

Performance of micro, small and medium enterprises in India: Before and after the MSMED Act, 2006

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Abstract

The MSMEs have long been recognized as the 'engine of growth' by providing large scale employment with smaller capital investment. In India it is the second largest employment generating sector after agriculture. As ancillary units, they complement the industrial sector and contribute significantly in the inclusive industrial development of India. Globalization has facilitated the opening of local and nationalistic perspectives to a broader interdependent world with free movement of capital goods and services. The MSMED act of 2006 has brought about some policy changes with the broader objective of economic and social development by flourishing entrepreneurship. The present study aims at to understand the performance of the MSMEs in the post liberalization period along with the effect of introducing the MSMED Act of 2006. The concept of efficiency has been introduced as a measure of the performance of this sector. It is found that after the introduction of new act the efficiency of the firms has improved to a great extent. This indicates a positive side of the new act. Besides, there exists evidence of the improvement of the export quality after the introduction of new act in 2006.

Keywords: MSMEs, liberalization, performance of MSMEs, technical efficiency

1. Introduction

Micro, small and medium enterprises (MSMEs) deserve special attention for its significant contribution to GDP, employment, export, regional balance in industrial base in India. It has emerged as the most dynamic and vibrant sector in the Indian economy by strengthening the industrial base of the country in the last five decades. It promotes economic and social development by flourishing entrepreneurship and generating large employment opportunity with a comparatively lower capital base. For its economic viability, they require shorter gestation period and relatively smaller markets. It has emerged as the second most important sector in the Indian economy in terms of employment opportunity, just after agriculture. According to National Sample Survey 73rd round (2015-16), India's MSME sector comprises of 633.88 lakh units and has created about 11.10 crore jobs in the country. As ancillary units, they complement the industrial sector and contribute significantly in the inclusive industrial development of India. Globalization has facilitated the opening of local and nationalistic perspectives to a broader interdependent world with free movement of capital goods and services. As a result, this sector has shown its potential in employment opportunity, better utilization of natural resources, development in entrepreneurial skills, eliminating the monopoly power and balanced social and economic development of the country. At the same time, policymakers and decision-makers are also concerned about the adverse effect of globalization on this sector in terms of a considerable fall in the growth rate of new units, output, exports and employment generation. Considering this fact the Government of India introduced the MSMEs development act, 2006 to address the policy issues affecting the MSMEs and changing the coverage and investment ceiling of the sector. It also aims to facilitate the development of these enterprises and enhance their

competitiveness. In this background the present study intended to investigate the performance of the MSMEs in the era of globalization. It also tries to understand the impact of the introduction of MSMED act, 2006 on the performance of these enterprises.

2. Literature Review

In a study based on a number of developing countries, UNIDO (1969) ^[11] observed that small enterprises with a lower capital investment per worker tend to achieve higher productivity growth as compared to large capital intensive enterprises. Realizing the importance of the MSMEs, government of India has incorporated this sector in its five year plan. Sudha and Krishnabeni (2012) ^[9] have shown that in a labour abundant country like India, this sector a major source of employment. They have also shown how the problems of finance, marketing and low quality of the products have hampered the progress of this sector. Venkatesh and Muthiah (2012) ^[14] observed that the importance of MSMEs in the industrial sector is growing rapidly and they have emerged as the thrust area for future growth. They recommended that nurturing the MSMEs is vital for further development of the industrial sector. Babar (2012) ^[11] examined the impact of globalization on the small scale industry and found that production was increased twice in the last 15 years. He suggested there was a need for changes in government regulations for the improvement of technology, market share and shortage of capital. Vani (2013) ^[12] observed that LPG (Liberalization, Privatization and Globalization) created uneven and unhealthy competition among the Indian industries including MSMEs and MNCs. Jena *et al.* (2012) ^[15] highlighted that there is general erosion in the growth rate of output of the MSMEs in the reform period as compared to pre reform period with variation across states. Uma ^[10] (2013) stated that every

