# Access to Finance: Challenges Faced by Micro, Small, and Medium Enterprises in India

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Access to finance plays a major role in the entrepreneurship development and economic growth of any country. It encourages new entrepreneurial initiatives. Timely access to finance sustains the survival and growth of micro, small, and medium enterprises (MSMEs). The purpose of this paper is to explore the challenges of access to finance faced by the MSMEs and to analyze their impact on their business performance. The survey was conducted in 400 MSMEs from various industrial clusters across India. The samples were selected using the quota sampling technique. The conceptual framework was developed and tested using the structural equation model (SEM).Results show that firm attributes, sources of finance, and the life cycle of an MSME have a significant positive impact on its access to finance, whereas financial obstacles have a negative impact that prevents the growth of MSME and affects the economic growth of the nation.

Keywords: MSME; Firm Attributes; Access to Finance; Sources of Finance; Financial Obstacles; Performance; Access to Credit.

### Introduction

Access to finance is the major concern for MSMEs in developing countries like India. The economic growth of developing countries is grounded based on the development of MSMEs. The Indian economy has been supported by the micro, small and medium enterprises (MSME) sector for the past fifty years (MSME Annual Report, 2019). MSMEs significantly contribute to the economic development of developing and developed nations and also account for 80 % of the global economic growth. In India, the MSME sector contributes to 6.11 % of the manufacturing GDP, 24.63 % of the services GDP, 33.4 % of the manufacturing output, and 34 % of the total

exports across a diverse range of commodities (CII, 2019). It is further added that the contribution of the present export of MSME is 50 % which could increase to 75 % through the extension of employment generation to 15 Crore people by 2024. At present, the MSMEs contribute 24 % to India's GDP and it is expected to reach 50 % which is anticipated to scale up the Indian economy to \$5 trillion by 2024. Further, the growth of MSMEs accelerates the achievement of social and economic goals. India's total addressable demand for external credit was INR 41.64 trillion, while the country's total supply of funds was INR 13.54 trillion. As a result, the MSME sector's loan shortfall in 2019 was INR 28.10 trillion (Mronindia, 2020). In India, getting institutional sources of

funding for MSMEs is more difficult. (Pachouri & Sharma, 2016). Due to financial institutions' unwillingness to give loans to small businesses or information asymmetry, the majority of MSMEs in India rely on short-term financing rather than long-term financing. Due to the difficulties of acquiring funding from banking institutions and capital markets, many small businesses in India use informal sources of finance. (Baker et al., 2020). Maximum number of MSMEs in India facing challenges in the initial phases of their entrepreneurial venture due to plenty of rules and regulations, and lack of access to finance. According to Ease of doing business ranking (2020), India was ranked as 63 with a DB score of 71.0. In general, a developing country like India has many loopholes in the system which thwart the new generation of entrepreneurs from expanding their business and dissuades them to venture into startups due to challenges in access to MSME loans.

Hence, the purpose of this study is to examine the challenges encountered by the MSMEs in accessing finance and its impact on firm performance. This research is aimed to answer the following research questions (RQs):

RQ1: What is the impact of the firm attributes, financial obstacles, sources of finance, and the life cycle of an MSME on the access to finance?

RQ2: To what extent does access to finance influence the performance of an MSME?

The present research is important to understand the key factors which influence access to finance and its impact on the performance of an MSME. The governments play a vital role in promoting and developing entrepreneurship so that the MSMEs are eligible for loan schemes, subsidies, and tax benefits to support their continuous growth and to encourage others to float start-ups (Thampy, 2010; Prasad, 2006). MSME financing is a significant element of many government policies (Kersten et al., 2017). A survey conducted by the International Finance Corporation (IFC) in 2018 reported that only 16 % of the total MSME debt financing was provided by formal funding sources and the rest was self-supported or was from informal sources. All financing channels of MSMEs are categorized into four types, namely, in-house sources, finance from the market, finance from a bank, and alternative sources of finance. The primary sources of MSME finance are bank loans, loans from non-banking institutions, microfinance institutions, venture capital, own funds, equity finance, and informal finance. The MSMEs seek further growth through formal financial sources like bank credit and venture capital, in addition to reducing the use of informal finance (Shinozaki, 2014; Asian Development Bank, 2014). Following the pecking order theory, friends and family are the primary sources of finance for MSMEs. This is because they have limited resources and income, which is insufficient to repay their debt obligations. The findings of previous studies also reveal that the main issue faced by the MSMEs is access to finance (Fatoki & Asah, 2011; Beck, 2007; Banerjee, 2014).

The ability of MSMEs to access finance heavily influences their survival, growth, and expansion capacity. Lack of access to credit has always been a significant obstacle in the progress of MSMEs in East and South Asian countries (Economic and Social Commission for Asia and the Pacific (ESCAP), 2009).

