing greater reliance on an analysis of other electronically verifiable cash flows such as transactions made through Point-of-Sale (POS) machines. Cash flow assessment from these alternative avenues tends to be less susceptible to manipulation compared to financial statements.

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<tr>
<th>Assessment of Capacity to Pay</th>
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<tbody>
<tr>
<td><strong>Existing Focus</strong></td>
</tr>
<tr>
<td>Reliance on evaluation of Financial Statements</td>
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</table>
It is therefore recommended that lenders upgrade their systems and processes, and re-train their staff to employ alternative methods of assessment of an enterprise’s capacity to repay.

1.1.2. Adopt alternative methods to assess Character (Willingness to Pay)

Lenders have traditionally relied on assessment of credit scores, generated based on past track record of serving loans on time, to assess an enterprise or individual’s character (willingness to pay). However, the credit score method penalizes an individual or institution with no prior credit exposure and track record of servicing a loan. Additionally, lenders also insist on collateral to enforce willingness to pay.

Almost 75 percent of MSMEs have no access to bank credit that can be tracked through credit information companies. While some of these may be serviced by MFIs and other NBFCs, a substantial portion of micro and small enterprises continue to lack any means of verifiable credit record. Nor do these enterprises have any acceptable collateral to offer to the lenders. For that reason, traditional measure of assessing willingness to pay will lead to financial exclusion of these enterprises.

Some NBFCs have therefore started to rely on alternative mechanisms such as psychometric profiling. Fintech companies have successfully used social media footprint and data analytics to come up with their own internal scoring on the character of the business owner. Additionally, growing popularity and early markers of success of Fintech companies globally, and in India, in the SME lending business has highlighted that alternative methods of credit appraisal and proper loan structuring can result in a quality portfolio with comparable, or even better, NPA. The icing on the cake: lenders don’t have to rely on the ability of an enterprise to offer acceptable collateral.

**Assessment of Willingness to Pay**

**Existing Focus**
- Reliance on evaluation of:
  - Credit Scores
  - LTV of Collateral offered

**Recommended Focus**
- Reliance on evaluation of alternate sources of information such as:
  - Psychometric profiling
  - Social media footprints
1.2. Focus on sector-specific product development

Financial institutions in India have shown limited intent in developing new and innovative products to meet the specific needs of a diversified MSME sector. Few banks have well-defined products for meeting the capex requirements for MSMEs. There are virtually no sector-specific differentiated loan products to facilitate asset purchases without secondary collateral. Similarly, the credit guarantee scheme from the government is so standardized that it might not meet the needs of a large section of otherwise eligible borrowers. Thus, it is recommended that banks could consider offering more innovative and sector-specific credit products to increase penetration among the MSMEs. For instance, lenders can potentially develop specialized loan products for meeting the credit needs of the dairy value chain, especially for those engaged in downstream activities.

1.3. Capitalize on the reach of informal moneylenders

Unregistered moneylenders continue to be important players in the MSME financing space as they form a significant majority of non-institutional last-mile financiers. Efforts could be made to capitalize on their reach and relationship with last-mile borrowers, particularly in the micro enterprise segment, for expanding credit to MSEs based on a well-aligned incentive system. Identifying and engaging with informal lenders to assess their funding requirements for on-lending is one way to initiate such partnerships.

1.4. Explore collaboration opportunities with Fintech players

Globally, fintech players with varied business models have been successful in catering to the credit needs of the SME segment on account of their flexible approach and ability to use alternative data for credit assessment. The marketplace-based lending model alone accounted for USD 60 billion to USD 70 billion in outstanding loan volumes globally in 2014. Countries with the highest SME marketplace lending volumes include China, the United States and the United Kingdom. While India holds potential, there is a need to increase awareness about mobile banking and fintech channels in the country.

It is therefore recommended that traditional lenders such as banks begin to explore opportunities to collaborate with Fintech companies and leverage each other’s competitive advantages. Fintech lenders are still a relatively new phenomenon in India’s MSME lending space and do not enjoy the kind of reach or relationship that banks have. Possible areas of collaboration include:

- Banks can feed Fintech companies with relevant MSME leads they consider unviable on account of institutional limitations
- Banks can extend credit lines to Fintech players for on-lending to MSEs
- Fintech companies can help banks with portfolio monitoring services on account of their advanced data analytics capabilities

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In fact, banks can leverage these partnerships to develop some of these capabilities in-house in order to be able to serve the segment better. However, these collaboration efforts need to be explored keeping in mind the existing RBI regulations and guidelines issued with regard to lending operations of both existing and new-age players.

### 2. Strengthen the supporting infrastructure

#### 2.1. Undertake an initiative to identify and catalogue existing MSMEs

Most MSMEs, especially micro and small enterprises, are structured as proprietorships and partnerships. Currently, these enterprises are not catalogued, resulting in only broad estimates about their geographic location or the industry in which they operate. In the absence of a centralized database and a system which can be used to target and track these enterprises, financial institutions’ ability to design suitable interventions for meeting their credit needs remains limited.

It is therefore recommended that a mass initiative is undertaken by the government to identify all existing MSMEs as well as new enterprises in future, and catalogue them appropriately.

The Ministry of MSME is trying to address the issue of uncatalogued MSMEs and has already taken steps for central registration of all MSMEs. Accordingly, filing of Entrepreneur Memorandum (EM) with DICs of the individual state has been discontinued. Beginning September 18, 2015, entrepreneurs are required to file Udyog Aadhaar Memorandum (UAM), a simple one-page document, on a self-certification basis. The database will be maintained by the central ministry and the filing process can be completed online for those with a valid Aadhaar number.

Ostensibly, the UAM can be mapped to the Aadhaar number of the individual in order to keep track of multiple enterprises floated by the same individual. This mapping, together with PAN information, can be critical in tracking the overall level of indebtedness of an individual across multiple businesses and multiple lenders.

As of March 2018, close to 4.5 mn enterprises had registered on the UAM portal. Of these enterprises, ~19% had commenced business in 2017 remaining unregistered enterprises.
However, what remains to be addressed is a comprehensive exercise aimed at cataloguing the existing ~50 million MSMEs in operation as per the Census estimates. In order to address this issue, the government can consider incentives such as tax breaks or holidays for unregistered enterprises if they obtain UAM and migrate to the new system so as to get them to register voluntarily. Additionally, the respective state governments can take appropriate measures to catalogue any remaining unregistered enterprises.

2.2. Expedite the processes necessary for facilitating movable asset-based lending

Central Registry of Securitisation Asset Reconstruction and Security Interest of India (CERSAI) registers immovable property such as house and commercial real estate. It is now expanding the scope of registration so that the registry includes movable assets such as precious jewelry, stock inventory, and more. This will promote financing against movable assets as collateral.

