

Growth and Performance of Micro, Small and Medium Enterprises in India: An Assessment

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Abstract

The industrial development becomes incomplete without the development of small and micro Industrial sector as this sector provides opportunity to utilize the abundant skill and unskilled human resources. These enterprises not only generate employment but also utilise optimum resources, increase total production and exports and help in balanced regional development of the country. Hence the paper is an attempt to evaluate the growth and performance of micro, small and medium enterprises in India. The study has met the objectives- growth pattern of micro, small and medium enterprises and has examined the contribution of micro and small enterprises in GDP terms in India.

Key words: *Micro and Small Enterprises, Economics and Growth Assessment.*

Introduction

At the time of independence in 1947, the industrial base of the economy was very small and the industries were beset with many problems such as shortage of raw-materials, deficiency of capital, bad industrial relations etc. In India, it was only after the attainment of independence in 1947, that the Indian Government realised the need for the rapid industrialisation of the country. To achieve this goal the government started the process of industrial development (Bakal, 1993).

Micro, Small and medium enterprises are two legs of industrialisation process of a country. These enterprises have been given an important place in the framework of Indian Planning since beginning both for economic and ideological reasons. Today, India operates the largest and oldest programmes for the development of Micro, small and medium enterprises in any developing country. As a matter of fact, small sector has now emerged as a dynamic and vibrant sector for the Indian economy in the recent years (Amit Singh, 2008).

The importance of micro, small and medium enterprises in the industrial front becomes more relevant in the agrarian economy of developing countries like India, where a wide spread disguised un-employment in agriculture exists. These unproductive masses can be employed in the MSME sector, where they can be regarded as resource and gainfully employed for productive activities. Industrial development becomes incomplete without the development of small Industrial sector as this sector provides opportunity to utilize the abundant skill and unskilled human resources. These enterprises not only generate employment but also utilise optimum resources, increase total production and exports and help in balanced regional development of the country. Therefore it is necessary to analyse the growth and performance of micro, small and medium enterprises in India. With this backdrop here an attempt has been made to evaluate the growth and performance of micro, small and medium enterprises in India.

Objectives

The study has been undertaken keeping view the following three objectives:

1. To assess the growth pattern of micro, small and medium enterprises across the country over the period from 2001-02 to 2009-2010.
2. To evaluate the performance of such enterprises in terms of output, employment and exports during the same period.
3. To examine the contribution of micro and small enterprises in the value of GDP in India.

Methodology

The researchers collected the data from secondary sources. The secondary data were obtained from the annual reports of MSME, government of India and other publications, news papers, journals and magazines. The estimates for the registered and unregistered sector taken together have given a complete picture of entire MSME sector. Information on economic activity, type of organization, type of management, employment, fixed investment, products, gross output, exports, etc., were collected from the registered units as well as from unregistered units.

In order to get inferences from collected data, statistical techniques like percentages, averages and growth rates were applied wherever necessary. More over regression techniques have also been used to analyze the performance levels of various enterprises and the factors determining their performances. For this purpose following regression models have been developed.

Model1 is a multi-variate regression model that expresses the relationship among production, employment and investment. The level of production is treated as dependent variable while employment and investment are considered as independent variables as shown in the equation below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + u \quad (\text{model1})$$

Where, Y = Production Level

X₁ = Employment

X₂ = Fixed Investment

α is the intercept, β is the coefficient and u is the error term.

The data related to export and production during the period under consideration will be fitted to regression model2 to estimate the effect of production on export volume of the country. The specified model is as follows:

$$X = \alpha + \beta Y + u \quad (\text{model2})$$

Where,

X = Volume of Export

Y = Level of Production,

and α is the intercept, β is the coefficient and u is the error term.

Review of Literature

Several important studies on all India basis have been made both at individual and organisational level to look into the growth and performance of micro and small enterprises in India. Anand (2007) in his study pointed out the contribution of the SME sector in India as well as in the global environment. He states that bankers are reluctant to lend SMEs because of the high transactions costs, insufficient credit information, inadequate credit appraisal and risk management skills, poor repayment records and low market credibility of SMEs. He also said that SMEs require a modest amount of capital to generate large employment opportunities, to stimulate economic activity within a country and to distribute the benefits of economic development. Reena (2007) on her study found out that the SSIs contribute more than one-third of industrial output and exports of the country, share of SSIs in GDP of the nation is approximately 6 percent and this segment provide 28.29 million employment to the country. The study observed that banks were not able to provide timely and adequate credit to the SSI sector. Saroj (2007) suggested that bank should have the capacity to co-ordinate the process of microcredit operation through diversified financial services, which may help to strengthen the microfinance initiatives in a comprehensive manner. The contribution by the national state levels agencies in fostering the overall growth of the SME sector is phenomenal and currently public-private -partnerships have become models to hasten the process of SMEs development (Shankar, 2007). Banks play important role to the development of SMEs but banks are not enthusiastic to finance SME sector because of poor marketing arrangements, lower adaptability to improve technology, high transactions costs, higher Non Performing Assets (NPA) level and lack of succession planning of SMEs (Murali and Lakshminarasimha, 2007). Anand and Srikant (2008) in their study revealed that the development of right strategies for marketing, selection of the most suitable communication options and measurement of performance are vital for the success of any organisation engaged in the SME financing activity. Wang (2008) in his article observed that in the era of rapid globalization, internet, local networks and support system are of particular importance in helping SMEs to meet the challenges of the changing world. The study also pointed out that due to bank's financial problems, many SME owners in addition to bank loans depends on their personal