This paper contributes to the literature in three aspects. First, it provides a framework to identify the financial challenges faced by MSMEs enterprises in access to finance in the selected five states, with a total share of 50.00% in terms of several units and is considered as the backbone or engine of economic growth in India, to the best of our knowledge this area has not been explored or untapped earlier. Secondly, it also contributes a comprehensive framework to examine the cause and effect relationship between financial Challenges faced by MSMEs in access to finance and its impact on firm performance, because earlier studies (Guna & Natalja, 2011; Thampy, 2010; Charan & Poornima, 2016; Beck & Demirguc-Kunt, 2006) have analyzed the impact of firm attributes, financial obstacles, sources of finance, and the life cycle of an MSME on its access to finance and its influence on firm performance. However, these studies have taken into account only one or two factors. Hence, there is a lack of empirical evidence regarding how all the mentioned factors together impact the MSMEs' access to finance and affect the firm performance (Jaroslav et al., 2019). This study is of great significance to take the Indian economy to the next level in near future. Thirdly, the results of the study may trigger the policymakers of the Indian government by eliminating or minimizing the financial challenges faced by MSMEs through appropriate measures using the latest technological interventions, which will encourage the budding entrepreneurs to venture up new entrepreneurial activities in India. Finally, the increase in successful MSMEs could overcome emerging economic issues in India namely unemployment, poverty, income inequality, and weak economic growth.

The next section provides the literature review, followed by the explanation of the conceptual model with relevant hypotheses to be tested, a description of the sample's profile, data analysis method and its interpretation, and finally, a discussion about the conclusions.

### Literature Review

### Definition of MSME

As per MSME Act 2006, MSMEs are classified in terms of investment and annual turnover. Table 1defines the MSME classification in India.

**MSME** Classification

Table 1

Criteria: Investment in Plant and Machinery or Equipment							
Classification Micro Small Medium							
Manufacturing	Investment	Investment	Investment				
	<rs. 25="" lac<="" td=""><td><rs. 5="" cr.<="" td=""><td><rs. 10="" cr.<="" td=""></rs.></td></rs.></td></rs.>	<rs. 5="" cr.<="" td=""><td><rs. 10="" cr.<="" td=""></rs.></td></rs.>	<rs. 10="" cr.<="" td=""></rs.>				
Services	Investment	Investment	Investment				
	<rs. 10="" lac<="" td=""><td><rs. 2="" cr.<="" td=""><td><rs. 5="" cr.<="" td=""></rs.></td></rs.></td></rs.>	<rs. 2="" cr.<="" td=""><td><rs. 5="" cr.<="" td=""></rs.></td></rs.>	<rs. 5="" cr.<="" td=""></rs.>				

Source: MSMED Act 2006

### Firm Attributes

According to Rational choice theory, firm attributes heavily influence both the demand and supply dimensions of access to financial services. Previous studies have widely acknowledged that the characteristics of a firm play a significant role in influencing its access to finance. For instance, a firm's age signifies the ability of the organization to withstand difficult times in the market. Since younger

firms do not have sufficient financial resources to deal with severe economic conditions, they are more likely to fail. MSMEs tend to have comparatively less access to finance than large firms (OECD, 2013; Saeed & Sameer, 2015). Gabbianelli (2018), in her research, stated that the local presence and the robust relationships that the MSMEs have established over the years with local stakeholders have allowed easier access to finance. The firm's size is a crucial factor; firms that have more tangible assets prefer to obtain long-term debt. Hence, companies with the huge investment are sufficiently diversified and therefore less competitive, enabling them to withstand high debt ratios and making them less vulnerable to failure. Schiffer & Weder (2001) reported that small concerns always face hindrances compared to medium and large firms. Thus, it is evident from the literature that the primary predictors of a firm's financial challenges are its size, age, and ownership (Fatoki & Asah, 2011).

### Financial Obstacles

The Asian Development Bank (2014) specified that access to finance is the foremost constraint faced by the MSMEs in India, followed by the necessity of collateral, inflexible policies, high lending rates, complex processes, and the absence of financial knowledge of relevant schemes among entrepreneurs. These obstacles have a negative influence on their access to finance. A fairly large number of studies have examined these factors, confirming their negative effect on the growth of MSMEs. The lack of access to non-financial inputs, lack of access to finance, as well as huge costs is the three major obstacles impeding the growth of MSMEs. Pissarides et al. (2003) identified four constraints: access to land, timely delivery by suppliers, finance problems, and production constraints. The results of their research also suggest that external financial access was the most severe problem among all other constraints. According to Saghir, Aston (2017), government regulations, interest rates, and financial crises are obstacles that have a statistically significant negative relationship with easy access to financial resources. MSMEs have reported finance to be their most significant obstacle, as they tend to receive loans after a lot of struggle. The most commonly addressed issue in literature deals with the financial obstacles of MSMEs (Beck, 2007; Banerjee, 2014; Dong & Men, 2014).