business organization should take the challenges and opportunities of globalization. The small firms have to take up the responsibility of upgrading their technology, qualities, skills and technical know-how needed in the global market. Bala Subramanya ^[2] (2004) focused on the impact of globalization and domestic policy changes on small-scale industrial units and found that these units suffered in terms of growth of units, output, employment etc. They observed that policy changes have brought out new opportunities and markets for this sector. In order to make these units internationally competitive and to increase their contribution in national output and employment, technological up gradation and financial structure should improve. Singh *et al.* (2012) ^[8] also made similar conclusion. Dixit and Pandey (2011) ^[3] tested the casual relationship between SMEs no of units, output, employment, exports and fixed capital with India's GDP, employment, exports and found positive relation between SMEs output and India's GDP. Mali ^[6] (1998) forecasted that MSMEs have to confront intense competition in the era of globalization in the field of marketing, management, product diversification, infrastructural development and technological up gradation. They have to move from slow growth area to the high growth area and have to make strategic alliance with neighboring country's entrepreneurs. There exist numerous literatures in the area of the performance of the MSMEs in India during pre and post liberalization period. But very few of them analyzed the performance of this sector after the liberalization period that considers the impact of the introduction of MSMED Act of 2006. The present study seems to contribute tangibly towards this direction.

3. Objectives

The broad objective of this study is to review the overall growth and development of the MSMEs in the liberalized era. However the specific objectives are as follows

- To present an overview of the MSMEs in India in the post globalized era.
- To analyse the growth rate of MSMEs in terms of number of units, output, employment and exports.
- To examine the performance of the MSMEs in terms of efficiency and future prospects.

4. Methodology

The present study is based on secondary data collected from different sources such as the database of the MSMEs, different reports of the government and other sources. Five economic variables namely no. of units, output, employment, fixed capital and exports has been taken for assessing the performance of the MSMEs. At first different partial performance indicators have been utilized for assessing the performance of the different units. They are partial indicators in the sense that they use only one input and one output at a time, keeping the other factors constant for assessing the performance. A more comprehensive method for assessing the performance is the efficiency analysis of the different units that uses all the input and outputs together. One such measure is in terms of technical efficiency.

In order to conceptualize the notion of technical efficiency, consider a set-up of m different outputs: $y \in R_+^m$ and n different inputs $x \in R_+^n$. For any output bundle y it is

possible to define the input requirement set as:

$$V(y) = \{x : x \text{ Can produce } y\} \tag{1}$$

Production theory imposes certain restrictions on the structure of V(y) (Varian 1984).

1. **Feasibility:** If (x^j, y^j) actually observed then $x^j \in V(y^j)$. All observed input-output bundles are feasible.
2. **Convexity:** V (y) is a convex set.
3. **Free disposability of inputs:** If (x^0, y^0) is feasible then for any $x \geq x^0$, (x, y^0) is also feasible.
4. **Free disposability of outputs:** If (x^0, y^0) is feasible then for any $y \leq y^0$, (x, y) is also feasible.

Based on this set, DEA measures are defined. An input oriented radial measure of technical efficiency of a firm producing output y^0 from inputs x^0 is

$$E_f^* = \frac{1}{\theta_f^*} \text{ Where } \theta_f^* = \min \theta_f : \theta_f x^0 \in V(y^0). \tag{2}$$

DEA uses the Linear Programming technique to construct efficient frontiers and the corresponding input efficiency following the above specifications.

5. An overview of the MSMEs in India

The classification of MSMEs is done on the basis of different criteria in different countries. Some of these criteria include capital investment, no of employees, annual turnover etc. The MSMED Act, 2006 classified micro, small and medium enterprises in terms of investment in plant and machinery and it is represented in table 1.

Table 1: Category wise investment slabs in MSMEs

Sector	Size of Unit	Investment Limit
Manufacturing	Micro enterprises	Up to Rs. 25 lakhs
	Small enterprises	Rs. 25 lakhs - Rs. 5 crores
	Medium enterprises	Rs. 5 crores – Rs. 10 crores
Service	Micro enterprises	Up to Rs. 10 lakhs
	Small enterprises	Rs. 10 lakhs – 2 crores
	Medium enterprises	Rs. 2 crores – Rs. 5 crores

Source: www.smallindustryindia.com

In the MSMED Act, 2006, along with previous SSI units, service sector and medium enterprises were also included. On the basis of these changes, the Fourth all India Census was carried out incorporating both registered and unregistered units.

