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AN EMPIRICAL STUDY ON COMMERCIAL BANK LENDING AND THE GROWTH OF MICRO, SMALL AND MEDIUM ENTERPRISES: THE INDIAN EVIDENCE

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ABSTRACT

In the present context, small and medium scale enterprises (SMEs) play the catalytic role in the industrial development agenda of India. But to a large extent the existence and survival of these SMEs depend on adequate financing. This paper therefore analysed the role played by commercial banks' credit in facilitating the growth of SMEs in India. It used multiple linear regression analysis in carrying out this empirical examination. Data between 2007- 08 to 2015-16 have been taken and analysed for all the SMEs in India. MSMEs output in terms of MSMEs contribution to the GDP has been taken as dependent variables and MSME credit to total credit, MSME size and Inflation rate as independent variables. The findings revealed that Commercial Banks' credit has not contributed significantly to the growth of Small and Medium Scale Enterprises in India.

Keywords: MSMEs, Financing, Credit, Inflation Rate

1. INTRODUCTION

Fostering a dynamic micro, small and medium enterprise sector for sustenance of economic development is a priority for the policy makers, in both developed and emerging

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economies. In India too, Micro, Small and Medium Enterprise (MSME) sector plays a pivotal role in generating employment, increasing cross - border trade and fostering the spirit of entrepreneurship. Prior researchers have identified lack of finance as a threat to the performance of SMEs.For SMEs to perform their role in the economy, they need adequate funds in terms of short and long-term loans (Ohachosim, Onwuchekwa&Ifeanyi, 2013). Commercial banks are often reluctant to lend to SMEs because of the perceived risky nature of SMEs by them. Analysis of the annual trend in the share of commercial bank credit to small-scale industries indicates a decline from about 7.5 per cent in 2003 to less than 1% in 2006 and a further decline in 2012 to 0.14 per cent (Sanusi, 2013). The decline shows that commercial banks have less preference to lend to SMEs. The main identified gap that necessitated this study is the perceived problem of inadequate financing from commercial banks on SMEs financing in India as well as specifically appraising the impact of the equity of selected banks on SMEs financing;. The period under review is between 2006-07 and 2014-15

2. REVIEW OF LITERATURE

- (i) World Bank (2001) reported that 39 per cent of small scale enterprises and 37 per cent of medium scale firms in Nigeria are financially constrained. Arising from the issue of financial constraints to the growth of SMEs, some studies have documented that commercial banks have risen to the challenge in providing financial succor to the SMEs to support their growth in Nigeria.
- (ii) Dada (2014) maintained that access to credit is crucial for the growth and survival of small and medium scale enterprises (SMEs) utilizing data from 1992 to2011 and adopting ordinary least squares regression, the study revealed that Commercial Banks' credit to SMEs and saving and time deposit of commercial banks exert a positive influence on SMEs' development while exchange rate and interest rate have adverse effects on SMEs' development
- (iii)Ahiawodzi and Adade (2012) examined the effect of access to credit on the growth of SMEs in the Ho Municipality of Volta region of Ghana by using both survey and econometric methods. The survey involved a sample of 78 SMEs in the manufacturing sector. Both the survey and econometric results showed that access to credit exerts a significant positive effect on growth of SMEs in the Ho Municipality.

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- (iv) Chiou, Wu and Huang (2011) examined how diversified operations of banks impact their loans to SMEs by using panel data on 28 banks. The result indicated that as aggressive derivatives traders, the impact of its total assets on SMEs loans is positive at 1% significance level and credit guarantees positively impact SME loans at 1% significance level, implying that large banks are encouraged to make loans to SMEs through the assistance of the credit guarantees scheme.
- (v) Aminu (2013). The study used a randomly chosen sample size of 500 respondents and employed Chi square test. The results revealed that there is no significant impact of 2004 banking reform on the financing of SMEs in Nigeria and suggested that there are some constraints that militate against access to credit from Commercial Banks by SMEs.
- (vi) Nwosa and Oseni (2013) examined the impact of bank loans on manufacturing output in Nigeria between 1992 and 2010. Utilizing error correction modeling technique, the findings indicated that banks' credit to the SMEs had significant impact on manufacturing output both in the short run and long run