China’s experience with movable asset registry suggests that it can have a significant impact on the access to credit for SMEs. A 2011 study conducted by IFC, involving firm-level surveys in 73 countries, came up with similar findings on the impact of collateral registries for movable assets on access to credit.

It is therefore necessary to provide the required impetus to movable asset-based lending by encouraging financial institutions to develop suitable financing mechanisms so that they can extend credit against the primary security of such movable assets. Additionally, such registration should also account for estimated economic life of the asset vis-à-vis the loan tenure.

2.3. Enhance the effectiveness of the Credit Guarantee Scheme

There are some specific guarantee schemes in operation that cater to the MSME sector exclusively. While CGTMSE is relatively well known owing to its vintage, operational information on the other guarantee schemes are limited owing to their recent inception. This should be collated and made available to lenders.

2.3.1. Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)

The scheme guarantees sanctioned facilities not exceeding INR 5 million for loans from regional rural banks / financial institutions, and not exceeding INR 20 million for loans from scheduled commercial banks and select financial institutions. The scheme’s current corpus of INR 24 billion is contributed by the Government of India and SIDBI in the ratio 4:1. Some of the recommendations for increasing the effectiveness of CGTMSE include:

- Much of SCB lending to the MSME sector is driven by PSL norms. There is considerable uncertainty as to whether the guarantee cover continues to be available when the underlying portfolio is sold as institutions look to adjust their PSL portfolio to meet the norms. Clarity on this issue would greatly encourage lenders to increase disbursals under this scheme.
- The eligible limits of the loan amount for which guarantee cover is applicable could be increased further from the INR 20 million at present. This would ensure alignment with the rise in the cost of machinery in manufacturing.

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*248 CERSAI website (Link)
*249 Report of the Committee set up to examine the financial architecture of the MSME sector (2015)
set-ups as well as increase in working capital requirements, driven in part by wage inflation. The increase in loan limit should ideally also be consistent with the proposed definition change that will increase the eligibility thresholds within which an enterprise qualifies as an MSME.

- At present if an entrepreneur seeks a loan for an amount greater than INR 20 million, he cannot avail the benefit cover under CGTMSE at all unless he brings in commensurate collateral. There is no mechanism by which the lending institution can avail the guarantee cover up to the maximum eligible limit, and accept collateral for the balance excess amount. It is worth considering if loans with partial collateral cover could also be made eligible for guarantee — it could help expand access to credit for eligible businesses considerably.

- Focus on timely settlement of claims without the lending institutions requiring to go through the completion of recovery proceedings for full settlement under CGTMSE would help to encourage financial institutions to use the guarantee cover for lending to MSMEs.

- The CGTMSE guarantee cover is also not available to enterprises engaged in retail trade[10]. Since a significant portion of MSMEs, especially micro enterprises, operate in this segment, they are automatically excluded from availing the guarantee benefit. Hence it is recommended that the cover could potentially be extended to all MSMEs irrespective of their industry or sector.

- Consideration should be given to differentiated guarantee products for different segments within MSMEs.

For instance, parameters such as risk profile, tenure of loan, quantum of credit, among others, are significantly different for manufacturing and service enterprise. Hence, the pricing of guarantee fee, tenure and maximum loan coverage could be either dynamic or fixed based on a more granular understanding of the needs at broad category levels.

2.3.2. Others

Two additional credit guarantee funds have recently been approved by GoI. These guarantee programs will facilitate loans to micro and small entrepreneurs through MUDRA (Micro Units Development Refinance Agency) and the Stand Up India scheme. The corpus of credit guarantee fund for MUDRA will be INR 30 billion while the fund size for Stand Up India will be INR 50 billion. As against CGTMSE and NCGTC in India, Japan has 52 credit guarantee corporations. Similarly, China has multiple credit guarantee schemes comprising of credit guarantee agencies (CGAs), mutual guarantee funds (MGFs) and commercial guarantee companies (CGCs).

Guarantee structure can increase credit flow to the MSME sector by mitigating risks for the lender. It can also support a high degree of leverage, thereby increasing the efficiency of resources. Thus, based on international evidence and the limited penetration of guarantee schemes for securing MSME credit in India, **multiple guarantee schemes** — both public and private—should be tailor-made for sector-specific enterprises. Additionally, practitioners also recommend exploring the role of counter guarantee as well as re-insurance corporations to deepen this market.

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[10] Retail Trades & partial collateral loans may now be covered under Credit Guarantee Scheme of CGTMSE as per decision taken in ‘Rebooting CGTMSE’ event organized by Ministry of MSME, CGTMSE, and SIDBI on Feb 20, 2018
The Export Credit Guarantee Corporation of India (ECGC) Limited provides credit risk insurance covers to exporters, export credit insurance covers to banks and financial institutions, and overseas investment insurance to those Indian companies that invest in joint ventures abroad, both in the form of equity or debt. As of March 31, 2014, 82 percent of exporters registered as policy holders with ECGC were MSMEs.

A Feb ’15 report of the committee set up to examine the financial architecture of the MSME sector came out with various recommendations to make ECGC more meaningful for MSMEs. Some of the important points raised by the committee include:

- ECGC currently only provides short-term cover of one year. The possibility of medium term cover for longer duration through ECGC can also be explored.
- Expanding ECGC programs by providing broader coverage through tie-ups with banks can be explored. The bank assurance program which is currently small in size for ECGC can be further expanded.
- ECGC can consider differential treatment of MSME accounts – through liberal approval of limits, reduced premium rates, higher cover, among others — under covers extended to banks to encourage banks to increase export credit to MSMEs.

2.4. Geographical mapping of all institutional lender access points

A brief analysis on branch banking data published by RBI indicates that branch penetration in India is abysmally low. Regional disparities make matters worse with the North-East states having ~25 percent less branch penetration than the Rest of India states. This indicated the extent of work that still needs to be done on this front.

It is thus recommended that the MSME ministry creates a Geographical Information System (GIS) to map all institutional lending access points comprising banks, NBFCs, and MFI branches. This database of financial inclusion footprint can foster appropriate policy interventions as well as a business-driven approach to reach out to potential customers groups. Additionally, policy guidelines on geographical coverage of the banks on the lines of PSL norms could go a long way in reducing regional disparities in access to credit.

3. Provide necessary regulatory impetus

Building an eco-system for facilitating credit flow to MSMEs is important. In order to strengthen credit flow to the MSE sector, particularly micro enterprises, regulators can possibly implement guidelines for year-on-year growth of MSE credit and the prescribed minimum flow for micro enterprises.

