

Impact of financial institutions on the MSMEs Productivity: A case study of Ambala District of Haryana state.

JITENDER KUMAR

Research scholar (Ph.D)
Department of Economics
Indira Gandhi University
Meerpur (Rewari), Haryana

Abstract

Micro small and medium enterprises have been playing a very important role in the growth & development of the economy since independence. These enterprises are very helpful to eradicate poverty, decrease unemployment and increase in export. The growth and development of any manufacturing enterprises are not possible without sufficient amount of fund. So most of the enterprises depend on different financial institutions for this. The present article deals with the impact of different financial institutions on the MSMEs productivity in Ambala district, Haryana. The study is exclusively based on primary data which has been collected through field survey covered the time period from 1980 to 2016 to examine the impact of financial institutions on the productivity of micro small and medium enterprises in Ambala district, Haryana. The study used productivity accounting model, single and multifactor measure to estimate the productivity of the MSMEs. The study found that labour, machines and raw material productivity for the micro enterprises shows decreasing trends during 1980 to 2016. Small enterprises labour and machine productivity shows increasing trends but raw material productivity shows decreasing trends during 1993 to 2016. Furthermore, medium enterprises labour productivity shows increasing trends but machines and raw material productivity shows decreasing trends during 2013 to 2016.

Keywords: Micro small and medium enterprises (MSME), Multi factor productivity, Financial Institutions (FIs).

Introduction

The micro small and medium enterprises (MSME) play a very important role in every country of the world including India because this sector is the major contributor to GDP, service, manufacturing and export. Haryana state has made extraordinary progress in every sector since it

came into existence- one of them is Micro, Small and Medium Enterprises. It is one of the most important sector of any economy because this sector solves many problems like poverty, income disparity, unemployment by providing instant large-scale employment with lower investment. Financial sector plays a significant role in the overall development of a country including the development of the MSME sector. In order to provide sufficient supply of credit to various sectors of the economy the Government of India has drafted a well-developed structure of financial institutions in the country. No doubt financial institutions played an important role in the development of the MSMEs in India but to measure the growth of MSMEs the measurement of productivity is highly required. Productivity is defined as the goods and services produced per unit of labour, capital or both. Broadly speaking, productivity is the ratio of output to input in any specific production situation. To fulfill this objective this paper intends to examine the impact of different financial institutions on the growth of MSMEs in Ambala district of Haryana state.

Definition of MSMEs in India

Small Scale Industries are defined in terms of investment in plant and machinery under section II B of Industries Development and Regulation Act 1951. The small-scale industries first defined in 1950 (Ministry of MSME, India). The first official criterion for small-scale industry dates back in 1955 when it was defined on the basis of limit on investment on fixed assets and power of the labour force or employment in India. Thereafter, in 1960 it was changed and only the investment in fixed assets in plant and machinery was considered for granting the status of a small scale industry unit. There have been many changes in investment limits in plant and machinery from time to time, to amend the different impacts. In India, presently, the definition of MSMEs is based on the investment limits in the plant and machinery of the enterprise. Recently the MSMEs definition is based on the **MSMED Act 2006**. So on the basis of above Act, the classification of MSMEs enterprises is as follows:

Table: 1 Classification of MSMEs Investment limits in India

Classifications	Manufacturing Enterprises	Service Enterprises
Micro	Rs. 25 Lakh	Rs. 10 Lakh
Small	Rs. 25 Lakh to Rs. 5 Crore	Rs. 10 Lakh to Rs. 2 Crore
Medium	Rs. 5 Crore to Rs. 10 Crore	Rs. 2 Crore to Rs. 5 Crore

Source: Micro, Small & Medium Enterprises Development Act 2006, GOI.

An enterprise is classified on the basis of **manufacturing and providing services** under as:

Enterprise involved in manufacturing, preservation or processing whose investment in plant and machinery is not more than Rs. 25 lakhs are called **Micro Enterprise**.

Enterprise involved in manufacturing, preservation or processing whose investment in plant and machinery is more than Rs. 25 lakhs but less than Rs. 5 crores are called **Small Enterprise**.

An enterprise involved in manufacturing, preservation or processing whose investment in plant and machinery is more than Rs. 5 crores but less than 10 crores are called **Medium Enterprise**.