### Sources of Finance

MSMEs face the problem of choice among various sources of finance based on the services provided by the financial institutions. Rational choice theory of demand for financial services comprises (i) the desire for financial services (ii) nature and type of services provided by the financial institutions; and (iii) the terms and conditions of services.

Selection of sources of finance by the individuals of MSMEs also explained by the theory of bounded rationality, rationality is restricted when individuals of MSMEs make decisions by the regularity of decision issues, the cognitive limitations of thought, and the time available for the selection of right source of finance. MSMEs have a high demand for external finance (particularly debt) to fund their growth because internal finance is not sufficient to satisfy the demands of these firms (Pandula, 2011). Despite various financial limitations, banks remain the primary provider of external finance to MSMEs, as they rely on banks more than large firms do (Klonowski, 2012; Thampy, 2010). There are various sources of external financing available to MSME entrepreneurs. MSMEs are often heavily dependent on straight debt to fulfill their investment and cash flow needs (OECD, 2016). Also, owing to the constraints in the financial market, MSME administrators are often unable to easily procure new equity finance (Rocca et al., 2011). Thus, access to finance differs based on each source of funding available to the MSMEs. The governments and regulating agencies have extended incentives, grants, guided loans, and subsidized lending to create a supportive platform and promote the MSMEs. However, they are still facing financial connectivity problems. Due to the various difficulties in accessing finance and its proper selection has become an obligation.

### Life Cycle of an MSME

Similar to the life cycle of a human being, organizations also have life cycles that include birth, maturity, change, and even death. The organizations need to undergo several stages during their development over a specified period. During this transformation period, the companies not only grow in size but also improve their processes and structures to meet the demands of both the internal and external environment (Phelps *et al.*, 2007). The term 'life cycle of an MSME' refers to the various stages which an MSME may go through since its inception. Models in previous theories have defined a life cycle as comprising several stages ranging from two to thirty-three (Phelps *et al.*, 2007). Table 2 presents the life cycle stages of an MSME as described by various authors over the years.

Life Cycle Stages of an MSME

Authors	Life cycle stages of an MSME
Lippitt & Schmidt (1967)	Birth, youth, and maturity
Adizes (1979)	Courtship, infancy, go-go, adolescence, prime, stability, aristocracy, recrimination, bureaucracy, and death
Quinn & Cameron (1983)	Creativity and entrepreneurial (collectively), formalization, and adaptation stages
Greiner (1998)	Creativity, direction, delegation, coordination, and collaboration
Richard (2007)	Entrepreneurial, collectivity, formalization, and elaboration stage
Charan and Poornima (2016)	Start-up, survival, growth, and sustenance.

This study describes the life cycle of an MSME in four stages: Conception/Development ( $\leq$ 3 years), Commercialization (3–6 years), Growth ( $\geq$ 6 years), and Maturity/Expansion ( $\geq$ 6 years) (Singh, Wasdani, 2016). An MSME which is successful in one particular stage of its life cycle may be able to reach the next stage. In general, the mortality rate of MSMEs is higher in the early stages due to poor practices.

### Access to Finance

It is also referred to as the access to credit, which means the capacity of the enterprises to acquire financial services, which comprises insurance, payments, credit, deposit, and other services connected to risk management. Finance is the lifeblood of any business; timely access to finance may enable the business to flourish or else it may perish soon. Access to finance through banks and formal financial institutions is considered to be a tremendous challenge for start-ups. As these firms are unable to produce financial reports, they are often neglected by the banks. The collateral requirements are also an important factor influencing their access to finance. MSMEs are regarded as "undesirable borrowers" because they find it difficult to provide highquality collaterals (Ayadi & Gadi, 2013). All the life-cycle stages of MSMEs are greatly influenced by their ability to access finance. Financial access enables small businesses to make fruitful investments, subsequently contributing to economic growth as well as the eradication of poverty from developing countries (Beck & Demirguc-Kunt, 2006). Access to finance is ranked third in the list of the variables determining the financial growth of MSMEs in emerging countries (IFC, 2011). Financial constraints lead to limited investment opportunities and stagnant growth. For MSMEs, access to finance is extensively perceived to be a vital factor that helps in maintaining their daily operations. It enables them to capitalize on long-term investment opportunities and promotes the development of targets (Fanta, 2016; Harvie et al., 2013; Jaroslav et al., 2017).