3.1. Unambiguous and consistent regulations across regulators

According to a survey on Asian business and politics by Political and Economic Risk Consultancy Ltd. (PERC), India is among the most over-regulated countries in the world. Often, multiplicity of regulations and inconsistency in stance in those over issues can hamper the growth of the industry.
3.2. Improving access to funds for NBFCs / MFIs to cater to MSMEs

Recent data on MSME financing landscape suggests that NBFCs have been effective in understanding the unique challenges of MSMEs and have been able to successfully navigate these with their alternative credit appraisal systems as well as innovative loan products. However, NBFCs in turn are constrained in their ability to serve the sector due to their limited access to low-cost funds – an area where banks have inherent competitive advantage.

Additionally, regulations such as 90-day NPA classification rule on par with banks as well as higher provisioning and capital adequacy requirements have adversely impacted NBFCs’ ability and willingness to cater to the more risky and untested market segments. The government may, therefore, consider offering incentives to players who are looking to serve the underserved markets.

3.3. Revamp the Negotiable Instruments Act to make it stricter

Trade credit is the life blood of business. Negotiable instruments such as cheques, Bills of exchange, and others express a promise to pay at a later date – this promotes credit in the system. However, the Negotiable Instruments Act, 1881 that is still in force has largely proved ineffective in fostering trust and reliance in these instruments. Prosecution for a bounced cheque, for instance, can take several years in Indian courts. Hence, businesses inherently prefer to transact in cash, which reduces the potential size and frequency of dealings. This also means that significant volume of transactions takes place against exchange of hard currency. This is inherently credit-digressive.

The Government of India has initiated necessary steps in this direction. The Negotiable Instruments (Amendment) Bill, 2015 seeks to amend the Negotiable Instruments Act, 1881 and was introduced in the Lok Sabha on May 6, 2015. Among other things, the proposed Bill lays down the basic principles for determining the jurisdiction of courts — a ground which was frequently used by dishonest drawers to skirt the law.

In addition to the aforementioned recommendations, this report provides two case studies on the MSME environment in Germany and Singapore, both of which are countries where MSMEs thrive and are well supported.
Global Experience-Germany

Traditional financial theory would indicate that due to financial crisis, banks would stop lending to firms, holding them back from making potentially profitable investments and strategic decisions in the near term. This would hypothetically affect SMEs disproportionately because SMEs the world over, in general, have limited and less diversified access to formal institutions. However, since 2008, evidence points to the continued access of affordable financing to German SMEs for three critical reasons.

First, policies to establish Mittlestand (small and medium sized enterprises in German-speaking countries) ensured that SMEs were integrated right from the outset in supply chain finance schemes that were backed by Germany’s public sector, private sector, and cooperative banks. So long as SMEs produced their goods, a steady stream of supply chain finance working capital was guaranteed to them, even if other longer-term loans for fixed asset needs were not as readily available.

Second, SMEs in Germany were equipped to successfully self-finance themselves, instead of turning to informal lending when formal institutional lending was running low. Export laws within the country ensure even smaller SMEs, which produce quality goods, are able to earn margins that can be used both for savings and long-term investments. The government department in charge of Mittelstand also works with enterprise owners to make them aware of the power of future investments and taking low dividends in the short run, to making larger profits in the long run. Research indicates that Germany has an SME culture that favors long-term investment for times of crisis.

Finally, and most importantly, regardless of their size, SMEs build relationships with at least two to three banking institutions to reduce the risk of over-dependence on a single financial partner. SMEs typically rely on a Hausbank, or home bank, which is the main bank for an enterprise and provides core financial services such as deposit-taking and credit lines. Enterprises then rely on other financial institutions for additional services such as asset management and facilitation of liquidity from capital markets.

Credit Guarantee Schemes for German SMEs

In addition to creating a culture that emphasizes formal credit for SMEs, the German government has fostered an ecosystem where loan products backed by a robust guarantee program can be tailor-fitted to SMEs’ needs. Bürgschaftsbanken are a network of 17 guarantee banks, which operate throughout the country.

The Bürgschaftsbanken network has a credit assessment team that reviews guarantee applications from banks and then works directly with them, rather than the borrower, through the loan guarantee process. All sectors are equally guaranteed under the program, and roughly a third of all loans to SMEs are funded with the help of this program.

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Institute for Economic Research
Finance Watch, WBG-Intellecap Analysis
Ecole Normale Supérieure
Deutsche Bundesbank, Friderichs & Körting
Hainz & Wiegand
OECD
Global Experience-Singapore

Singapore is widely recognized as an ideal place to set up business. Low cost of incorporation, minimal documentary requirements, and streamlined trade regulations have all contributed to its high position in the global 'Ease of Doing Business' rankings.

SMEs account for 99 percent of all registered enterprises in Singapore, and contribute close to half of the country's GDP and about 70 percent of the country's employment. Some policy interventions that have contributed to their growth and timely access to credit are discussed in brief below.

Vibrant start-up ecosystem

Programs such as the University Innovation Fund (UIF), Proof-of-concept (POC) grants, Early Stage Venture Capital (ESVF) and Technology Incubation Scheme (TIS) have helped to create a virtuous cycle of entrepreneurial activity. These programs have been suitably complemented by various other initiatives from different government agencies such as Media Development Authority (MDA), Infocomm Development Authority (IDA) and SPRING Singapore. For instance, MDA's grant schemes for development, production and marketing assistance are tailored to meet the needs of firms in the media industry. IDA helps in preparing Singapore start-ups for the world stage and also works towards promoting Singapore as a key entrepreneurial and innovation hub for global VC-backed Infocomm start-ups.

Data from the NRF suggests that every dollar allocated to investment schemes such as ESVF and TIS as of March 2016, enabled beneficiary startups to attract follow-on funding from private investors equivalent to four dollars.

Additionally, the Incubator Development Program (IDP) from SPRING provides up to 70 percent grant support to incubators and venture accelerators for covering eligible costs towards assisting innovative start-ups.

Loan and Credit Guarantee Schemes

There are various loans schemes where the Government, through its agencies, shares the risk of loan default that support SMEs' access to financing in Singapore.

SME Micro Loans enable companies with 10 or less employees to access working capital financing of up to $100,000.

SME Equipment and Factory Loans provides companies with credit of up to $15 million to purchase equipment, machines or selected factory properties.

SME Working Capital Loan, where in companies will be able to access unsecured working capital financing of up to $300,000.

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7th Asia Pacific Business Research Conference (August 2014)

Dr Francis Yeoh, Professor for Entrepreneurship at the NUS School of Computing (Link)

SPRING Singapore is an agency under the Ministry of Trade and Industry responsible for helping Singapore enterprises grow and building trust in Singapore products and services.
Loan Insurance Scheme (LIS) insures banks against the risks of SMEs defaulting on their trade loans.