savings or the family members and friends. S. K. (2005) in his article revealed that under the current Basel Capital Accord, loans to SMEs generally fall in the 100 percent risk-weight category. Ramakishna (1962) in his study pointed out the nature and magnitude of financial problem faced by the small scale sector of India and the role of Government and Banks in financing this sector. Vepa (1988) argued that despite a well developed institutional framework it was the urban based and comparatively bigger entrepreneurs who obtained the bulk of the advances made to the small scale sector. The availability of institutional finance to SSI has not been commensurate with their needs. The promoters of SSI, feel that the rules and procedures of financial institutions are very cumbersome and time consuming (Rudramurthy,1997). G.P. Prasain, E. Nixon Singh and N. Sharat Singh (2006) in their study found that there were no statistically significant differences in the average of all financing entities in Manipur despite some visible variations thereon. District-wise homogeneity of variability of the financing entities has also been observed. They found that respondents depends more on family income (more than 50%) followed by government agencies and commercial banks. Commercial banks, on the other hand, played the main role of providing financial assistance to these industries as far as the source of borrowing is concerned. Both in the initial and latest year under study 20.5% of the industries depended on commercial banks for institutional borrowing followed by Manipur Industrial Development Corporation (14.2%), North-Eastern Development Finance Corporation Ltd.(6.6%) etc. In their study they suggested that the both central state governments should give wide publicity so as to reach the information to all the entrepreneurs about policies, incentives, schemes, programmes, etc., relating to small scale industries. The commercial banks and financial agencies may establish more small scale industrial specialized branches at least one in every district head quarters to cater to the financial needs of small entrepreneurs. Banking services should be available near to the entrepreneurs/enterprise. They suggested that the small scale industrial units should maintain proper books accounts. Statutory obligation should be imposed on the units to maintain and prepare their books of accounts by professional accountant. They also suggested that the commercial banks and financial agencies should establish small industrial specialised branches at least one in every district head quarters to cater to the financial needs of small entrepreneurs. He also suggested that banking services should be available near to the entrepreneurs / enterprises and the small scale industrial units should maintain proper books of accounts by employing professional accountant. S.K.Bagchi (2008) in his book pointed out that small and medium enterprises may require funds for acquisition of capital assets, e.g., land/building/machinery/equipments etc., and /or purchase of stocks of raw materials / finished goods, extending credit to trade debtors and for other day-to-day business operations. He assessed the financial requirements of small and medium enterprises. Small and medium enterprises need finance towards cost of fixed assets like land and building, machinery, equipment, including computers by way of loan to be repaid over a period of time generally three

to five years. Working capital finance by way of cash credit / overdraft, bills finance, etc., for a period, generally of twelve months, with a provision for renewal to enable the small and medium enterprises to buy raw materials / stocks, incur day to day business overheads and to take care of sale to its buyers on trade credit terms. It is also observed that often vendors of materials insist that the small and medium enterprise buyers arrange for a letter of credit facility from a bank.