Every economic activity is bound to be affected by globalization-the small-scale sector is no exception. Globalization refers to an advanced process of transition where information, labour, capital, raw material, technology etc. moves freely among the nation. The adoption of liberalization process brings both challenges and opportunities to the MSME sector. The challenges comes in the form of competition and reduced protection and the opportunities comes in the form of free flow of technology and technical skills, increased availability of raw materials and higher productivity and efficiency. In pre-liberalization period the sector enjoyed several facilities in the form of

incentives, concessions and institution facilities. But in the post-liberalized period this sector faces stiff competition in both domestic and international market. The performance of different economic variables in the liberalization period is presented in table 2. In the present study, the post liberalized period is divided into two periods: First phase includes the period from 1990-91 to 2005-06 (post-liberalized period up

to the introduction of MSMED Act, 2006) and the second phase covers the period 2006-07 to 2014-15 (post-liberalized period up to 2014-15). This enables me to study the impact of MSME Act, 2006 in the post-liberalized period. Due to data unavailability of capital investment beyond 2014-15, the study is confined up to the period of 2014-15.

Table 2: Different economic variables of MSME sector in the post liberalized period

Year	Units (in millions)	Output (Rs. crore)	Employment (in lakh)	Capital (Rs. crore)	Export(Rs. crore)
1990-91	6.79	78802	15.83	93555	9664
1991-92	7.06	80615	16.6	100351	13883
1992-93	7.35	84413	17.48	109623	17784
1993-94	7.65	98796	18.26	115795	25307
1994-95	7.96	122154	19.14	123790	29068
1995-96	8.28	147712	19.79	125750	36470
1996-97	8.62	167805	20.59	130560	39248
1997-98	8.97	187217	21.32	133242	44442
1998-99	9.34	210454	22.06	135482	48979
1999-00	9.72	233760	22.91	139982	54200
2000-01	10.11	261297	24.09	146845	69797
2001-02	10.52	282270	25.23	154349	71244
2002-03	10.95	314850	26.37	162317	86013
2003-04	11.4	364547	27.53	170219	97644
2004-05	11.86	429796	28.76	178699	124417
2005-06	12.34	497842	29.99	188113	150242
After the MSMED Act, 2006					
2006-07	36.17	1351383	80.52	868543	182538
2007-08	38.74	1435179	84.2	920459	202017
2008-09	39.38	1524235	88.08	977114	214387
2009-10	41.05	1619356	92.18	1038546	238752
2010-11	43.87	1721553	97.52	1105934	497774
2011-12	45.77	1788584	101.17	1182757	670707
2012-13	47.76	1809976	106.15	1268763	696025
2013-14	49.85	1831624	111.43	1363700	798946
2014-15	51.06	1853531	117.13	1471913	866716

The growth rate of the different variables is presented in diagram 1 (a) and (b). It is clear that all the variables show a fluctuating trend in both periods.

The export growth rate has outperformed the growth rate of other variables. So export potential of this sector is very significant.