These schemes are modified based on prevailing needs and business circumstances. For instance, during the global financial crisis, the government enhanced the risk-share for loans made under the MLP to 90 percent and launched the Loan Insurance Plus Scheme, where the government co-shares in the risk of new loans which are beyond the capacity of LIS insurers⁴⁴.

⁴⁴ Budget 2016 (Link)
Appendix A — Demand Estimation Methodology

The principal sources of data for the estimation of the debt demand for MSMEs are the Fourth All India Census on MSME 2007 (MSME Census), Annual Reports of Ministry of MSME, Central Statistical Organization (CSO), and Ministry Of Statistics and Program Implementation (MOSPI). Other sources include publications of the Reserve Bank of India (RBI), Government of India, Small Industries Development Bank of India (SIDBI), existing research literature, IFC publications, industry publications and primary interactions with various stakeholders.

The methodology for estimating the debt demand from MSMEs draws from the methodology and assumptions used during a similar exercise done in 2012, the results of which were published in IFC’s 2012 report on MSME Enterprise Finance in India. The assumptions used were re-validated through both secondary sources and primary interactions with key stakeholders in the sector such as SIDBI, public sector banks, private banks, and NBFCs. The estimation methodology involves the following key steps:

Figure: Key Steps in the Estimation of Debt Demand from MSMEs

Step 1: Estimate average finance demand per enterprise and overall finance demand

The underlying data for estimation is derived from the MSME Census. Trends in key metrics such as gross output per enterprise and average enterprise asset turnover ratio are used to derive average enterprise finance demand (in 2017). Average finance demand is estimated as the sum of the demand for capital expenditure and the demand for working capital of an enterprise.

- The demand for capital expenditure is the annual demand to finance the increase in fixed asset per enterprise
- Demand for working capital is estimated as 25 percent (3 months) of operating expenses per enterprise across manufacturing and services enterprises

The key steps involved in estimation of average finance demand include the following:

- Enterprises have been segregated by type of industry i.e. manufacturing and services sector. Top industry groups in each manufacturing and services sector are considered for demand estimation at industry group level
- The key financial metrics to be used as inputs for estimating the overall finance demand were calculated from the MSME Census 2007 raw data for each of the industry groups:
  - The gross output per enterprise in 2007 (INR Cr.) was calculated as aggregate reported gross output (INR Cr.) for the industry group divided by the number of enterprises in that industry group.
- The value of fixed assets per enterprise in 2007 (INR Cr.) was calculated as aggregate reported value of fixed assets (INR Cr.) for the industry group divided by the number of enterprises in that industry group.
- The asset turnover ratio was calculated as the aggregate reported gross output (INR Cr.) divided by the aggregate reported value of fixed assets (INR Cr.) for each industry group.
- The operating margins for each of the industry groups were estimated from secondary research about the industry.
- The gross output per enterprise for 2017 (INR Cr.) for each of the industry groups was derived by extrapolating the gross output per enterprise in 2007 (from above) using industry level growth rates from the Central Statistical Organization (CSO), Ministry of Statistics and Program Implementation (MOSPI) and industry reports.
- The value fixed asset per enterprise for 2017 (INR Cr.) corresponding to the above-estimated output in 2017 was calculated as the gross output per enterprise in 2017 (INR Cr., from above) divided by the asset turnover ratio for the industry group.
- The annual increment in fixed assets (INR Cr.) corresponding to the above-estimated output was calculated as the CAGR of the value of fixed assets per enterprise from 2007 to 2017 for each of the industry groups. This CAGR was used to calculate the annual capital expenditure (towards the incremental fixed assets) for 2017.
- The annual capital expenditure requirement per enterprise in 2017 was adjusted for depreciation.
- The working capital expenditure requirement per enterprise was calculated as the product of average operating margins in each industry (as estimated earlier) and gross output per enterprise in 2017.
- The demand for capital expenditure was taken as the annual demand to finance the increase in fixed asset per enterprise.
- Demand for working capital was estimated as 25 percent (three months) of operating expenses per enterprise across manufacturing and services enterprises.
- Total finance demand per enterprise (capital expenditure + working capital) thus estimated was multiplied by number of enterprises in the MSME universe in 2017 for the respective industry groups. Number of enterprises in industry groups was estimated by extrapolating numbers in the MSME Census 2007 by growth rates from Annual Reports of the Ministry of MSME.

Key assumptions in estimation of average finance demand
- Average finance demand in the registered and unregistered enterprises is similar
- Asset turnover ratio of enterprises remains constant over 2007-2017

Step 2: Estimate overall debt demand
Discussions with financial institutions, MSME associations and enterprises suggest that the share of finance demand met by debt varies across MSMEs. The overall finance demand has been split into Debt and Equity Demand in the ratio ~4:1 (in case of early stage enterprises, the average debt – equity ratio has been assumed to be lower at 3:1).
Step 3: Identify addressable subset of MSME universe

Debt demand from all MSMEs cannot be considered amenable to formal credit supply. In order to arrive at the addressable subset of MSMEs, the following exclusions were made:

1. New enterprises with less than 1 year of operating history
2. Sick enterprises on the verge of closing
3. Micro service enterprises that voluntarily opt out of formal financing

Percentage of enterprises operating for less than a year has been estimated based on an analysis of Udyog Aadhaar Registrations.

Sick enterprises on the verge of closing were estimated based on the difference between rate of new enterprises as estimated above, and the net growth rate of MSMEs as per MSME Annual Reports.

Based on primary interactions with various stakeholders, it has been assumed that 50 percent of the remaining micro enterprises from the service industry voluntarily opt out of formal financing options for various reasons such as reliance on friends and family, level of comfort with the local money lenders, easier procedures, quicker turn-around time for loans, etc. Accordingly, the following exclusions have been applied to the overall debt demand:

<table>
<thead>
<tr>
<th>Source</th>
<th>Details</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellecap Analyst</td>
<td>Average percentage of new enterprises every year</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Intellecap Analyst</td>
<td>Implied average rate of yearly closures</td>
<td>16%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Assumption Analyst</td>
<td>% of Micro units that opt for voluntary exclusion</td>
<td>25%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Calculation</td>
<td>Total Exclusions by each category</td>
<td>61%</td>
<td>36%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Step 4: Estimate addressable debt demand

The overall debt demand was segmented by size into debt demand for micro, small, and medium enterprises separately. The above mentioned exclusions were then applied to each category (Micro, Small & Medium) to arrive at addressable debt demand.