3. OBJECTIVES OF THE STUDY

I. To ascertain empirically the impact of commercial bank lending on MSME growth in India.

4. RESEARCH HYPOTHESIS

- H_1 There is a Positive and significant relationship between MSME Growth and Bank Credit.
- H_2 There is a Positive and significant relationship between MSME Growth and MSME size.
- H₃ There is a Positive and significant relationship between MSME Growth and Inflation Rate

5. RESEARCH METHODOLOGY

5.1 SOURCES OF THE DATA

The data are basically collected from secondary sources. This secondary source includes mainly Reports on Trends and progress of banking in India from the RBI website. The statistical tables are prepared by compiling data from RBI publications and statistical tables. Besides that we have borrowed a lot of things from various Magazines & journals. Many websites have also been

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referred for collecting much important information. Various articles and research papers form internet also have been used for gathering a lot of information to prepare this dissertation.

5.2 PERIOD OF THE STUDY

The period for the study covered 10 years from 2006-07 to 2014-15.

5.3 ECONOMETRIC MODELLING

An empirical exercise is being carried out by taking **panel data** for Public sector banks in India from the period 2006-07 to 2014-15 in a **multiple linear regression** framework.

The Econometrics Model is written as follows:

 $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \dots + \varepsilon_{it}$

Y= Dependent variable= MSME growth.(Percentage share of MSME total output to the GDP)

 $\beta 0$ = Intercept term

 β_1 = Co-efficient of bank credit (Percentage of MSME credit to total Credit of all the banks in India)

 β_2 = Co-efficient of MSME size (Natural Logarithm of Assets size of MSMEs)

 β_3 = Co-efficient of Inflation Rate

 x_1, x_2, x_3, x_4= independent variables

 X_1 = Co-efficient of bank credit (Percentage of MSME credit to total Credit of all the banks in India)

X₂= MSME size (Natural Logarithm of Assets size of MSMEs)

X₃= Co-efficient of Inflation Rate

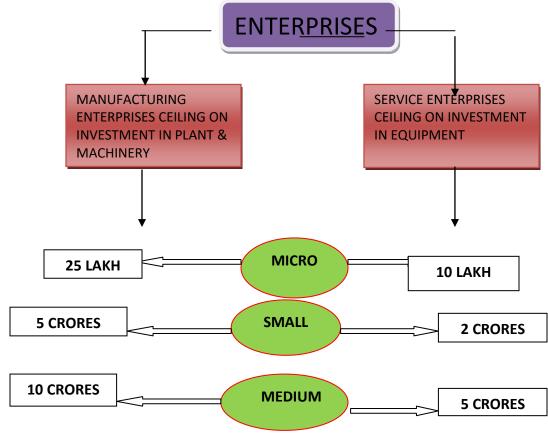
6. MSME: A SNAPSHOT FROM INDIAN CONTEXT

Since independence MSMEs in India have ear-marked as a important sector. The economic planning from 1951, followed by industrial policy prompted the Govt. To give more & more attention to this underprivileged sector . Till the liberalization period Govt. Of India has little role & intervention in the regulation of MSME sector. After 1991, the fruits of globalization and liberalization were sweet, but it created serious threats and challenges to the small industries. The inflow of foreign capital in the form of FDI, had negatively affected the domestic small & medium industries. To wipe out these problems Govt. Enacted MSME development act in 2006 to provide a legal framework to tackle the development concerns relating to MSMEs.

The MSME sector in India is a dynamic one constituted with different size of enterprises dealing with variety products & services & levels of technology. The MSMED act 2006 classified MSMEs into 2 sectors.

- Manufacturing companies on the basis of investment in plant & machinery.
- Services on the basis of investment in equipment.

CHART-1: Types of MSME



(Source: Self compiled)

6.1 PRESENT STATUS OF MSME IN INDIA:

The growth parameters like GDP, employment, output, exports etc. indicate the performance of MSME sector in India. On the basis of data on GDP published by CSO, MOSPI and final result of the fourth census, the contribution of MSME sector to GDP and output during 2006-07 to 2012-13 are as below.