Similarly, an enterprise involved in providing services whose investment in equipment is not more than Rs. 10 lakhs are called **Micro Enterprise**.

An enterprise involved in providing services whose investment in equipment is more than Rs. 10 lakhs but less than Rs. 2 crores are called **Small Enterprise**

An enterprise involved in providing services whose investment in equipment is more than Rs. 2 crores but less than Rs 5 crore is called **Medium Enterprise**.

Review of literature

Buae B. Z. and Kitawa Y. S. (2016), in their study tries to analyzing the role of financial institutions in growth and productivity of SMEs in Yirgalem town using stratified random sampling found that impact of financial Institutions in Growth and Productivity of Micro and Small Enterprises in Yirgalem Town is significant with reference to factors like level of criteria expected to fulfill for borrowing, access to bank and finance, loan sufficiency, inefficiency of time allowed and other support like motivation and training.

Dube H. (2013), in his paper, examine the impact of debt financing on the operations of SMEs in Masvingo found that debt financing had a positive impact on the productivity of SMEs. Further, the study revealed that firms which received sufficient funding from banks improved their productivity. The study recommended that a reasonable level of debt at the reasonable cost of borrowing helped the SMEs to improve their productivity.

Emenyonu C. A, Nwosu A.C., Lemchi J.I., Iheke, O.R. (2014), in their study on “Analysis of productivity, profitability, incomes and returns on investments in youth SMEs in Niger Delta,

Nigeria” found that small and medium enterprises in the study are productive and profitable. The objective of this study was to identify profitable and viable SMEs in the Niger Delta Region which could form a basis for an economic empowerment Programme for the restive unemployed youths. The focus of the study is on SMEs which are registered with the coordinating agency and considered by financial institutions. A survey of SMEs was conducted in four major urban centres of Nigeria and their environs applying the simple analytical tools of net income (NI), total factor productivity, and rate of return on total investment.

Ferrando A. and Ruggieri A. (2015), in their working paper, consider the relation between access to external credit, labour productivity of the firm, and financial framework using a large dataset of firm-level data for Euro-area countries during the period 1995 to 2011. The study estimated that impact of financial restraint on a measure of labor productivity and found significant and negative impacts in the majority of sectors across countries. The impact appears to be significantly higher in sectors like Communication and Information, Gas and Water Supply and R&D, Energy for small and micro firms, while it is slightly smaller for firms with positive investment rates.

Sethi A. S. and Kaur S. (2016), in their study on “Sources of Growth in Punjab and Haryana Economies vs. India: Evidence from Translog Production Function Analysis” analyzing sources of growth in Punjab and Haryana states vis-à-vis the overall Indian economy using time series data spanning over the period 1980-81 to 2009-10 and estimation through of translog production function. The main findings of the study show that output has been more responsive to relative changes in energy consumption rather than capital and labour in most cases. As far as the rate of technical progress is concerned, Haryana state (as also the overall Indian economy) have registered positive growth, while Punjab, on the contrary, has experienced a delay in the rate of the progress.

The objective of the study

To examine the impact of different financial institutions on the productivity of MSMEs in Ambala District, Haryana.

Productivity measurement model for MSMEs in Ambala district

The study developed productivity measurement model for MSMEs, on the basis of H.S. Davis (1955) productivity accounting Model because this is a best-suited model for this study among the different productivity measurement models {(Craig-Harris Model (1973), Kendrick-Creamer Model (1965)}. In this model, output means the monetary value of production and inputs means the monetary value of all inputs like raw material, labour and overhead expenses.

In MSMEs following input parameters used to measure the productivity. They are:

- 1) Labour Input (L)
- 2) Machine Input (C)
- 3) Raw Material Input (R)

Using above parameters study developed the following equations:

$$\text{Total Productivity} = \frac{Q_t}{(L+C+R)}$$

$$\text{Partial Productivity} = \frac{Q_t}{\text{Monetary value of any input i.e. L /C /R}}$$

Here,

Q_t = Total output, L = Labour Input, C = Machine Input, R= Raw Material Input

On the basis of the above formula, this study calculated the Productivities of each input in Ambala district for micro small and medium enterprises.