S. Ganesan and N. Namasivayam (2008) in their study analyses the performance of financing Small Scale Industries by commercial banks in Maduri district and the performance scores of loans grants to small scale industries by commercial banks using Friedman's test. The result of Friedman's test indicates that there is no significance difference in the performance of commercial banks of different classifications operating in Maduri district in lending to small scale industries. They found that state bank groups have exhibited a high range of performance score (viz., 50%) resulting a high record of achievement in finance when compared its target, followed by National Commercial Banks (49%) and Private Sector Banks (33%). K. Sudarsan and Himachalam Dasaraju (2010) in their book revealed the role of Andra Pradesh State Financial Corporation (APSFC) for the development of small and medium enterprises. APSFC reduced assistance to small and medium scale industries. They are ups and downs in the average size of assistance but the overall sanctions to the small and medium sector on an average show a positive significant growth. The average size of sanctions made to the small-scale sector has been less than that of the small and medium industries. In spite of the assistance rendered by the corporation 96 (80%) entrepreneurs out of 120 are faced with different financial problems. Shortage of working capital and high interest rate has troubled more than 80% of them. 11 or 50% of the entrepreneurs which are located in villages are faced with shortage of working capital, 32 or 62.75% of the town enterprises find the rate of interest high, 3 or 50% of the district head quarters enterprises are faced with shortage of working capital and 13 or 76.47% of the industrial estate enterprises are faced with shortage of working capital. They also found that more than half of the sample entrepreneurs felt that the loan amount sanctioned has been much less than their requirement. A little more than one third of the sample found needless procedural delays by the corporation a hurdle. 111 (92.50%) entrepreneurs find the loan amounts sanctioned are inadequate. They are also troubled by procedural delays. Therefore they suggested that the APSFC should provide adequate finance to the enterprises with liberal collateral security without delay. Carbo, Rodriguez and G. Udell, (2010) in their study argue that the issue of bank competition and credit availability may matter most to small and medium enterprises because they are more vulnerable to information problems and are much more bank dependent than large enterprises. They suggests that constrained firms with restricted access to the bank loan market may turn to the trade credit market to exploit their investment opportunities, while unconstrained firms would turn to the bank loan market. Additionally they analyse the supply the side the trade credit market by testing whether extension of trade

credit is sensitive to bank lending. They find that there is a significant sensitivity of the extension of trade credit to bank lending for unconstrained firms, thereby suggesting that these financially unconstrained firms may act as lenders due to their easier access to a less costly source of funding. K. Das (2007) in his study observes that there is no transparency regarding the financial conditions of small and medium enterprises. Banks hesitate to give loans to small scale units. Unless fairly detailed information on small firms is available, banks would hesitate to take the risk and may prefer to lend to relatively larger firms and thus leaving smaller firms significantly constrained for capital. He also suggests that improving the quality of financial information is an important requirement for enhancing the flow of funds to the SME sector as the quality of information also influences decisions on loan finance. So here lies the scope of present study, which is a humble attempt to explore the growth and performance of micro and small enterprises in India.

Concept and Definition of MSMEs

Definition of MSMEs approved by the Reserve Bank of India (RBI)

As directed by the Reserve Bank of India in August 2005, a Small and Medium Enterprise can be defined as under :

“At present, a small scale industrial unit is an undertaking in which investment in plant and machinery does not exceed Rs. 1 crore, except in respect of certain specified items, under hosiery, hand tools, drugs and pharmaceuticals, stationery items and sports goods, where this investment limit has been enhanced to Rs. 5 crores. Pending enactment of the comprehensive legislation, the current SSI/Tiny industries definition may continue. Units with investment in plant and machinery in excess of SSI limit and upto Rs. 10 crores may be treated as Medium Enterprises (ME).”

Definition of MSME as per MSMED Act 2006

In India, very recently, a clear cut definition of MSME has been given. In October 02, 2006, Government of India has introduced “Micro, Small and Medium Enterprises Development Act 2006 (MSMED Act).” The Act defined, rather reclassified, the industries based on the investment in the plant and machinery and not on the turnover or employment basis.

As per the Act, the enterprise in the MSME segment have been classified as below:

Enterprises engaged in the manufacturing or production of goods:

Categorisation	Investment in plant and machinery
Micro Enterprises.	Not exceeding Rs.25 lacks.
Small Enterprises.	More than RS.25 lacks but not exceeding Rs.5 crore.
Medium Enterprises.	More than Rs.5 crores but not exceeding Rs.10 crores.

Enterprises engaged in providing or rendering of services:

Categorisation	Investment in plant and machinery
Micro Enterprises.	Not exceeding Rs.25 lacks.
Small Enterprises.	More than RS.25 lacks but not exceeding Rs.5 crore.
Medium Enterprises.	More than Rs.5 crores but not exceeding Rs.10 crores.

From the above discussion we may defined MSMEs as follows :

Micro Enterprises

The enterprise (engaged in the manufacturing or production) whose investment in plant and machinery does not exceed Rs.25 lacks or the enterprise (engaged in rendering of services) whose investment in equipment does not exceed Rs.10 lacks can be treated as Micro Enterprise.

Small Enterprises

The enterprise (engaged in the manufacturing or production) whose investment in plant and machinery is more than Rs.25 lacks but does not exceeds Rs.5 crores or the enterprise (engaged in rendering of services) whose investment in equipment is more than Rs.10 lacks but does not exceed Rs.2 crores is known as Small Enterprise.