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Table no-1: Performance of MSMEs

	Gross Value	Share of MSME s	Share of MSME			
Year	of Output of MSME Manufacturing Sector (₹ in crore)	Manufacturing Sector MSME	Services Sector MSME	Total	Manufacturing output in total Manufacturing Output (%)	
2006-07	1198818	7.73	27.40	35.13	42.02	
2007-08	1322777	7.81	27.60	35.41	41.98	
2008-09	1375589	7.52	28.60	36.12	40.79	
2009-10	1488352	7.45	28.60	36.05	39.63	
2010-11	1653622	7.39	29.30	36.69	38.50	
2011-12	1788584	7.27	30.70	37.97	37.47	
2012-13	1809976	7.04	30.50	37.54	37.33	

(Source: Annual report 2014-15, ministry of MSME, Govt. of India)

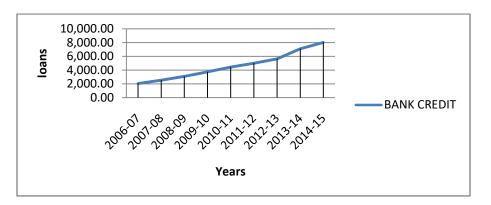
Table 2: Bank credit to MSME sector

	BANK
YEAR	CREDIT
2006-07	2,036.52
2007-08	2,520.71
2008-09	3,091.95
2009-10	3,735.30
2010-11	4,428.48
2011-12	4,986.25
2012-13	5,622.96
2013-14	7,078.13
2014-15	8,003.43

Source: Statistical tables relating to banks in India different years, RBI

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Chart: 2 Bank credit to MSME sector



Source: Statistical tables relating to banks in India different years, RBI

This Graph depicts the trend of MSME credits provided by commercial banks in India from 2006-07 to 2014-15. And we see an increasing trend in this lending to MSMEs. This graph shows that there is around 4 times increase in the bank lending to MSMEs in 2014-15 than 2006-07.

6.2 FINANCING PATTERN TO MSME

> Direct Finance

Manufacturing Enterprises

The Micro and Small enterprises engaged in the manufacture or production of goods to any industry specified in the first schedule to the Industries (Development and regulation) Act, 1951 and notified by the Government from time to time. The manufacturing enterprises are defined in terms of investment in plant and machinery.

Loans for food and agro processing

Loans for food and agro processing will be classified under Micro and Small Enterprises, provided the units satisfy investments criteria prescribed for Micro and Small Enterprises, as provided in MSMED Act, 2006.

Service Enterprises

Bank loans up to Rs.5 crore per borrower / unit to Micro and Small Enterprises engaged in providing or rendering of services and defined in terms of investment in equipment under MSMED Act, 2006.

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Export Credit

Export credit to MSE units (both manufacturing and services) for export of goods/services produced / rendered by them.

Khadi and Village Industries Sector (KVI)

All loans sanctioned to units in the KVI sector, irrespective of their size of operations and location and amount of original investment in plant and machinery. Such loans will be eligible for classification under the sub-target of 60 percent prescribed for micro enterprises within the micro and small enterprises segment under priority sector.

> Indirect finance

(i) Loans to persons involved in assisting the decentralised sector in the supply of inputs to and marketing of outputs of artisans, village and cottage industries.

(ii) Loans to cooperatives of producers in the decentralised sector viz. artisans village and cottage industries.

(iii) Loans sanctioned by banks to MFIs for on-lending to MSE sector as per the conditions specified in extant Master Circular on Priority Sector Lending.