### Firm Performance

'Firm performance' refers to the performance of a company which not only measures the effectiveness and financial stability of the company but also considers its performance concerning the market where it operates. Several financial measures are adopted by companies to examine their performance, with the common measures and ratios being the growth of sales, liquidity ratio, capital adequacy, price of the stock, income, margin of profit, return on equity, and return on assets. The firm performance also depends on access to short-term and long-term finance. A survey was conducted among female-owned firms in African and Middle Eastern countries; the results revealed that insufficient access to finance was a significant factor that led to very poor firm performance (Zindiye, 2008). MSMEs cannot purchase sufficient raw materials to manufacture high-end products and services that meet global standards or requirements, because of their insufficient access to finance. This also leads to MSMEs having trouble in achieving their performance goals. (Karedza et al., 2014). Specifically, the small firms that frequently complain about their limited access to finance, also experience a slow growth trajectory. Bilal et al. (2017) mentioned that predicting SMEs' performance is an important area of research because their failure is both costly and disruptive to a variety of firm's stakeholders, including investors, societies, and economies. Therefore, based on the above discussion, we have outlined five key factors that have an impact on firm performance: (1) Firm Attributes, (2) Financial Obstacles, (3) Sources of Finance/Financing Decision, (4) Life Cycle of an MSME, and (5) Access to Finance (Fatoki & Asah, 2011; Beck, 2007; Banerjee, 2014; Thampy, 2010; Charan & Poornima, 2016; Beck & Demirguc-Kunt, 2006).

### **Research Methodology**

### Conceptual Framework and Hypothesis Development

A firm's attributes, such as location, industry, size, age, collateral influence, and incorporation, have an impact on access to debt finance. MSME administrators should ensure the presence of appealing firm attributes to induce banks to extend financing (Kira & He, 2012). In general, the firm's attributes and its legal status influence its access to finance (Zelalem & Wubante, 2019). Musamali & Tarus (2013) found that the features of a firm, such as size, structure, business period, and type of business have a definite impact on the MSMEs' access to finance. This study uses five items to assess firm attributes, namely, type, size, location, characteristics of the firm, and stage of the enterprise. The first hypothesis is formulated to analyze the effect of a firm's attributes on its access to finance.

### *H1: The firm's attributes have a significant positive impact on the MSME's access to finance.*

Obstacles in the path of an MSME's access to finance are measured through five variables, namely, government regulations, high-interest rates, lack of awareness about various available schemes, collateral requirements, and lengthy procedures and documentation. The second hypothesis attempts to verify the perceived association between the identified financial obstacles and the access to finance. As a financial obstacle signifies a negative factor, it is assumed that it would have a negative impact on the MSME's access to finance.

## H2: Financial obstacles have a significant negative impact on an MSME's access to finance.

While various sources of external financing are offered only to the entrepreneurs who are on a growth trajectory, bank loans are a common source of fund procurement for many MSMEs and new entrepreneurs. However, owing to constraints in the financial market, MSME administrators are often unable to procure new equity finance easily (Rocca *et al.*, 2011). Thus, access to finance differs based on the source of funding available to the MSMEs. The "sources of finance" factor is measured using five items, namely, personal funds/savings, private banks, public sector banks, cooperative banks, and money lenders. Thus, the third hypothesis aims to examine the association between various sources of finance and the MSME's access to finance.

### H3: The sources of financehave a significant positive impact on an MSME's access to finance.

The need for finance varies with the life-cycle stage of any MSME (Singh & Wasdani, 2016). The lifecycle of a company is influenced by the selection of the source of finance (Rautanen, 2013). MSMEs adopt various strategies to meet their financial needs as they move across the different stages in their life cycle. MSMEs and start-up firms have incompetent internal financial support to nurture growth, and thus, owing to constraints in the financial market, they are unable to procure new equity finance easily. Thus, against the conventional belief, debt is vital to growth in the early stages of such firms. Access to finance increases during the maturity stage, which in turn accelerates the growth rate of the firm. The life cycle of an MSME is assessed through the four stages, namely, development, commercialization, growth, and maturity/expansion. The fourth hypothesis seeks to verify how access to finance is associated with the life cycle of an MSME.

### *H4: The different stages of its life cycle have a significant positive impact on an MSME's access to finance.*

Access to finance and credit regulation is a major challenge for the growth of MSMEs (Stevenson and Pond, 2016). The firms that are not credit-constrained observe quicker growth as compared to the credit-constrained firms (Fowowe, 2017). The results of earlier studies have confirmed that access to finance has a significant effect on the performance of a firm (Harash*et al.*, 2014; Fowowe, 2017). The firm's access to finance is measured through five items, namely, loans offered without any collateral security, reasonable interest rates, government-guaranteed loan schemes, flexibility in the repayment schedule, and quick financing with simple documentation. The fifth hypothesis verifies the association between access to finance and MSME performance.