Impact of different financial institutions on MSMEs Output in Ambala District

In this section, the study analyzes the impact of different FIs on MSMEs total output. The table 2 shows that total credit flow from different financial institutions to MSMEs is Rs. 301.86 million resulted in total output Rs. 2907.47 million in which public sector FIs contribution to micro enterprises is Rs. 47.21 million, Rs. 158.71 million to small enterprises and Rs. 39.00 million to medium enterprises resulted in total output Rs. 358.73 million, Rs. 1476.20 million and Rs. 345.00 million respectively. Similarly, the contribution of private sector FIs

(Loan capital) is Rs. 9.64 million to micro enterprises and Rs. 31.70 million to small enterprises resulted in total output Rs. 24.74 million and Rs. 513.50 million.

Table- 2

Impact of Financial Institutions on Total Output			
(Rs. in Millions)			
	Firms	Loan capital	Total Output
Public Sector	Micro	47.21	358.73
	Small	158.71	1476.20
	Medium	39.00	345.00
	Total	244.91	2179.93
Private Sector	Micro	9.64	24.74
	Small	31.70	513.50
	Total	41.34	538.24
Relatives	Small	10.57	123.30
	Medium	5.03	66.00
	Total	15.60	189.30
Total	Micro	56.85	383.47
	Small	200.98	2113.00
	Medium	44.03	411.00
	Total	301.86	2907.47

Source: Field survey, MSME Ambala District, 2016-17

Furthermore, the contribution of other financial sources like relatives is Rs. 10.57 million to small enterprises and Rs. 5.03 million to the medium enterprises resulted in total output Rs. 123.30 million and Rs. 66 million respectively.

The case study of financial institutions and its impact on MSMEs productivity in Ambala district

In this section a case study of Ambala district, financial institutions and its impact on the growth of the MSMEs is presented. The case study is presented in order to illustrate how the proposed productivity model can be implemented to measure the partial and multi factor productivity for the MSMEs in Ambala district.

In the beginning, to measure the productivity data were collected from Ambala district MSMEs for the various period. The data is collected from District Industrial Centre and through field survey. The study plots the monetary value of the loan capital and total output that is summaries in table-2. Further, this study explains the impact of different financial institutions on MSMEs productivity. Here, the study explains (a) Impact of different financial institutions on micro enterprises Productivity (b) Impact of different financial institutions on small enterprises Productivity (c) Impact of different financial institutions on medium enterprises Productivity in Ambala district.

Impact of different financial institutions on the micro enterprise's productivity

Financial institutions are the backbone of any industry those want to grow its business. FIs provides finance facility to the industrial sector on time to time. The industry used this assistance for employ required labour, new machines and raw material for production to increase the productivity. Table-3 shows that in 1980 per Rs. labour productivity was Rs. 50.8, per rupee expenditure on machine productivity was Rs. 476.2 and per rupee expenditure on raw material productivity was Rs. 1.5. After that, the lot of fluctuations are come in the productivity due to some technical and non-technical reasons reveals that per Rs. labour productivity, per Rs. expenditure on machine productivity and per Rs. raw material productivity reach to the level of 4.5, 10.7, 6.2 in 1990, 2.1, 12.5, 2.2 in 2008; 5.4, 8.9, 3.2 in 2014; and 11.9, 16.7, 2.7 in 2016 respectively. Furthermore, the movement of factors productivity during 1980-2016 for the micro enterprises reveals that labour, machines and raw material productivity show decreasing trends in all types of studied productivities. The reasons for decreasing productivities under that period are unskilled labour, lack of managerial training, lack of advanced technology, a high cost of machinery, increasing labour cost and costly raw material. The study also reveals that labour productivity and machines productivity continuously decreased from 1980 to 1990 but the raw

material productivity is increased, after that it becomes moderate. The reason behind this phenomenon the labour cost, machinery and raw material cost started too increased constantly from 1980 to 2016.