	Bank loans to medium enterprises (no. of A/c in Lakhs and Amt in Rs. Crores)							
Quarter	Public Sector Private Sector Banks		Foreign Banks		All Schduled	Commercial		
Ended	Banks						Banks	
	No. of	Amt.	No. of		No. of			
	A/c	O/s	A/c	Amt. O/s	A/c	Amt. O/s	No. of A/c	Amt. O/s
Mar.2011	0.46	109146	1.4	18858.8	0.01	1023.11	1.87	129027
Mar.2012	0.68	136286	0.25	15742.9	0.00172	1598.27	0.9318	153621
Mar.2013	0.77	141066	0.37	27516	0.04528	13233.5	1.18	181815
Mar.2014	0.46	138415	0.37	45887.4	0.01166	4339.11	0.84	188641

 Table 3: Bank loans to medium enterprises

Source: 1. Report on trend and progress on banking in India, various issues

2. Statistical tables relating to banks in India

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 Table 4 Gross bank credit of Scheduled Commercial banks towards Micro and small

 enterprise

ENTERPRISE							
		% Of		% Of	Total Micro & Small	% Of	
Year	Manufacturing	Change	Services	Change	Enterprises	Change	
2008	14704		12499		27203		
2009	17801	21.06	14867	18.95	32668	20.09	
2010	22563	26.75	17516	17.82	40079	22.69	
2011	25336	12.29	22700	29.6	48037	19.86	
2012	26548	4.78	27821	22.56	54514	13.48	
2013	30330	14.25	31143	11.94	61473	12.77	
2014	36897	21.65	38865	24.8	75762	23.24	
2015	42983	16.49	46782	20.37	89763	18.48	
2016	29975	-30.26	34627	-25.98	64603	-28.03	

GROSS BANK CREDIT OF SCHDULED COMMERCIAL BANKS TOWARDS MICRO SMALL ENTERPRISE

Source: 1. Report on trend and progress on banking in India, various issues

2. Statistical tables relating to banks in India

7. POLICY FRAMEWORK ON MSME SECTOR

KAPUR COMMITTEE:

Reserve Bank of India had appointed a one-man High Level Committee headed by Shri S L Kapur, (IAS, Retd.), Former Secretary, Government of India, Ministry of Industry to suggest measures for improving the delivery. Followings are the important recommendations:

- (i) Delegation of more powers to branch managers to grant ad-hoc limits;
- (ii) Simplification of application forms;
- (iii) Freedom to banks to decide their own norms for assessment of credit requirements;
- (iv) Opening of more specialized SSI branches;
- (v) Enhancement in the limit for composite loans to Rs. 5 lakh. (since enhanced to Rs.1 crore);
- (vi) Strengthening the recovery mechanism;
- (vii) Banks to pay more attention to the backward states;
- (viii) Special programmes for training branch managers for appraising small projects;

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(ix) Banks to make customers grievance machinery more transparent and simplify the procedures for handling complaints and monitoring thereof.

GANGULY COMMITTEE:

The Committee made 31 recommendations covering wide range of areas pertaining to financing of SSI sector. The recommendations pertaining to RBI and banks have been examined and RBI has accepted 8 recommendations so far and commended to banks for implementation vide circular RPCD.PLNFS.BC.28/06.02.31(WG)/ 2004-05 dated September 4, 2004 which are as under:

(i) adoption of cluster based approach for financing MSME sector;

(ii) sponsoring specific projects as well as widely publicising successful working models of NGOs by Lead Banks which service small and tiny industries and individual entrepreneurs;

(iii) sanctioning of higher working capital limits by banks operating in the North East region to SSIs (now MSE), based on their commercial judgment due to the peculiar situation of hilly terrain and frequent floods causing hindrance in the transportation system;

(iv) exploring new instruments by banks for promoting rural industry and to improve the flow of credit to rural artisans, rural industries and rural entrepreneurs, and

(v) revision of tenure as also interest rate structure of deposits kept by foreign banks with SIDBI for their shortfall in priority sector lending.

DR. K.C. CHAKRABARTY COMMITTEE:

In the light of the recommendations of the Working Group on Rehabilitation of Sick MSEs (Chairman: Dr. K.C. Chakrabarty, the then CMD of Punjab National Bank), all commercial banks were advised vide our circular RPCD. SME & NFS.BC.No. 102/06.04.01/ 2008-09 dated May 4, 2009 to:

a) put in place loan policies governing extension of credit facilities, Restructuring/Rehabilitation policy for revival of potentially viable sick units/enterprises and non- discretionary One Time Settlement scheme for recovery of non-performing loans for the MSE sector, with the approval of the Board of Directors and

b) implement the recommendations with regard to timely and adequate flow of credit to the MSE sector as detailed in the aforesaid circular.