### H5: Access to finance has a significant positive impact on MSME's performance.

The growing contribution of MSMEs in building the Indian economy increases the concern of all the stakeholders of the MSME sector - entrepreneurs, banks, and government organizations in ensuring timely financial access to the emerging companies. The performance of an MSME is measured through the increase in production volume, increase in sales turnover, and profit growth, in addition to its performance relative to the competitors, and the overall business performance.



Figure 1. Conceptual Framework

This study has developed a conceptual model to verify and test the aforementioned hypothetical associations between the chosen variables.

#### Survey Instrument and Sampling Design

The current research study seeks to analyze the basic factors that influence access to finance and its impact on the performance of an MSME. The survey instrument used in this study has six factors and 29 items. The six factors of the research are firm attributes, financial obstacles, sources of finance, the life cycle of MSME, access to finance, and

MSME performance. Responses were obtained through the self-administered questionnaire survey method of data collection using a five-point Likert scale that ranged from strongly disagree to strongly agree. The sample size was limited to 400MSME enterprises from various industrial clusters across India. Table 3 presents the number of MSMEs in India published in the MSME Annual report (2019) and the sampling distribution of the present research.

Sampling Distribution

Table 3

S. No	State/UT	State/UT No. of MSMEs (in Lakhs)	
1	Uttar Pradesh	89.99	80
2	West Bengal	88.67	80
3	Tamil Nadu	49.48	80
4	Maharashtra	47.78	80
5	Karnataka	38.34	80
	Total	633.88	400

Source: Ministry of Micro, Small and Medium Enterprises, Government of India. MSME Annual Report 2018–19. Available at https://msme.gov.in/ sites/default/files/Annualrprt.pdf-

The states which had the maximum number of estimated MSMEs in India were selected for the study. The survey was conducted among various industrial units located in the above-mentioned five states. The effects of access to finance on the performance of MSMEs were examined through the measurement model and path analysis. The data were collected between January 2020 and April 2020 (four months). The questionnaire was sent to various subject matter experts (academicians working in this domain) and industry experts (officials from the MSME-Development Institute) to assess the content validity of the instrument. A final draft was prepared after incorporating the suggestions received from the experts. A pilot study was conducted with 30 samples (six from each selected state) and the reliability and validity of the structured questionnaire were verified. The survey was administered both by email and in person. The MSMEs were approached mainly based on the information provided by the MSME-Development Institutes of major clusters, industrial directories of clusters, and the MSME Associations. The MSMEs also responded to the survey after being contacted via telephone or email or in person. The MSMEs were chosen from the population through quota sampling technique (Nonprobability sampling technique) (Sunday et al., 2015; Bawono et al., 2020; Samsuri et al., 2021). The final sample consisted of 400 MSMEs (i.e., 80 samples from each state). The distribution of the data was verified by plotting Q-Q plot and two statistical tests of normality namely Kolmogorov-Smirnov and Shapiro-Wilk which confirms the normal distribution of data.

### Results

### Sample Description

The MSME owners were generally reluctant to disclose the financial aspects of their business, which could constitute a possible limitation of the study. The sample of MSMEs is geographically spread throughout India covering 400 entrepreneurs from five states. The sample covers 160 units from manufacturing and 240 units from the service sector. Furthermore, it comprises 200 micro, 140 small, and

60 medium enterprises. Among the 400 MSMEs surveyed, 30 % are in the conception/development stage, 30 % in maturity, 25 % in commercialization, and 15 % are in the growth stage. The survey respondents are the owners or senior executives of the selected MSMEs who manage the day-to-day activities of the firms.

### Reliability and Validity Analysis

The measurement statistics of the constructs are mentioned in Table 4. The Cronbach alpha coefficient is computed for all the factors to verify the internal consistency among the items. Cronbach's alpha for all the factors is higher than 0.80 (ranging between 0.813 and 0.928), which implies that all the factors are highly reliable (Hair et al., 2006). In addition to the Cronbach alpha, the reliability of the constructs also was verified by Krippendorff's alpha (i.e. interrater reliability) using KALPHA SPSS Macro developed by Hayes & Krippendorff, (2007), alpha values equal or above 0.667 confirms the reliability. From table 4, it is identified that the Krippendorff's alpha values of all the constructs are more than the threshold values (Krippendorff, 2013).

The validity analysis verifies that the instrument measures what it was designed to measure. The study analyzes the convergent validity and the discriminant validity of the scale of analysis. The Mardia's coefficient value of the scale is 12.236, and the critical ratio value of the measurement model is 1.749, which is less than 1.96, thus confirming the existence of normality in the data. The convergent validity of the scale was established using standardized factor loading resulting from the measurement model.