Appendix B – Supply Estimation Methodology

Calculation of Formal Debt Supply

The formal debt supply to the MSME sector is the sum of debt supply from the following sources:

1. Scheduled Commercial Banks (Public, Private and Foreign Banks)
2. Non-Banking Finance Companies (NBFCs)
3. Regional Rural Banks (RRBs)
4. Urban Co-operative Banks (UCBs)
5. Small Industries Development Bank of India (SIDBI)
6. State Finance Corporations (SFCs)

Estimated the debt supply from each of the above sources in order to arrive at the total supply of formal credit to the sector. The detailed methodology adopted to arrive at supply from each of the above sources is enumerated below.
1: **Estimate supply from SCBs**

1. Identify Outstanding Loans to MSME Sector from SCBs in 2016-2017 from RBI data
2. Disaggregate the Outstanding Loans to MSME Sector from SCBs in 2016-2017. Total SCB lending in 2017 has been split between Micro & Small enterprises in the same ratio as in FY’15 for which data was available in SIDBI’s monthly publication (2015)
3. Calculate Disbursals to MSME Sector as a percentage of outstanding. Disbursals as percentage of outstanding has been calculated based on primary interviews with various banks

2: **Estimate supply from NBFCs**

1. Identify Total Outstanding Loans from NBFCs to MSMEs in 2017. This data was taken from RBI report, 2017. ~40 percent of all NBFC loans to service sector was assumed to be directed at MSME enterprises for the purpose
2. Calculate Disbursals to MSME Sector as percentage of outstanding. Disbursal to outstanding ratio was assumed to be 100 percent, based on insights from primary and secondary research

3: **Estimate supply from RRBs**

1. All loans disbursed by RRBs in 2017 under the PMMY scheme were assumed to constitute RRBs total exposure to MSME sector. This data was sourced from NABARD 2017 Annual Report.

4: **Estimate supply from UCBs**

1. Calculate Outstanding Loans to MSEs from UCBs in FY’14. Based on data from RBI, ratio of outstanding MSE loans from UCBs to total outstanding loans from UCBs in FY'14 was identified. This ratio was applied to total outstanding loans of UCBs in 2017 in order to arrive at corresponding figures for outstanding loans to MSEs
2. Calculate Disbursals to MSEs in FY 15 as percentage of Outstanding. Based on primary insights, it was found to be in the vicinity as that of SCBs and was therefore assumed as 75 percent. The same was assumed to have remained constant in 2017.
3. Calculate Disbursals to MSMEs in 2017. It was assumed that disbursals to medium enterprises are negligible as UCBs typically do not cater to that segment

5: **Estimate supply from SIDBI**

1. Identify Outstanding Loans to MSMEs in 2017 based on data from SIDBI Annual Report for 2017
2. Calculate Disbursals to MSME Sector as percentage of Outstanding. Based on insights drawn from primary interviews, the disbursal to outstanding ratio has been assumed at ~13 percent

6: **Estimate supply from SFCs**

1. Calculate MSME Disbursals in 2017 as the sum of individual SFC disbursal data sourced from respective SFC website

**Appendix B — Supply Estimation Methodology**

**Calculation of Informal Debt Supply**

1. Calculate Total Debt Demand from MSMEs in 2017 (as per WBG-Intellecap Analysis described earlier)
2. Calculate Formal Credit Supply to MSMEs in 2017 (as per WBG-Intellecap Analysis described earlier)
3. Calculate Supply of Informal Credit to MSMEs in 2017. Informal credit supply is the difference between total debt demand and formal credit supply
Appendix C — Comparative Figures for 2010 & 2017

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Unit</th>
<th>2010 Figure</th>
<th>2017 Figure</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Debt Demand</td>
<td>INR, Trillion</td>
<td>26</td>
<td>69.3</td>
<td>15%</td>
</tr>
<tr>
<td>Addressable Debt Demand</td>
<td>INR, Trillion</td>
<td>9.9</td>
<td>36.7</td>
<td>24%</td>
</tr>
<tr>
<td>Formal Debt Supply</td>
<td>INR, Trillion</td>
<td>7</td>
<td>10.9</td>
<td>7%</td>
</tr>
<tr>
<td>Addressable Demand – Supply Gap</td>
<td>INR, Trillion</td>
<td>2.9</td>
<td>25.8</td>
<td>42%</td>
</tr>
</tbody>
</table>

The total debt demand has increased from INR 26 trillion (USD 520 billion)$^{267}$ in 2010 to INR 69.3 trillion (USD 1.1 trillion)$^{267}$ in 2017. This is attributed to the overall growth rate in the economy as well as the inclusion of an additional 13.3 million micro enterprises due to an expanded definition of the MSME universe established in 2006, but retrospectively included in the MSME count only in 2012-13$^{268}$. The additional enterprises contribute INR 7.4 trillion (USD 114 billion) to the increase in the overall debt demand.

In addition, changes in addressable debt demand can be partly attributed to change in methodology of computation. These pertain to methodology adopted for applying exclusions to the overall debt demand under the three categories (sick enterprises, new enterprises, and voluntary exclusions) for each of three segments viz. Micro, Small and Medium enterprise category.

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$^{267}$ Based on then prevailing USD-INR exchange rate of 50
$^{268}$ USD INR exchange rate of 65 has been used for all conversions of latest numbers
$^{269}$ Subsequent to enactment of the Micro, Small and Medium Enterprises Development Act, 2006 the then, Ministry of Agro and Rural Industries and Ministry of Small Scale Industries were merged into a single Ministry, namely, Ministry of Micro, Small and Medium Enterprises. Small-Scale Industrial units were identified as those where fixed investment in plant and machinery, whether owned or held on lease/hire purchase basis did not exceed INR 10 million (USD 154,000)
<table>
<thead>
<tr>
<th>SI No</th>
<th>Name of the Scheme</th>
<th>Objective</th>
<th>Budget-FY 16 (INR-Crore)</th>
<th>Actual off take-9M FY16 (INR-Crore)</th>
<th>Inception Year</th>
<th>Off-take since scheme inception (INR-Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Performance &amp; Credit Rating Scheme</td>
<td>To provide a trusted third party opinion on the capabilities and creditworthiness of the MSEs so as to create awareness amongst them about the strengths and weakness of their existing operation.</td>
<td>28</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2</td>
<td>Marketing Assistance Scheme</td>
<td>To enhance the marketing competitiveness of MSMEs; to provide them a platform for interaction with the individual/institutional buyers; to update them with prevalent market scenario and to provide them a form for redressing their problems.</td>
<td>14</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>3</td>
<td>International Co-operation Scheme</td>
<td>Technology infusion and/or upgradation of Indian micro, small and medium enterprises (MSMEs), their modernization and promotion of their exports.</td>
<td>4</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>4</td>
<td>Assistance to Training Institutions Scheme</td>
<td>Financial assistance for establishment of new institutions (EDIs), strengthening the infrastructure of the existing EDIs and for supporting entrepreneurship and skill development activities.</td>
<td>80</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>5</td>
<td>Survey, Studies and Policy Research</td>
<td>(i) To regularly/periodically collect relevant and reliable data on various aspects and features of MSMEs, (ii) to study and analyze, on the basis of empirical data or otherwise, the constraints and challenges faced by MSMEs as well as the opportunities available to them in the context of liberalization and globalization of the economy, and (iii) to use the results of these surveys and analytical studies for policy research and designing appropriate strategies and measures of intervention by the Government.</td>
<td>2.28</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