Medium Enterprise

The enterprise (engaged in the manufacturing or production) whose investment in plant and machinery is more than Rs.5 crores but does not exceeds Rs.10 crores or the enterprise (engaged in rendering of services) whose investment in equipment is more than Rs.2 crores but does not exceed Rs.5 crores is called Medium Enterprises.

Size of the registered MSME Sector

The size of the registered MSME sector is estimated to be 15,63,974 in 2009-2010. The proportion of micro, small and medium enterprises are shown in figure-1. Figure-1 reveals that out of the total working enterprises, 94.94% are micro enterprises, 4.89% are small enterprises and 0.17% are medium enterprises. Data on this aspect reveals that most of the enterprises in India are Micro Enterprises and only few of them are

Small and Medium Enterprises.

The proportion of rural and urban enterprises is shown in figure-2. Figure-2 reveals that about 45.23% (7.07 lakh) of the units are located in rural areas about 54.77 % are located in the urban areas. Data on this aspect reveals that the maximum number of enterprises are located in the urban areas than that of rural areas.

Table-1
Distribution of registered MSME

Distribution by Nature of Activity	No. in lakh
Manufacturing/ Assembling/ Processing	10.49 (67.10%)
Services	2.62 (16.78%)
Repairing & Maintenance	2.52 (16.13%)
Total	15.64 (100%)

Source: Annual Report 2010- 2011, Govt. of India, Ministry of MSMEs

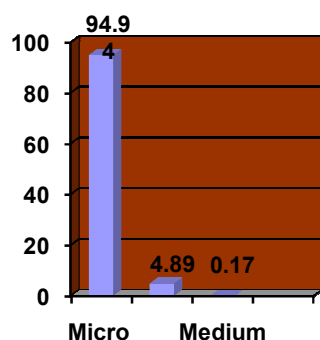


Figure-1

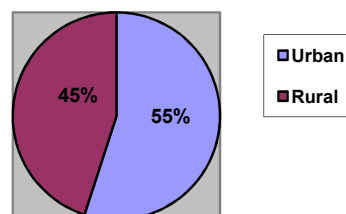


Figure 2

MSMEs are engaged in different activities. The distribution of registered enterprises according to the nature activity is shown in table-1. Table-1 reveals that 67.10 % of the enterprises in the registered MSME sector are engaged in manufacturing/ assembling/processing, whereas 16.78 % of the units are engaged in services activities. The remaining 16.13 % of the enterprises are engaged in the repair and maintenance. Data on this aspect reveals that most of the enterprises in India are engaged in manufacturing/ assembling/processing activities and a few of them are engaged in services, repair and maintenance activities.

The organizations of MSMEs are proprietary, partnership, Pvt. Company, Pub. Ltd. company, Cooperatives and others. The table-2 shows that 90.08 % of the enterprises in the registered MSME sector are proprietary concerns. About 4.01% of the enterprises are run by partnerships , 2.78 % of the enterprises are run by private companies, 0.54% of the enterprises are run by the Public Ltd. companies and the rest are owned by cooperatives and others. Data depicts that most of the enterprises are

proprietary concern followed by partnership and private companies and a few them are belonging to the public Ltd. Companies.

The study found that out of the total registered MSMEs 13.72% (2.15 lakh) (Table- 3) of the enterprises were women enterprises whereas 86.28% (13.49 lakh) were men enterprises. From the angle of community status, it was found out that 7.60% (table-4) of the enterprises were owned by Scheduled Caste (SC) entrepreneurs, 2.87% by Scheduled Tribe (ST) entrepreneurs and 38.28% by entrepreneurs of Other Backward Classes (OBCs). In terms of religion, 81.22% (table-5) units were owned by Hindu whereas domination of Muslim, Sikh , Christian , Jain and Buddhist was 9.11%, 3.31% , 4.12% , 0.52% and 0.07% respectively.

It is cleared that most of the enterprises are managed by the male entrepreneurs and a few of them are managed by the female entrepreneurs. Data also reveals that 48.75% of the working units in the registered MSME sector were being owned by socially backward classes and rest were owned by others. Most of the enterprises are owned by the Hindu and a few of them are owned by the other religion.

Table-2

Type of Organization of MSMEs	
Distribution by type of Organization	No. in lakh
Proprietary	14.09 (90.08%)
Partnership	0.63 (4.01%)
Pvt. Company	0.43 (2.78%)
Pub. Ltd. Company	0.08 (0.54%)
Cooperatives	0.05 (0.30%)
Others	0.36 (2.30%)

Source: Annual Report 2010- 2011, Govt. of India, Ministry of MSMEs.