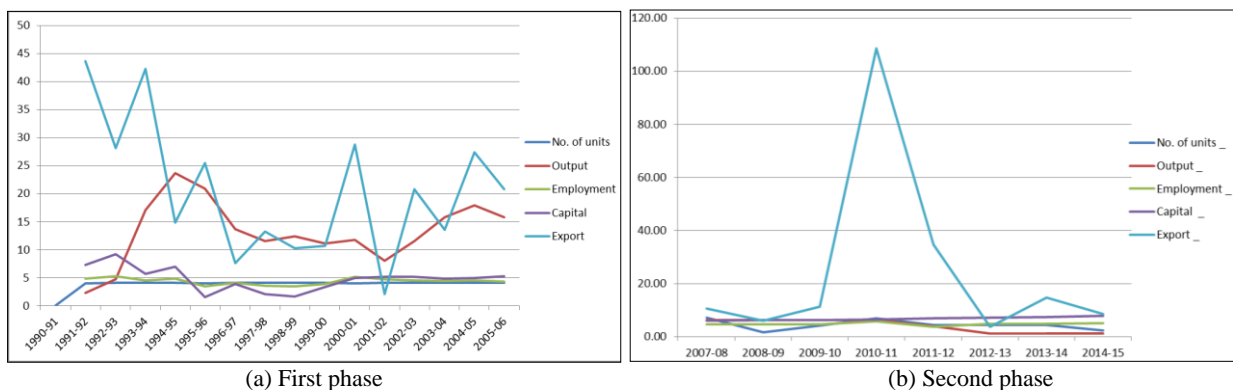


Fig 1: Growth rate of different variables

Annual average growth rate (AAGR) and the compound annual growth rate of different variables in the two periods are presented in Table 3. While AAGR is used to determine the trend of different economic variables, CAGR is used to determine the trend between the starting and ending period of any study. Both AAGR and CAGR shows similar trend

for all variables. However, if we compare the growth rate of the different variables in two different time periods, then we see somewhat different picture. While the growth rate of no. of units, employment, fixed capital and export has increased after the introduction of the MSMEs Act, 2006, the growth rate of output has declined in the latter period.

Table 3: Annual average growth rate (AAGR) and compound annual growth rate (CAGR) of different variables

	AAGR		CAGR	
	1990-91 to 2005-06	2006-07 to 2014-15	1990-91 to 2005-06	2006-07 to 2014-15
No. of units	4.06	4.42	4.06	4.4
Output	13.21	4.05	13.08	4.03
Employment	4.35	4.8	4	4.8
Capital	4.79	6.82	4.77	6.82
Export	20.63	24.44	20	21.5

6. Partial performance indicators

Now our concern is to estimate the performance of the MSMEs in two different periods in the post liberalized period. The common performance yardsticks are based on outcomes such as in terms of output and export of this sector. Among these factors, labour productivity (output/labour) is crucial. We study labour productivity in terms of per capita output that is important from the accounting point of view of any enterprise. From table 4 we find that annual average productivity of the employees in the second period is larger than the 1st phase. But in terms of CAGR, per capita output growth is negative in the 2nd phase.

This implies that though average productivity is larger in the 2nd phase in absolute terms, growth rate of productivity of labor is slower in the 2nd phase. Again in terms of exports per unit, both annual average and CAGR has improved in the 2nd phase as compared to 1st phase. It indicates that in the 2nd phase performance of the enterprises has improved in terms of export. This may be due to the improvement in the quality of exports of the MSMEs after the MSMED Act, 2006. But these are partial measures. In order to arrive at a more decisive conclusion, we have to use a more comprehensive measure of performance that uses all the available information on outputs and inputs.

Table 4: Performance indicators in two different periods

	Annual average		CAGR	
	1990-91 to 2005-06	2006-07 to 2014-15	1990-91 to 2005-06	2006-07 to 2014-15
Per capita output (Y/L)	933470	1703844	8.36	-0.7
Export per unit	56414	105663	15.38	16.37

7. Efficiency Analysis

According to Farrell (1957) technical efficiency reflects the ability of a firm to obtain maximal output for a given set of inputs. It will take a value between 0 and 1 and hence provides an indicator of the degree of technical inefficiency of the firm. It is usually termed as input-oriented measure. There are various efficiency estimators available in the literatures. We used the DEA technique due to non-homogeneity of the different units of the manufacturing and

service sector and the remote possibility of the existence of any rigid structural form. Two types of technical efficiency are used. In type I, there is only one output (production) and two inputs (employment and fixed capital) and in type II there are two outputs (production and export) and two inputs (employment and fixed capital). So type II measure allows us to find out the impact of export on the efficiency estimation of the enterprises.

Table 5: Efficiency of the enterprises in two different periods

Year	Technical Efficiency (Type I)	Technical Efficiency (Type II)
1990-91	0.318	0.318
1991-92	0.304	0.304
1992-93	0.291	0.291
1993-94	0.326	0.326
1994-95	0.384	0.384
1995-96	0.45	0.45
1996-97	0.491	0.491
1997-98	0.531	0.531
1998-99	0.587	0.587
1999-00	0.631	0.631
2000-01	0.672	0.672
2001-02	0.691	0.691
2002-03	0.733	0.733
2003-04	0.809	0.809
2004-05	0.909	0.909
2005-06	1	1
Average	0.57	0.57
2006-07	0.997	0.997
2007-08	1	1
2008-09	1	1
2009-10	1	1
2010-11	1	1
2011-12	1	1