Table-3

Impact of different financial Institutions on Micro enterprises Productivity				
Years	Labour Productivity	Machines Expenditure Productivity	Raw material Expenditure Productivity	Total Factor Productivity
1980	50.8	476.2	1.5	1.5
1990	4.5	10.7	6.2	3.7
1991	1.7	2.5	5	1.5
2000	8.3	9.3	1.8	1.5
2002	4.6	10	1.7	1.4
2004	10.9	7	4.5	2.7
2005	4.4	6.6	3.5	2.2
2006	9.5	26.3	2	1.9
2006	1.9	20	2.5	2
2007	3.4	3.6	2	1.2
2007	2.2		2.5	2.3
2008	4.5	22.7	1.8	1.6
2008	2.1	12.5	2.2	1.8
2009	8	9.5	1.6	1.4
2010	8.1	8.3	2.7	2
2010	10	2	6.7	1.5
2011	10.3	72.1	6.1	5.4
2012	5.6	7.5	1.8	1.4
2012	2.2	10.8	2.4	1.8
2013	6.7	15.1	2.4	2
2013	4	1.1	2.2	0.7
2014	6.4	16.9	2	1.7
2014	5.4	8.9	3.2	2.3
2015	6	4.3	4.3	2.1
2016	11.9	16.7	2.7	2.3
2016	11.4		1.3	1.2

Source: Field survey, MSME Ambala District, 2016-17

Impact of different financial institutions on the small enterprise's Productivity

Table-4 shows that in 1993, small enterprises per Rs. labour productivity was Rs. 12.5, per rupee expenditure on machine productivity was Rs. 4.5 and per rupee expenditure on raw material productivity was Rs. 2.3.

Table-4

Impact of different financial Institutions on Small enterprises Productivity				
Years	Labour Productivity	Machines Expenditure Productivity	Raw material Expenditure Productivity	Total Factor Productivity
1993	12.5	4.5	2.3	1.5
1994	15.2	8.8	1.4	1.2
2000	7.9	3.3	2	1.2
2001	4	12.5	1.7	1.4
2001	8.9	6.7	2	1.5
2003	8.3	12.5	2.2	1.9
2004	14.9	10	1.7	1.4
2005	10.7	31.3	1.5	1.4
2006	20.6	30.8	1.5	1.4
2008	10.4	4.5	3.3	1.9
2008	11.1	57.1	1.3	1.3
2009	13.2	15.9	1.5	1.4
2009	11.7	11.3	2	1.7
2010	10.5	20	1.5	1.4
2010	18.6	6.6	1.8	1.4
2011	30.6	20.5	1.5	1.4
2011	19.8	18	1.7	1.5
2011	15.9	15.5	1.2	1.1
2012	11.6	12.1	1.4	1.3
2012	4.5	10.5	1.5	1.3
2013	26.4	6.4	1.5	1.2
2013	8.3	7.5	1.3	1.1
2014	8.9	14.6	1.4	1.3
2014	25.5	32.5	1.3	1.2
2015	8.8	4.3	1.8	1.3
2016	13.8	2	1.3	0.8

Source: Field survey, MSME Ambala District, 2016-17

After that lot of fluctuations are come in the productivity due to some technical and non-technical reasons reveals that per unit labour productivity, per Rs. Expenditure on machine productivity and per Rs. Raw material productivity reach to the level of 20.6, 30.8, 1.5, 1.4 in 2006; 11.6, 12.1, 1.4, 1.3 in 2012 and 13.8, 2, 1.3, 0.8 in 2016 respectively. Furthermore, the movement of factors productivity during 1993 to 2016 for the small enterprises reveals that labour and machine productivity increasing, but raw material productivity shows decreasing trends in all types of studied productivities. The reason to increase the labour productivity in the small enterprises that firms started to employ skilled and trained labour. Use of advanced technology is the main reason to increase the machine productivity but the raw material productivity is decreasing due to increase in the cost of raw material.

Impact of different financial institutions on the medium enterprise's Productivity

Table-5 shows that in 2013, per Rs. labour productivity was Rs. 2.2, per rupee expenditure on machine productivity was Rs. 13.2 and per rupee expenditure on raw material productivity was Rs. 2. After that lot of fluctuations are come in the productivity due to some technical and non-technical reasons reveals that per unit labour productivity, per Rs. Expenditure on machine productivity and per Rs. Raw material productivity reaches the level of 3.6, 14.5, 2 in 2014 and 4.2, 10, 1.7 in 2015 respectively.