Table -3

No. of enterprises Managed by	No. in lakh
Male	13.49 (86.28%)
Female	2.15 (13.72%)
Total	15.64 (100%)

Source: Annual Report 2010- 2011, Govt. of India, Ministry of MSMEs.

Table-4

Ownership by type of Social Category:	No. in lakh
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Scheduled Caste(SCs)	1.19 (7.60%)
Scheduled Tribe(STs)	0.45 (2.87%)
OBCs	5.99 (38.28%)
Others	8.02 (51.26%)

Source: **Annual Report** 2010- 2011, Govt. of India, Ministry of MSMEs.

Table-5

Ownership by type of Religion:	No. in lakh
Hindu	12.70 (81.22 %)
Muslim	1.43 (9.11 %)
Sikh	0.52 (3.31 %)
Christian	0.64 (4.12 %)
Jain	0.08 (0.52 %)
Buddhist	0.01 (0.07 %)
Others	0.26 (1.64 %)

Source: **Annual Report** 2010- 2011, Govt. of India, Ministry of MSMEs.

Growth of Micro, Small and Medium Enterprises in India

The growth of MSMEs in India is very slow. This can be understood from the figure-3 and table-6. The figure-3 and table-6 reveal that the number of MSMEs in 2001-02 was 105.21 lakh which had been increased to 113.95 lakh in 2003-04. In 2005-06 the number was 123.42 lakhs which had been increased to 272.79 lakhs in 2007-2008. The number of MSMEs was 285.16 lakh in 2008-09 but it had been reached to 298.08 lakh in 2009-2010. The growth rate of the number of MSMEs was 4.07 per cent which had been remained constant up to the year 2005-06 but after that it had been increased to 111.48 per cent in 2006-07. In 2007-2008 the rate of growth had been felled down to 4.51 per cent . But in that period rate of growth of the enterprises remained constant at 4.53 per cent in 2008-09 and 2009-2010.

Thus it is cleared that the number of MSMEs have been increased during the said period. The growth rate of number of MSMEs was constant during the first five years and it had been reached to highest in 2006-07 but after that it had been declined. The study observed that the rate of growth of MSMEs was very slow during the period.

Number of MSMEs

Figure-3

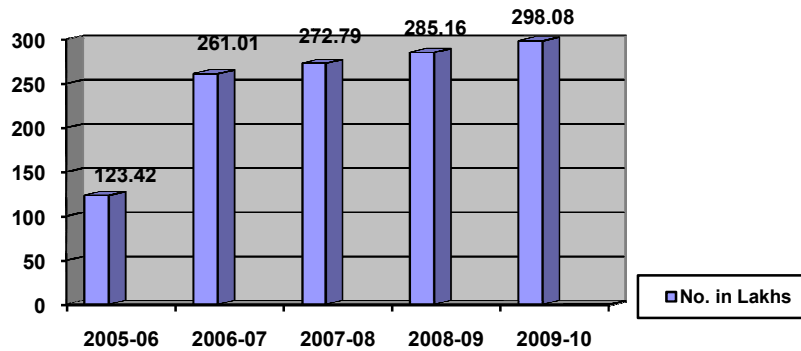


Table-6
Number and growth rate of MSMEs

Year	Number of MSMEs (in lakhs)	Growth Rate
2001-02	105.21	4.07
2002-03	109.49	4.07
2003-04	113.95	4.07
2004-05	118.59	4.07
2005-06	123.42	4.07
2006-07	261.01	111.48
2007-08	272.79	4.51
2008-09	285.16	4.53
2009-2010	298.08	4.53

Source: Annual Report 2010- 2011, Govt. of India, Ministry of MSMEs.

Performance of MSMEs

The micro, small and medium enterprises (MSME) sector contributes significantly to the manufacturing output, employment and exports of the country. It is estimated that in terms of value, the sector accounts for about 45 per cent of the manufacturing output and 40 percent of the total exports of the country. The sector is estimated to employ about 42 million persons in over 13 million units throughout the country. Further, this sector has consistently registered a higher growth rate than the rest of the industrial sector. There are over 6000 products ranging from traditional to high-tech items, which are being manufactured by the MSMEs in India. It is well known that the MSMEs provide the maximum opportunities for both self-employment and jobs after agriculture.