2012-13	0.964	0.976
2013-14	0.93	1
2014-15	0.895	1
Average	0.976	0.997

From table 5 we find that efficiency of the MSMEs has improved in the 2nd phase (period after 2006) in both types (I and II) of estimation. This indicates that SMSEs exhibits a fare performance after the introduction of the MSMED Act, 2006 as compared to the previous period. One important finding is that efficiency of firms in type II estimation has increased in the 2nd phase as compared to the type I estimation. But there is no change in the efficiency score in the 1st phase of liberalization in both type I and II estimation. It can be explained by the fact that export quality has improved in the post MSMED Act, 2006 period. Different organizations under the MSME ministry are providing skill up-gradation training to existing entrepreneurs and working force to improve their performances. MSME sector has adopted an export strategy for foreign market entry in their internationalized effort. At the national level several measures like structural shift in the composition of MSME exports from traditional to non-traditional items, modes of entry such as MNCs and e-commerce etc. have been adopted to internationalize their activities.

8. Conclusion

The present study analyses the performance of the MSMEs of India in the post liberalized period. This sector has a significant contribution in employment generation, wealth creation and poverty alleviation. The post-globalized period is divided into two different phases. First phase covers the period prior to the enactment of MSMED Act, 2006 and the second phase covers the period 2006-07 to 2014-15. A positive growth rate of all variables has been observed in both the periods. But the growth rate is more pronounced in phase II as compared to phase I. The performance in phase II is much higher than phase I, as evidenced from efficiency score. The score is pronounced in type II analysis where export has entered as an output, indicating an improvement in the quality of the export. The act has given freedom to SSI units to upgrade themselves by raising the ceilings investment and by providing other institutional support. The beneficial effect of the new act has been reflected in their performance.

9. References

1. Babar SN. Small scale industries and economic development: Special reference to India, *Indian Streams Research Journal*. 2012; 2(3):1-4.
2. Bala Subrahmanya MH. Small industry and globalization: Implications, performance and prospects. *Economic and Political Weekly*, 2004, 39(18).
3. Dixit A, Pandey AK. 'SMEs and Economic Growth in India: Cointegration Analysis', *The IUP Journal of Financial Economics*. 2011; 9(2):41-59.
4. Farrell MJ. The Measurement of Productive Efficiency, *Journal of the Royal Statistical Society, ACXX*, part. 1957; 3:253-290.
5. Jena NR, Thatte LR, Ket VG. Performance of the Micro small and medium enterprises (MSMEs) manufacturing sector in select states in India: The concept of MSME manufacturing business facilitator (MSME-MBF) index, *Academy of Entrepreneurship Journal*. 2018; 24(1):1-22.
6. Mali DD. Development of Micro, Small and Medium Enterprises of India: Current Scenario and Challenges', *SEDME (Small Enterprises Development, Management and Extension) Journal*, 1998, 25(4).
7. Rakesh C. PEST analysis for micro, small & medium enterprises sustainability. *MSRUAS-JMC*, 2014, 1(1).
8. Singh R, Verma OP, Anjum B. Small Scale Industry: An Engine of Growth', *Zenith International Journal of Business Economics & Management Research*, 2012, 2(5). Online available at <http://www.zenithresearch.org.in>
9. Sudha V, Krishnaveni M. SMEs in India: Importance and contribution. *Asian Journal of Management Research*, 2012, 2(2).
10. Uma, P Role of SMEs in economic development of India, *Asia Pacific Journal of Marketing & Management Review*, 2013, 2(6).
11. UNIDO. Small Scale Industry in Latin America', Publication no. 11B, 1969, p37.
12. Vani, R. The impact of globalization on micro, small and medium enterprises with special reference to India, *Innovative Journal of Business and Management*. 2013; 2(5):109-111.
13. Varian HR. The Nonparametric Approach to Production Analysis, *Econometrica*. 1984; 52(3):579-598.
14. Venkatesh S, Muthiah K. SMEs in India: Importance and Contribution', *Asian Journal of Management Research*, 2012, 2(2).