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8. EMPIRICAL ANALYSIS.

8.1 Descriptive Statistics

Descriptive analysis shows the mean, and standard deviation of the different variables of interest in this study. It also presents the minimum and maximum values of the variables which help in getting a picture about the maximum and minimum values a variable has achieved.

		BANK		INFLATION
	GROWTH	CREDIT	SME SIZE	RATE
Mean	35.14	0.15	6.05	9.11
Median	36.05	0.10	6.04	9.47
Standard				
Deviation	2.68	0.13	0.08	2.95
Minimum	30.64	0.03	5.94	5.51
Maximum	37.97	0.40	6.17	14.97

Table 5: Descriptive Statistics

(Source: Excel output)

8.2 CORRELATION

Table 6: Pearson Bivariate Correlation Coefficients

		BANK		INFLATION
	GROWTH	CREDIT	SME SIZE	RATE
GROWTH	1			
BANK				
CREDIT	-0.7052154	1		
SME SIZE	-0.49305347	0.944811102	1	
INFLATION				
RATE	0.29014223	-0.290689795	-0.116997206	1

(Source: Excel output)

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8.3 REGRESSION ANALYSIS:

 $Y = \beta 0 + \beta 1x \ 1 + \beta 2x 2 + \beta 3x 3 + \dots + \varepsilon it$

RESULT

SUMMARY	
OUTPUT	
Regression	
Statistics	
Multiple R	0.90
R Square	0.82
Adjusted R	
Square	0.71
Standard Error	1.45
Observations	9.00

		Standard		<i>P</i> -
	Coefficients	Error	t Stat	value
Intercept	-365.13	136.50	-2.67	0.04
BANK				
CREDIT	-55.83	14.72	-3.79	0.01
MSME SIZE	67.87	23.07	2.94	0.03
INFLATION				
RATE	-0.22	0.21	-1.08	0.33

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ANOVA					
					Significance
	df	SS	MS	F	F
Regression	3.00	47.20	15.73	7.53	0.03
Residual	5.00	10.44	2.09		
Total	8.00	57.64			

8.4 ANALYSIS

GROWTH = -365.13 + (-55.83) * BANK CREDIT + 67.87 * MSME SIZE + (-0.22) * + 0.2323* INFLATION RATE + ϵ_{it}

 \mathbf{R}^2 of 0.82 implies that the three independent variables are collectively able to explain 82% Variation in MSME growth.

F-statistic of 7.53 and Sig. (F-Statistic) value of 0.03 shows that the model has statistically significant explanatory power.

Intercept value of -365.13 is the value of ratio of Total MSME growth when values of all independent variables are equal to 0.

The empirical results show that bank credit with a negative sign, which is statistically significant i.e. when bank credit increases the output of MSME sector decreases and vice versa. This means bank credit is not a major factor for the MSME growth. There are many other factors which affect the MSME performances. It also confirms that adequate bank credit is not very much accessible to the MSME sector. So the 1st hypothesis is rejected. Besides that, the size of the MSME sector exerts positive relationship with the output of this sector. And it is statistically significant. Which means bigger the size larger is the output of MSME. So 2nd hypothesis is accepted. Again as revealed by the results this study finds that another independent variable that is inflation rate exert a negative relationship with the growth of MSME sector and it is statistically insignificant. So the last hypothesis is rejected. And it depicts that more inflation leads to lowering the output of MSME sector.

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9. CONCLUSION

The growth of small and medium scale enterprises (SMEs) has been in the front burner in India in recent times. This is due largely to the fact that from empirical evidence, SMEs constitute the bedrock of every nation's industrial take-off. Existing studies in the literature have identified financial constraint as a major impediment to the growth of SMEs in developing countries. It is in this respect that this paper re-examined the impact of Commercial Banks' Credit on the growth of small and medium scale enterprises in India. Based on the empirical findings, Commercial Banks' Credit has not contributed significantly to the growth of small and medium scale enterprises in India. For SMEs to play a catalytic role in rapid industrial take-off and development other several factors that affects largely must be taken care of.

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