Table-7

MSMEs Performance: Units, Investment, Production, Employment & Exports

Sl. No.	Year	Total MSMEs (lakh Numbers)	Fixed Investment (Rs. Crore)	Production (Rs crore) Current Prices	Employment (lakh person)	Exports (Rs. crore)
1	2001-2002	105.21 (4.07)	154349 (5.11)	822702 (8.03)	249.33 (4.44)	71244 (2.07)
2	2002-2003	109.49 (4.07)	162317 (5.16)	314850 (11.54)	260.21 (4.36)	86013 (20.73)
3	2003-2004	113.95 (4.07)	170219 (4.87)	364547 (15.78)	271.42 (4.31)	97644 (13.52)
4	2004-2005	118.59 (4.07)	178699 (4.98)	429796 (17.90)	282.57 (4.11)	124417 (27.42)
5	2005-2006	123.42 (4.07)	188113 (5.27)	497842 (15.83)	294.91 (4.37)	150242 (20.76)
6	2006-2007	261.01 (111.48)	500758 (166.20)	709398 (42.49)	594.61 (101.62)	182538 (21.50)
7**	2007-2008	272.79 (4.51)	558190 (11.47)	790759 (11.47)	626.34 (5.34)	202017 (10.67)
8**	2008-2009	285.16 (4.53)	621753 (11.39)	880805 (11.39)	659.35 (5.35)	N. A.
9**	2009-2010	298.08 (4.53)	693835 (11.59)	982919 (11.59)	695.38 (5.46)	N. A.

Source: Annual Report 2010- 2011, Government of India, Ministry of Micro Small and Medium Enterprises.

**Projected N.A.: Not Available.

The figures in brackets show the percentage growth over the previous year. The data for the period up to 2005-06 is of small scale industries (SSI). Subsequent to 2005-06, data with reference to micro, small and medium enterprises (MSMEs) are being compiled.

The table- 7 shows the performance of MSMEs on output, production, employment and exports. The table shows that the fixed investment in MSME sector was Rs. 154349 crores in 2001-02 but it had been increased to Rs. 693835 crores in 2009-2010. The rate of growth had been also increased from 5.11 per cent to 11.59 percent in 2009-10. The data reveal that the investment in MSME sector had been increased during the period.

The table depicts that the total production of the MSMEs in India was Rs. 822702 crores (at current prices) in 2001-02 which had been increased to Rs. 709398 crores (at current prices) in 2006-07. In 2007-08 the production was Rs. 790759 crores which had been raised to Rs. 982919 crores in 2009-10. The growth rate in production was 8.03 percent in 2001-02 which had been raised more than doubled to 17.90 per cent in 2004-05. In 2005-06 the rate was downed to 15.83 per cent but after that period

there had been a tremendous growth of 42.49 per cent in 2006-07. The growth of production again downed to 11.59 per cent 2009-10. The data reveals that the production in MSME sector had been increased during the period but the rate of increment was very slow during the mentioned periods.

So far as employment was concerned it was found that employment in MSMEs in India had been increased the throughout the period . The total employment in MSMEs in India figured out as 249.33 lakhs persons in 2001-02 which was geared up to 594.61 lakhs persons in 2006-07. In 2007-08 the total employment was 626.34 lakhs persons which had been sharply increased to 695.38 lakhs persons in 2009-10. The growth rate of employment was 4.44 per cent in 2001-02 which had been raised to 4.37 per cent in 2005-06. During the period of study the rate was highest in 2006-07 as 101.62 per cent but after that period the rate was downed to 5.46 per cent in 2009-10. Thus it can be said that the growth rate of employment in MSME sector has been increased but the rate of increment is very slow.

The total exports of the country's MSMEs were only Rs. 71244 crores in 2001-02 which had sharply increased to Rs. 182538 crores during 2006-07. The rate of growth also increased from 2.07 per cent in 2001-02 to 21.50 per cent in 2006-07.

From the above analysis it is observed that growth rate of employment; production and exports of MSEs in India have been gradually increased over the period from 2001-02 to 2006-07.

Regression Analysis:

In order to analyze the functional relationship among production, employment and investment as well as between export and production the following regression models have been specified. The hypotheses designed for the study have also been tested and confirmed the effect of explanatory variables on the depended variables by employing these regression models. Model1 is a multi-variate regression model that expresses the relationship among production, employment and investment. The level of production is treated as dependent variable while employment and investment are considered as independent variables as shown in the equation below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + u \quad (\text{model1})$$

Where, Y = Production Level

X₁ = Employment

X₂ = Fixed Investment

α is the intercept, β is the coefficient and u is the error term.