Table 4

Measurement Statistics of Constructs							
Construct	Factor Loading	Composite Reliability	Krippendorff's alpha	Cronbach's Alpha	AVE		
Type of the firm (FA1)	0.850						
Size of the firm(FA2)	0.645						
Location of the firm (FA3)	0.582	0.826	0.671	0.906	0.570		
Characteristics of the firm (FA4)	0.817						
Stage of the enterprise (FA5)	0.839						
Government Regulations (FO1)	0.879						
High-Interest Rates (FO2)	0.836						
Lack of knowledge about available schemes (FO3)	0.867	0.925	0.753	0.862	0.726		
Collateral requirement (FO4)	0.837						
Lengthy procedures & documentation (FO5)	0.841						
Personal funds/ savings (SF1)	0.816						
Government Schemes (SF2)	0.679						
A loan from financial institutions (SF3)	0.807	0.894	0.703	0.813	0.607		
The loan from Moneylenders (SF4)	0.738						
Funds from IPOs (SF5)	0.843						
Conception/ Development stage (LC1)	0.837						
Commercialization Stage (LC2)	0.72	0.894	0.714	0.928	0.592		
Growth stage (LC3)	0.713	0.894	0.714		0.392		
Maturity stage / Expansion stage (LC4)	0.8						
Loans offered without collateral security (AF1)	0.73						
Affordable interest rates (AF2)	0.828						
Loan guaranteed by government schemes (AF3)	0.862	0.908	0.706	0.846	0.619		
Flexibility in repayment schedule (AF4)	0.766						
Quick financing with simple documentation (AF5)	0.738						
Increase in production volume (MF1)	0.938						
Increase in Sales turnover (MF2)	0.847						
Growth in profit (MF3)	0.886	0.854	0.683	0.877	0.725		
Performance relative to competitors (MF4)	0.751						
Overall business performance (MF5)	0.825						

Table 4 reveals that all the latent variables mentioned in the model have an average variance extracted (AVE) value of more than 0.5, which confirms that all the items under each latent variable have a significant factor loading more than 0.5, and converge to measure the specific latent variable. The square root of AVE is measured to examine the discriminant validity of the research model.

Table 5

Discriminant Validity								
Variables	1	2	3	4	5	6		
1. Firm Attributes (FA)	(0.755)	-	-	-	-	-		
2. Financial Obstacles (FO)	-0.432	(0.852)	-	-	-	-		
3. Source of Finance (SF)	0.540	-0.082	(0.779)	-	-	-		
4. Life cycle of an MSME (LC)	0.316	-0.004	0.727	(0.769)	-	-		
5. Access to Finance (AF)	0.591	-0.144	0.750	0.713	(0.787)	-		
6. MSME Performance (MF)	0.246	-0.087	0.374	0.342	0.446	(0.852)		

Note: The values mentioned in parentheses "()" are the square root of the AVE of the specific latent variable.

### Discriminant Validity

Discriminant validity is the degree to which two conceptually similar concepts are distinct. The results of the discriminant validity of the scale are summarized in Table 5. All the latent variables mentioned in the table have a correlation coefficient value less than the square root of AVE, which confirms the existence of discriminant validity of the scale.

### Measurement Model

The measurement model confirms the convergent validity of all the underlying factors. The standardized regression coefficient of all the items in each latent variable is more than 0.5, which indicates significant factor loading of all the items in the respective latent variable and again proves the convergent validity of the scale used in the study. All factor loadings are positive and significant at the 1 % level.

Table 6 presents model fit indices of measurement models. As recommended by Kline (2010), measurement models with increasing complexity (i.e. more number of latent variables) were compared. We have evaluated six measurement models. From the above table, it is identified that six factor measurement model is having comparatively good fit than all the other five measurement models. Structural Equation Model (SEM).

Table 6

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Models	χ2	df	Р	χ2/df	GFI	CFI	NFI	RFI	IFI	TLI	RMR	RMSEA
One Factor Model	5194.319	377	< 0.001	13.778	0.534	0.517	0.503	0.457	0.419	0.473	0.133	0.148
Two Factor Model	3916.429	376	< 0.001	10.416	0.572	0.567	0.548	0.431	0.586	0.547	0.118	0.102
Three Factor Model	3216.429	374	< 0.001	8.600	0.600	0.656	0.631	0.600	0.639	0.626	0.103	0.095
Four Factor Model	3046.615	371	< 0.001	8.212	0.708	0.774	0.749	0.716	0.775	0.743	0.097	0.082
Five Factor Model	1990.761	367	< 0.001	5.424	0.814	0.813	0.886	0.853	0.814	0.882	0.083	0.074
Six Factor Model	1025.934	362	< 0.001	2.834	0.969	0.940	0.908	0.925	0.940	0.920	0.067	0.051

**Model fit Indices for Measurement Models** 

The SEM approach is used to examine the cause and effect relationship between the independent variables (firm attributes, financial obstacles, sources of finance, and life cycle of an MSME) on the dependent variable (access to finance) using maximum likelihood estimation. This study also attempts to examine the impact of access to finance on MSME performance (i.e., outcome variable).