Table-5

Impact of different financial Institutions on Medium enterprises Productivity				
Years	Labour Productivity	Machines Expenditure Productivity	Raw material Expenditure Productivity	Total Factor Productivity
2013	2.2	13.2	2.5	2
2014	3.6	14.5	2	1.7
2015	4.2	10	1.7	1.4

Source: Field survey, MSME Ambala District, 2016-17

Furthermore, the movement of factors productivity during 2013 to 2015 for the medium enterprises reveals that labour productivity is increasing, but machines and raw material productivity showing decreasing trends in all types of studied productivities. The main reason to

increase the labour productivity in the medium enterprises that firms employ a large number of skilled and trained labour but the machines and raw material productivity is decreasing, the main cause of this decreased productivity is an increase in the cost of these inputs.

Findings:

1. Micro enterprises taking financial assistance from either public or private financial institutions.
2. Small enterprises taking financial assistance from all the sources either it is public, private or other financial institutions i.e. relatives.
3. Medium enterprises taking financial assistance from public & other FIs i.e. relatives.
4. Factors productivity during 1980-2016 for the micro enterprises reveals that labour, machines and raw material productivity shows decreasing trends.
5. Factors productivity during 1993 to 2016 for the small enterprises reveals that labour productivity and machine productivity increasing trends but raw material productivity shows decreasing trends.
6. Factors productivity during 2013 to 2015 for the medium enterprises reveals that labour productivity is increasing but machines and raw material productivity showing decreasing trends in all types of studied productivities in medium enterprises.

Conclusion and suggestion

Financial institutions play a very important role in the growth of micro small and medium enterprises in Haryana. The study concludes that micro enterprise factors productivity shows decreasing trends in all types of studied productivities. Factors productivity of the small and medium enterprises is comparatively high. There is various reason of decreased productivities in micro-enterprises like unskilled labour, lack of managerial training, lack of advanced technology, a high cost of machinery, increasing labour cost and costly raw material. It is recommended that government should provide promotional initiatives like proper managerial training and financial facilities to promote the micro as well as small and medium enterprises in Ambala district, Haryana.

References

- **Buae B. Z. and Kitawa Y. S. (2016)**, “Assessing Role of Financial Institutions in Growth and Productivity of Micro and Small Enterprises in Yirgalem Town Administration; Sidama Zone, Ethiopia”, *British Journal of Economics, Management & Trade* 14(4): XX-XX, Article no. BJEMT.25814, ISSN: 2278-098X.
- **Craig C.E. and R.C. Harris (1973)**, “Total productivity measurement at the firm level” Sloan
- **Davis H.S. (1955)**, “Productivity Accounting, University of Pennsylvania.
- **Desai, Vasant (1983)**, *Organisation and Management of Small Scale Industries*, Himalayan Publishing House, p.4.
- **District Industrial Centre, MSMEs, Ambala Cantt. (2016)**.
- **Dube H. (2013)**, “The impact of debt financing on productivity of small and medium scale enterprises (SMEs): A case study of SMEs in Masvingo Urban”, *International Journal of Economics, Business and Finance*, Vol. - 1, No -10, PP: 371-381, ISSN: 2327-8188 (Online). <http://ijebf.com/>
- **Emenyonu C.A, Nwosu A.C., Lemchi J.I., Iheke, O.R. (2014)**, “Analysis of productivity, profitability, incomes and returns on investments in youth SMEs in Niger Delta, Nigeria” *International Journal of Small Business and Entrepreneurship Research*, Vol-2, No-1, PP: 20-34.
- **Ferrando A. and Ruggieri A. (2015)**, “Financial constraints and productivity: evidence from euro area companies”, *European Central Bank Working Paper Series*, No-1823.
- **Kendrick J. & Creamer D. (1965)**, "Measuring Company Productivity: A Handbook with Case Studies (89)", *The National Industry Productivity Board*.
- **Micro, Small & Medium Enterprises Development Act 2006, GOI.**
- **OECD Manual**, *Measuring Productivity, measurement of aggregate and industry-level productivity growth*.
- **Sethi A. S. and Kaur S. (2016)**, “Sources of Growth in Punjab and Haryana Economies vs. India: Evidence from Translog Production Function Analysis”, *SEDME Journal*, Vol. - 43, No. - 3, PP: 47-68.