MSME at a Glance, 2016, Ministry of MSME, GoI
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<tr>
<th></th>
<th>Scheme Name</th>
<th>Description</th>
<th>Amount (in Rs.)</th>
<th>2019-20</th>
<th>2018-19</th>
<th>2017-18</th>
<th>2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Prime Minister’s Employment Generation Programme (PMEGP)</td>
<td>(i) Setting up new self-employment ventures/projects/micro enterprises to generate employment opportunities in rural as well as urban areas of the country, and (ii) bring together widely dispersed traditional artisans/rural and urban unemployed youth and give them self-employment opportunities to the extent possible, at their place to help arrest migration of rural youth to urban areas.</td>
<td>1050</td>
<td>850</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>7</td>
<td>Scheme of fund for Regeneration of Traditional Industries (SFURTI)</td>
<td>To organize the traditional industries and artisans into clusters to make them competitive and provide support for their long-term sustainability and economy of scale, and provide sustained employment for traditional industry artisans and rural entrepreneurs to enhance marketability of products of such clusters by providing support for new products, design intervention and improved packaging and also the improvement of marketing infrastructure.</td>
<td>50</td>
<td>20.75</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>8</td>
<td>Market Promotion and Development Assistance (MPDA)</td>
<td>Formulated as a unified scheme by merging different schemes/sub-schemes/components of different Heads implemented in the 11th Plan, namely: Market Development Assistance, Publicity, Marketing and Market promotion and adds a new component of infrastructure (inclusive of new component of Marketing Complexes/Khadi Plaza).</td>
<td>178</td>
<td>156</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>9</td>
<td>Interest Subsidy Eligibility Certificate for Khadi and Polyvastra</td>
<td>Applicable for all registered institutions under KVIC/State KVIBs. The quantum of subsidy shall be limited to the difference between the actual rate of interest charged by the financing institutions and 4 (four) percent to be borne by the borrower.</td>
<td>40.07</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Scheme Name</td>
<td>Description</td>
<td>Year</td>
<td>Amount</td>
<td></td>
<td></td>
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<tr>
<td>--------</td>
<td>-------------</td>
<td>-------------</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Coir Vikas Yojana</td>
<td>For adoption of strategic and aggressive product specific and market specific promotional programmes for popularizing coir and coir products in markets abroad, supporting the export oriented industry on modernization programme and to attain overall and sustainable development of Indian Coir Industry by participating in international fairs/product promotion programmes/seminars etc. and to assist the entrepreneurs to participate in such programmes through export market development assistance scheme.</td>
<td>2000-01</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Coir Udyami Yojana</td>
<td>To Rejuvenate, Modernize and Technologically upgrade the most crucial link in the Coir production chain, namely Spinners and Tiny Household sector.</td>
<td>2000-01</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>12</td>
<td>Coir S &amp; T Yojana (PLAN S &amp; T)</td>
<td>Develop many new eco-friendly technologies, processes, diversified products, equipment and machinery for increased productivity and efficiency and grades and quality of the coir products.</td>
<td>2000-01</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>ASPIRE</td>
<td>To set up a network of technology centers and to set up incubation centers to accelerate entrepreneurship and also to promote start-ups for innovation and entrepreneurship in agro-industry.</td>
<td>2015</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Credit Guarantee Scheme (CGTMSE)</td>
<td>(i) To make available credit to Micro and Small Enterprises for loans up to INR 200 lac without collateral/third party guarantees, and (ii) to strengthen credit delivery system and facilitate flow of credit to the MSE sector.</td>
<td>2000</td>
<td>1935</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Credit Linked Capital Subsidy Scheme (CLCSS)</td>
<td>To facilitate technological upgradation: Facilitating 15 percent upfront capital subsidy to a maximum limit of INR 15.00 lac (investment in approved plant &amp; machinery up to INR 1.00 crore) for induction of well-established and improved technologies.</td>
<td>2000-01</td>
<td>2143.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Programme Name</td>
<td>Description</td>
<td>Amount</td>
<td>Interest</td>
<td>Duration</td>
<td>Amount</td>
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<td></td>
</tr>
<tr>
<td>16</td>
<td>Micro and Small Enterprises Cluster Development Programme (MSE-CDP)</td>
<td>For enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their collectives in the country.</td>
<td>100</td>
<td>52.21</td>
<td>2007-08</td>
<td>318</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Lean Manufacturing (NMCP)</td>
<td>To enhance the manufacturing competitiveness of MSMEs through the application of various Lean Manufacturing (LM) techniques like 5S System, Visual Control, Standard Operating Procedures (SOPs), Just in Time (JIT), KANBAN System, Cellular Layout, Value Stream Mapping, Poka Yoke, Single Minutes Exchange of Dies (SMED), Total Productive Maintenance, Kaizen.</td>
<td>12</td>
<td>11.26</td>
<td>2009-10</td>
<td>45.26</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Design Clinic Scheme (NMCP)</td>
<td>To create a sustainable design ecosystem for the MSME sector through continuous learning and skill development.</td>
<td>10</td>
<td>0</td>
<td>2009-10</td>
<td>38.57</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Information and Communication Technology (NMCP)</td>
<td>To promote an ecosystem of cost effective and all inclusive ICT applications for MSMEs through Cloud Computing.</td>
<td>5.5</td>
<td>0</td>
<td>2009-10</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Intellectual Property Right</td>
<td>To enhance awareness of MSMEs about Intellectual Property Rights (IPRs) To take measure for protecting their ideas and business strategies.</td>
<td>3</td>
<td>1.73</td>
<td>2008-09</td>
<td>13.69</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Bar Code Scheme (MDA)</td>
<td>(i) To enhance marketing competitiveness of Micro &amp; Small Enterprises (MSEs) by providing 75 percent of one-time registration fee and Annual recurring fee (for first three years) paid by MSEs to GSI India, and (ii) Motivating and encouraging MSEs for use of barcodes through conducting.</td>
<td>5</td>
<td>2.53</td>
<td>2007-08</td>
<td>137.96</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Scheme Name</td>
<td>Objective</td>
<td>Year</td>
<td>Value</td>
<td>Period</td>
<td>Amount</td>
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<td>-----</td>
<td>------------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>22</td>
<td>Marketing Development Assistance (MDA) Scheme</td>
<td>(i) To encourage small &amp; micro enterprises in their efforts of tapping and developing overseas markets, (ii) To increase participation of representatives of small/micro manufacturing enterprises under MSME India stall at international trade fairs/exhibitions, and (iii) To enhance exports from the small/micro manufacturing enterprises.</td>
<td>6</td>
<td>4.77</td>
<td>2007-08</td>
<td>28.76</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>ZED Maturity Model: Quality Management Standards (QMS) And Quality Technology Tools (QTT) –NMCP</td>
<td>To sensitize and encourage MSMEs to adopt latest QMS and QTT. To enable MSEs to achieve efficient use of resources improvement in product quality. Reduction in rejection and re-work in the course of manufacturing.</td>
<td>6</td>
<td>0.6</td>
<td>2009-10</td>
<td>8.61</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Trade Related Entrepreneurship Assistance and Development (TREAD) for Women</td>
<td>The scheme envisages economic empowerment of such women through trade related training, information and counseling extension activities.</td>
<td>3</td>
<td>1.5</td>
<td>2007-08</td>
<td>13.39</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Public Procurement Policy</td>
<td>To facilitate increased business fusion between Public Sector Units like BEL, BHEL, TELCO, BSNL, IOC, NHPC, NTPC, Railways, Defence Organizations etc. and Indian SMEs for their mutual benefit by way of providing appropriate marketing linkages.</td>
<td>5</td>
<td>1.26</td>
<td>XI plan (2007-12)</td>
<td>1761.96</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Marketing Assistance and Technology Upgradation (MATU)</td>
<td>To provide marketing platform to manufacturing MSMEs through their participation in State / District level exhibitions organized by State / District Authorities / Associations</td>
<td>5</td>
<td>4.77</td>
<td>2009-10</td>
<td>4.08</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Technology Centre Systems Programme (TCSP)</td>
<td>Making MSMEs globally competitive through Access to advanced manufacturing technologies. Skilling manpower by offering opportunities for technical skill development to the youth, and providing technical and business advisory support to MSME entrepreneurs</td>
<td>100</td>
<td>29.19</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>
Technological support to MSMEs by making available: Access to State-of-the-art, advanced manufacturing technologies; Skilled manpower by offering various skill development courses; and Technical and business advisory support to MSMEs.