The structural model depicts the relationship between the latent variables. Figure 2 represents the structural equation model which is the combination of a measurement model and a structural model. The hypothetical relationships between the latent variables are depicted with their corresponding standardized regression coefficient value.



The extension of the regression model is seen in the path analysis (Figure 3), which indicates the kind of cause and effect relationship between the selected variables. Among the four independent variables of "access to finance", the variable "sources of finance" has the highest standardized regression coefficient (0.673), whereas the variable "firm attributes" has the lowest standardized regression coefficient (0.296) to the dependent variable (i.e., access to finance).

All the variables (except financial obstacles) have a positive impact on access to finance. Based on the regression coefficient values, it was found that the sources of finance have the highest effect (0.673) on the MSME's access to finance, followed by the life cycle of MSME (0.352), and firm attributes (0.296).





Figure 3. Path Analysis

Figure 3 illustrates the path analysis model of the research framework to emphasize the causal relationship between the chosen variables.

All the aforementioned variables are significant and positive at the 1 % level. Financial obstacles have a strong negative (-0.231) impact on the MSME's access to finance, which is significant at the 1 % level.

Table 7 presents the regression weights of the SEM and the hypothesis testing results. From the above table and the path analysis, it is clear that all the hypothetical relationships mentioned in the conceptual model are significant at the 1 % level.

Tabl	e 7

Regression Weights of the SEM							
Path	Std. Estimate	C.R.	Р	Hypothesis Result			
Firm Attributes $\rightarrow$ Access to Finance	0.296	6.624	< 0.001**	Hypothesis 1 Significant			
Finance Obstacles → Access to Finance	-0.231	3.373	< 0.001**	Hypothesis 2 Significant			
Source of Finance $\rightarrow$ Access to Finance	0.673	10.008	< 0.001**	Hypothesis 3 Significant			
Lifecycle of MSME $\rightarrow$ Access to Finance	0.352	7.417	< 0.001**	Hypothesis 4 Significant			
Access to Finance → MSME Performance	0.378	6.678	<0.001**	Hypothesis 5 Significant			

*Note:* \*\* significant at the 1 % level.

From the results, it is evident that firm attributes, financial obstacles, sources of finance, lifecycle have significant effect on access to finance of MSME. On the other hand, access to finance has significant positive effect on the performance of MSME. All these hypothetical relationships are significant at 1% level.

The model fit indices of the structural model are Chisquare/Degrees of Freedom (3.025), Root Mean Square Error of Approximation (0.029), Root Mean Square Residual (0.021), Goodness of Fit (0.915), Adjusted Goodness of Fit(0.907), Comparative Fit Index(0.928), Tucker Lewis index(0.955), and Normed Fit Index(0.967).The most frequently used model fit indices of the model are within the recommended values, hence, SEM has an absolute fit.

### Discussions

Timely access to finance plays a significant role in the survival and growth of MSMEs. Federal (or state) governments of many countries act as a major role in offering assistance through various initiatives and schemes for nurturing MSMEs.

The results revealed that the available sources of finance enhance the MSME's access to finance. (Godke Veiga & McCahery, 2019; Khan, 2015; Singh & Wasdani, 2016). For example, the availability of various sources of finance may help them to fulfill their financial need to manage the working capital, expand the business, or deal with any unexpected financial crunch in the business. This may be through personal funds or loans from financial institutions or money lenders obtained in a short time with less effort, thus directly enhancing their access to finance. (Bilal et al., 2017; GodkeVeiga & McCahery, 2019; Karedza et al., 2014; Khan, 2015; Rocca et al., 2011; Singh & Wasdani, 2016; Zelalem & Wubante, 2019). The model examined in this study provides a clear picture that the MSME's access to finance is influenced by its attributes, the available sources of finance, and the life cycle stage it is in.

The empirical findings also revealed that the life cycle of MSME has a significant positive impact on access to finance. The need for the different sources of finance may vary according to the stage in which the MSME is in. Hence, the second most important factor, the lifecycle of an MSME, because MSMEs in the conception/ development stage have

more access to loans through government schemes; the MSMEs in the commercialization stage have more access to loans from banks and other financial institutions, and the MSMEs in the growth or maturity/expansion stages have access to finance from various sources based on their reputation and financial stability.

The third most important factor, which has a positive influence on the MSME's access to finance is firm attributes. A firm's attributes enhance its access to finance because the financial institutions or money lenders approve the loan after careful analysis of the various characteristics of the firm. Favorable firm attributes increase an MSME's access to finance, whereas unfavorable attributes decrease the access.

Financial obstacles have a significant negative impact on an MSME's access to finance, because financial obstacles prevent MSMEs from getting loans from financial institutions or money lenders to meet the needs of their business (Naidu & Chand, 2012; Pandula, 2011; Wang, 2016).