The strength of association between dependent and independent variables is represented by the value of R² whose significance is tested by t-statistic. The estimated equation is shown below:

$$\begin{aligned} Y &= 11.377 + 1.164 X_1 - 0.525 X_2 \\ &\quad (t=9.103) \quad (t=1.365) \quad (t=-1.009) \\ &\quad (se=1.250); (se=0.853); (se=0.520) \\ R^2 &= 0.922 ; F = 35.490 \end{aligned}$$

The estimated equation shows that 92% of the variation in production level is due to the variations in employment and fixed investment over the period under consideration. This implies that production is effected by employment and investment to the extent of 92%. The employment coefficient is found to be positive but statistically not significant at 0.221 level judged by t-statistic. It is estimated that the propensity to change in production due to employment change is 1.164, implying that any increase in employment will cause an increase in output more than employment. Whereas the regression coefficient of fixed investment is negative and significant judged by t-value, indicating a negative association between production level and fixed investment. The negative association is due to the investment reason that with the increase in production the proportion of fixed investment to the total volume of investment decreases, and so the type of fixed investment has negative relationship with the level of production. The standard error of the estimate of production with respect to employment is 0.853 and the same with respect to fixed investment is 0.520. The equation has positive intercept value showing 11.377, which signifies that a small quantum of output was there even at zero level of employment and investment during the study period.

The data related to export and production during the period under consideration have been fitted to regression model2 to estimate the effect of production on export volume of the country. The specified model is as follows:

$$X = \alpha + \beta Y + u \quad (\text{model2})$$

Where, X = Volume of Export
 Y = Level of Production,

and α is the intercept, β is the coefficient and u is the error term.

The estimated equation with regression results is shown below:

$$\begin{aligned} X &= 10.589 + 0.346Y \\ &\quad (t=1.768) \quad (t=1.186) \\ &\quad (se=5.989); \quad (se=0.292) \\ R^2 &= 0.220; \quad F = 1.407 \end{aligned}$$

The coefficient of determination in the estimated equation is calculated as $R^2 = 0.220$, explaining that only 22% of the change in export volume is due to the variation in production level. However, the regression coefficient of production is positive but statistically not significant at 0.289 level as judged by t-statistic. The standard error of the estimate is found to be 0.292. The positive coefficient of output reveals that propensity to change in export volume due to change in production level is 0.346, implying that any increase in production level will cause an increase in export but less than proportionate increase in production during the period under study.

Performance of the Sector in North Eastern Region

It is interesting to know the performance of the MSE sector in the north eastern region. The table-8 depicts that out of the total number of 402209 units in North Eastern Region, Assam ranks the highest number of MSEs (246980 units) whereas the

State of Sikkim shows the lowest number of MSEs (472 units) in 2007-08. The total production of MSEs in Assam was Rs. 8155.1 crores which was highest in 2007-08. The employment in MSEs in Assam was reached to 556896 persons out of the total employment of 1010210 persons in North Eastern Region during 2007-08. The data reveal that in North eastern region Assam ranks the highest in number of MSEs, investment, production and employment. The estimated number of MSE units in North-East, fixed investment, production and employment for the year 2007-08 (Projected) have been incorporated in the table-8.

Table – 8 North East and the MSEs (2007-08)

Name of the State	No. of Units	Fixed Investment (Rs. crore)	Production (Rs crore)	Employment (persons)
Sikkim	472	17.00	73.7	1828
Arunachal Pradesh	1614	46.76	115.2	5060
Nagaland	18653	583.49	897	81608
Manipur	60625	529.53	1168.5	173663
Mizoram	14242	188.66	343.6	32984
Tripura	30772	423.61	765.4	70774
Meghalaya	28851	224.07	799.8	87397
Assam	246980	1733.05	8155.1	556896
Total	402209	3746.17	12318.3	1010210

Source: Directorate of Industries, Government of Assam, Dispur.

The MSE sector has maintained a higher rate of growth vis-à-vis the overall industrial sector as would be cleared from the comparative growth rates of production for both the sectors during last five years as incorporated in the table – 9. The table-9 reveals that MSE sector achieved the growth rate of 8.68 per cent while that of overall Industrial Sector was only 5.70 per cent in 2002-03. The growth rate of MSE sector was 12.60 per cent while that of overall Industrial Sector was 11.5 per cent in 2006-07. It is also cleared from the above table that the growth rate of MSE sector in each year always remains higher than the growth rate of the overall industrial sector.

Table - 9
Comparative Growth Rates of MSE Sector and Overall Industrial Sector in India

Year	Growth Rate of MSE Sector (%)	Overall Industrial Sector (%)
2002-03	8.68	5.70
2003-04	9.64	6.90
2004-05	10.88	8.40
2005-06	12.32	8.10
2006-07	12.60	11.5

Source: Ministry of small industries as given in Economic Survey (2006-2007).

Contribution of MSEs in Gross Domestic Product

The contribution of MSEs in Gross Domestic Product of India has been increased gradually. Table- 10 depicts that the contribution of MSEs in Gross Domestic Product of India was 5.86 percent in 1999-2000 which had been increased to 8.72 percent in 2008-09. The table also reveals that the contribution of MSEs in total industrial production was 39.74 per cent in 1999-2000 which had been increased to 44.86 per cent in 2008-09.