| Technology and Quality Upgradation Support to MSMEs | to encourage the MSMEs to acquire product certification/licenses from National/International bodies and adopt other technologies mandated as per the global standards. | 100 | 78.08 | 2007-08 | 386 |

Appendix E – Summary of some credit evaluation tools

Psychometrics Tests

Psychometrics tests are mainly designed to evaluate the willingness to repay loan by the prospective borrower. Responses received from the prospective borrowers indicate personal characteristics such as honesty, ethics, drive, motivation, optimism, intelligence, and business skills. It has been found that entrepreneur's business profits and repayment behavior patterns are strongly related with their individual personality traits. Armed with this information, lenders can lend to those whose willingness to repay can otherwise not be ascertained from traditional sources such as credit score (for instance when borrower does not have a borrowing history), formal financial records or collateral.

Typically, such tools are designed by first quantifying the individual characteristics of people who had defaulted on a past loan versus those who had not. In order to create holistic tool, results are analyzed for people who owned small businesses with high versus low profits. Entrepreneurial traits, measured via personality and intelligence tests, determine an entrepreneur's ability to generate cash flows in the future. Willingness to pay is independent of ability to pay, and is ascertained by honesty traits which is measured by integrity tests. These data points are modeled using advanced statistical frameworks and tested for statistical significance at various confidence levels to ascertain the predictive ability of the tool.

[Link] Psychometrics as a Tool to Improve Screening and Access to Credit, WBG, Dec '15
Psychometric tests could be employed (i) as a secondary screening mechanism for entrepreneurs accepted under the traditional credit scoring method, to lower the risk of the SME loan portfolio, and (ii) as a skimming mechanism for applicants rejected under the traditional credit scoring method, in order to offer more loans without increasing the risk of the portfolio\textsuperscript{275}.

Some studies show that in the case of unbanked entrepreneurs i.e. those with no formal credit history, specific psychometric tools can be used to make additional loans based on the traditional screening method without increasing the lender’s portfolio risk. Thus, these tools can potentially increase access to credit for small and unbanked entrepreneurs where traditional credit assessment tools continue to fail due to limited availability of financial and operational data.

**Sector-specific value chain scenario building**

Value chain analysis is a process for identifying opportunities for and constraints to increased competitiveness of a sector. Taking a value chain approach entails considering the risks and returns of the finance supplier along with the risk and returns of the value chain actor demanding finance\textsuperscript{276}. This is a critical element of determining where expansion of financial services is tied to the growth and competitiveness of a value chain. The analysis allows lenders to draw a risk management plan based on assessment of risks present in the value chain.

**Cash flow based lending**

Cash flow based lending is a lending technique wherein loans are provided based on and backed by SME’s cash flows as opposed to asset based lending where the loan is secured by the SME’s assets.
Thus, business cash flows are analyzed to determine whether the company under evaluation can generate enough cash from its own operations to cover all its expenses, including its interest and loan instalment payments. The analysis also helps in detection of any aberration in the cash flows of the unit.

For cash flow based loans, the loan amount is based on the SME’s actual revenue generation and capacity to repay. Furthermore, the repayment schedule is based on the timing of the SME’s cash inflows. For cash flow based loans, collateral can be taken however it is not the primary consideration for the loan. In case of SMEs where detailed cash flow data may either not be readily available or remain unreliable, lenders train their staff to assess the cash conversion cycle which helps in determining the quantum of loan as well as scheduling its repayment terms.

One of the advantages for cash flow based lending is that loan size, terms and repayment mode are all based on the SME’s actual generation and hence the risk of default due to diversion of funds is reduced. Cash flow based lending is typically better suited for short-term working capital loans.\footnote{Building SME-focused capacity, FSD Kenya, July 2015}

**Enterprise owners’ network analysis**

As a part of this analysis, lenders reach out to customers, suppliers, friends and relatives, neighbors, etc. to collect information about a business or the promoter. The analysis is a critical step to establish the identity of the borrower. It also enables evaluating the goodwill of the company and the promoter in the market.

**Sensitivity Analysis**

Sensitivity Analysis is a tool used to analyze how the different values for a set of independent variables affect a dependent variable under certain specific conditions. Sensitivity Analysis is performed to assess risks, measure potential outcomes, and plan for an uncertain future.