Meanwhile, access to finance also has a significant positive impact on MSME performance. Ease access to finance helps the MSMEs to grow faster and at par with the reputed companies in a highly competitive business environment. If the MSMEs have access to the required quantity of funds at the required time at a low-interest rate, in addition to fewer procedures, it would help them to meet the financial needs of their business. Timely investments in the business will help the enterprise to rise from financial crises and fulfill its financial commitments (i.e., accounts payables, interest payments, tax payments, etc.), purchase raw materials to increase production based on sudden unexpected demands, and expand its business.

#### **Conclusion and Policy Implications**

The extrinsic value of the results of this research is to provide empirical evidence about the impact of financial challenges in access to finance on the firm performance of MSMEs and to provide useful suggestions to improve its performance, sustainability, and in the long run to reduce its failure rate in developing countries like India. The political, economical, and technological environments of the one developing country to another vary to a greater extent, which also impacts its access to finance by the MSMEs, however apart from its environment the chosen variables (i.e. firm attributes, financial obstacles, sources of finance, and the life cycle of an MSME) also plays an important role in all the developing countries (Ayadi & Gadi, 2013; Fowowe, 2017; Jaroslav *et al.*,2017; Klonowski, 2012; Musamali & Tarus, 2013; Phelps *et al.*, 2007; Thampy, 2010; Zelalem & Wubante, 2019)

The results of this study stress the significance of access to finance for the growth of emerging entrepreneurs, and it is also revealed that the negative impact of financial obstacles and the positive impact of firm attributes on access to finance.

Consequently, the policymakers in India should find ways to eliminate or minimize the financial obstacles in the near future, so that MSMEs can access finance easily, irrespective of their attributes and life-cycle stage, to bridge the credit gap. Though many schemes have been introduced by the government of India to bridge the credit gap, the gap is still widening because of the information asymmetry between MSME and financial institutions.

The policymakers should take initiatives to simplify the procedures and also demand only the most relevant and minimum number of documents to verify the identity, credibility, and financial position of the entrepreneur and the company. They should also reduce the processing time of loans to promptly fulfill the financial needs of the entrepreneur. Though the Government of India has launched many initiatives like MSME support and outreach program, their impact has been very limited. MSME associations need to play a key role in the dissemination of information about the various schemes to enhance and expedite their adoption. The creation of tools and applications that could disseminate knowledge about the schemes and their simplicity of use in real-time as well as the communication of scheme-related information through SMS and WhatsApp is very important.

MSMEs could consider Non-bank sources of finance for their development. Few of the alternative sources of finance suitable for MSMEs are asset-based finance, alternative debt, hybrid instruments, and equity instruments. However, all of these sources may not be appropriate for all enterprises, because it depends on the firm's risk-return profile, stage in the business life cycle, size, scale, management structure, and financial skills. It is important to appraise small and medium-sized enterprises' promoters of the long-term sustainable growth advantages of SME listings and how they will lead to growth prospects. Innovative MSMEs need to be substantially strengthened so that they can acquire funds from new sources such as angel investors, venture capital, and others (Anna, 2018). However, MSMEs in India are hesitant to get the necessary funds from risk capitalists who expect rising transaction costs and problems with quitting such investments. Thus, the fiscal and regulatory obstacles should be removed so that MSMEs can use these funds. MSME's growth has been affected by several challenges due to the current Coronavirus pandemic as well. The government's decision of a lock-down to deal with Covid-19 has affected this sector very badly. Therefore, MSME has attracted considerable attention from the policymakers in the wake of this crisis with the announcement of several packages under the Atmanirbhar Bharat Abhiyan (Self-reliant India movement). Many of the measures announced are to ease the liquidity constraints. Although such initiatives are a ray of hope for the MSME market, the government should introduce more plans to safeguard the interests of this distressed business community.

### Limitations and Future scope of Research

This study has a few limitations. Firstly, the small sample size (i.e., 400) may not be sufficient to explore the prevailing conditions of MSMEs concerning their access to finance and its impact on the performance of firms in various cities (and states) in India. Therefore, an exhaustive study with a larger sample size could be conducted to cover a higher number of MSMEs located in other cities/states of India. Secondly, the study has covered MSMEs located in urban areas only, whereas the situation of access to finance in rural areas may significantly vary from urban areas. Hence, a comparative study could be conducted in the future to identify any significant difference between MSMEs located in urban and rural areas concerning the accessibility of finance.

Thirdly, this study has considered only a few factors that may have an impact on access to finance. However, there are many other factors such as the demographic profile of the entrepreneur, entrepreneurial competencies and orientations, financial performance of the company, market potential, brand image, and reputation, etc. Thus, future studies may be conducted to explore the impact of these variables on access to finance.

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