In case of term loans, sensitivity analysis is conducted by slightly changing the assumptions of the project. This is primarily done to evaluate the impact of adverse changes in the assumptions and the consequent impact on credit risk. Fintech lenders also use the tool to design loan products based on product attributes that potential borrowers are likely to be most sensitive to. For instance, lenders may find that SME borrowers do not mind paying an extra 2 percent or so on loans but are extremely sensitive to time taken to disburse the loan.

**Appendix F – Details of Primary Research**

This study draws on primary interviews conducted with various debt suppliers, MSMEs and other key stakeholders to understand the MSME financing landscape in general, validate estimates of data, and receive insights on gaps and recommendations. The interviewees are listed as follows:\footnote{Please note that the lists are not exhaustive and does not contain the names of stakeholders who have requested anonymity and do not want their or their organizations’ names to be disclosed}: 

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\footnote{Building SME-focused capacity, FSD Kenya, July 2015}

\footnote{Please note that the lists are not exhaustive and does not contain the names of stakeholders who have requested anonymity and do not want their or their organizations’ names to be disclosed}
<table>
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<th>Sl No.</th>
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<th>Type</th>
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<td>Public Sector Bank</td>
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<tr>
<td>2</td>
<td>Central Bank of India</td>
<td>Public Sector Bank</td>
</tr>
<tr>
<td>3</td>
<td>Dena Bank</td>
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<tr>
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<td>IDBI Bank</td>
<td>Public Sector Bank</td>
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<td>Kotak Mahindra Bank</td>
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<td>ICICI Bank</td>
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<td>7</td>
<td>Axis Bank</td>
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<td>YES Bank</td>
<td>Private Bank</td>
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<td>HDFC Bank</td>
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<td>NBFC</td>
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<td>Indostar</td>
<td>NBFC</td>
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<td>12</td>
<td>Magma Fincorp</td>
<td>NBFC</td>
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<td>13</td>
<td>Intellegrow</td>
<td>NBFC</td>
</tr>
<tr>
<td>14</td>
<td>Intellecash</td>
<td>NBFC</td>
</tr>
<tr>
<td>15</td>
<td>Capital Float</td>
<td>NBFC</td>
</tr>
<tr>
<td>16</td>
<td>Caspian Impact Investment Advisors</td>
<td>Investment Advisor</td>
</tr>
<tr>
<td>17</td>
<td>DBS</td>
<td>Foreign Bank</td>
</tr>
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<td>18</td>
<td>Xio Financial Services Limited</td>
<td>Fintech NBFC</td>
</tr>
<tr>
<td>19</td>
<td>Vistaaar Financial Services Pvt Ltd</td>
<td>Fintech NBFC</td>
</tr>
<tr>
<td>20</td>
<td>Kudos Finance &amp; Investments Pvt Ltd</td>
<td>Fintech NBFC</td>
</tr>
<tr>
<td>21</td>
<td>Lending Kart</td>
<td>Fintech NBFC</td>
</tr>
<tr>
<td>22</td>
<td>Zouk Loans (Zouk Management Advisors Pvt Ltd)</td>
<td>Fintech (marketplace)</td>
</tr>
<tr>
<td>23</td>
<td>SME Corner</td>
<td>Fintech (marketplace)</td>
</tr>
<tr>
<td>24</td>
<td>SMERA</td>
<td>Credit Rating Agency</td>
</tr>
<tr>
<td>25</td>
<td>SIDBI (Risk Capital)</td>
<td>Apex body for MSMEs</td>
</tr>
<tr>
<td>26</td>
<td>SIDBI (Debt)</td>
<td>Apex body for MSMEs</td>
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### Demand side

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<tr>
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<tr>
<td>3</td>
<td>A*****g India</td>
<td>Manufacturing</td>
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<tr>
<td>4</td>
<td>B***a Delivers</td>
<td>Services</td>
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<tr>
<td>5</td>
<td>C*****e Salt</td>
<td>Manufacturing</td>
</tr>
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<td>6</td>
<td>C***** Bakery</td>
<td>Services</td>
</tr>
<tr>
<td>7</td>
<td>D***a Enterprises</td>
<td>Services</td>
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<tr>
<td>8</td>
<td>Edu*****</td>
<td>Services</td>
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<tr>
<td>9</td>
<td>G***** Enterprises</td>
<td>Services</td>
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<td>Manufacturing</td>
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<td>H*****n Clockworks</td>
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<td>H***** A*****t View</td>
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<td>13</td>
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<td>17</td>
<td>M***** C***** Guide</td>
<td>Services</td>
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<td>18</td>
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<td>19</td>
<td>R*****n Systems</td>
<td>Manufacturing</td>
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<td>S** A<em><strong><strong>t l</strong></strong></em></td>
<td>Services</td>
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<td>S** K********k Electronics Pvt. Ltd.</td>
<td>Manufacturing</td>
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<tr>
<td>22</td>
<td>Su<em><strong><strong>n F</strong></strong></em>***</td>
<td>Services</td>
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<tr>
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<td>S******* p***** M*****</td>
<td>Manufacturing</td>
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<td>27</td>
<td>W** N********</td>
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### Other stakeholders

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<th>Type</th>
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<td>Federation of Indian Micro and Small &amp; Medium Enterprises (FISME)</td>
<td>Association</td>
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<td>2</td>
<td>Foundation for MSME Clusters (FMC)</td>
<td>Association</td>
</tr>
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<td>3</td>
<td>MSME Board</td>
<td>Ministry of MSME</td>
</tr>
<tr>
<td>4</td>
<td>NABARD</td>
<td>Apex Development Bank</td>
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### Appendix G – Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Acronym Definition</th>
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<tr>
<td>ANBC</td>
<td>Adjusted Net Bank Credit</td>
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<tr>
<td>API</td>
<td>Application Programming Interface</td>
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<tr>
<td>BCG</td>
<td>Boston Consulting Group</td>
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<tr>
<td>BOP</td>
<td>Bottom of Pyramid</td>
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<td>BPO</td>
<td>Business Process Outsourcing</td>
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<td>CAGR</td>
<td>Compounded Annual Growth Rate</td>
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<tr>
<td>CBI</td>
<td>Central Bureau of Investigation</td>
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<td>CERSAI</td>
<td>Central Registry of Securitization Asset Reconstruction and Security Interest of India</td>
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<td>CGS</td>
<td>Credit Guarantee Scheme</td>
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<tr>
<td>CGTMSE</td>
<td>Credit Guarantee Trust for Micro and Small Enterprises</td>
</tr>
<tr>
<td>CIC</td>
<td>Credit Information Companies</td>
</tr>
<tr>
<td>CLCSS</td>
<td>Credit Linked Capital Subsidy Scheme</td>
</tr>
<tr>
<td>CSO</td>
<td>Central Statistical Organization</td>
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