Table - 10
Contribution of MSEs in Gross Domestic Product (GDP) of India

Year	Contribution of MSE (%) at 1999-2000 prices in	
	Total Industrial Production	Gross Domestic Product (GDP)
1999-00	39.74	5.86
2000-01	39.71	6.04
2001-02	39.12	5.77
2002-03	38.89	5.91
2003-04	38.74	5.79
2004-05	38.62	5.84
2005-06	38.56	5.83
2006-07	45.62	7.20
2007-08	45.24	8.00
2008-09	44.86	8.72

Source: Ministry of small industries as given in Economic Survey (2010-2011).

Conclusion

It is observed that the number of MSMEs, the growth rate of employment, production and exports of MSEs in India have been gradually increased over the period from

2001-02 to 2009-10. The contribution of MSEs in Gross Domestic Product of India have been also increased gradually. Regarding performance of MSMEs it is concluded that the production is effected by employment and investment to the extent of 92%. It is estimated that any increase in employment will cause an increase in output more than employment but there is a negative association between production level and fixed investment. The negative association is due to the investment reason that with the increase in production the proportion of fixed investment to the total volume of investment decreases, and so the type of fixed investment has negative relationship with the level of production. It is also observed that only 22% of the change in export volume is due to the variation in production level, implying that any increase in production level will cause an increase in export but less than proportionate increase in production during the period under study.

References

- Anand Chakravarthi, (2007), "SME Financing: The Indian Scenario", Financing of Small and Medium Enterprises (SMEs), June, IB The ICFAI University Press 52, Nagarjuna Hills, Punjagutta Hyderabad, PP. 3-13.
- Bagchi, S.K., (2008), Small and Medium Enterprises, Jaico Publishing House A-2, Jash Chambers, sir Pherozshah Mehta Road Fort, Mumbai-400001.
- Bakal, G.M., (1993), Development of SSIs, Anmol Publications, New Delhi PP. 22-28.
- Basu, S.K., (1939), Industrial Finance in India. University Press, Calcutta.
- Dasaraju, Himachalam and Sudarsan, k., (2010), Financing Micro, Small and Medium Enterprises, Associate Publishers B-43, Vita Colony, Ambala city- 134003, India.
- Das, k., (2007), "SMEs in India: issue and possibilities in times of globalization" Indian Institute of Management, Bangalore, vol-19 No.2, September, PP. 5-23.
- Desai, Vasant, (2005), Small - Scale Industries & Entrepreneurship, Himalaya Publishing House, Mumbai, PP. 164 - 165.
- Kar, S.K., (2005), "SME Sector Needs Innovative Lending Approach Under Basel II", Professional Banker, August, IB ICFAI University Press, PP. 15-19.
- Lakshminarasimha A and Murali S., (2007), "Role of Banks in the Development of SMEs", Financing of Small and Medium Enterprises (SMEs), August, IB The ICFAI University Press 52, Nagarjuna Hills, Punjagutta Hyderabad, PP. 51-62.
- Namasivayam, N., and Ganesan, S., (2008), "Analysis of Financing Small Scale Industries by Commercial Banks in Maduri District, Tamil Nadu Using Friedman's Test", Indian Institute of Finance, vol. xxii No.3, September, PP. 957-964.
- Ray Reena, (2007), "Challenges for SMES and Opportunities for Banks", Indian Economy: Growing Risk on the Horizon Professional Banker, August, IB the ICFAI University Press 52, Nagarjuna Hills, Punjagutta Hyderabad, PP. 15-25.

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- Rudramurthy, D.G., (1997), "Institutional finance for the development of small scale Industries in Karnataka", Karnataka University.
- Singh Sharat, Nand Singh Nixon E., Prasain G.P., (2006), "Financing Patern of Small Scale Industries", The Indian Journal of Commerce, Volume - 59, No-4, December, Quarterly Publication of the Indian Commerce Association, PP. 45-48.
- Srikant A and Anand Chakravarthi, (2008), "Marketing strategies of Banks to Foster Financing SMEs in India", Financing of Small and Medium Enterprises (SMEs), September, IB The ICFAI University Press 52, Nagarjuna Hills, Punjagutta Hyderabad, PP. 60-72.
- Udell, G., Rodriguez and Carbo, (2010), "Bank lending, financing constraints and SME investment- Federal Reserve Bank of Chicago" Indian Institute of Management, Bangalore, vol-22 No.3, September, PP. 3-13.
- Upadhyay Saroj, " Microfinance and Role of Commercial Banks", (2008), Financial Stability in China, Professional Banker, September, 2007, IB the ICFAI University Press 52, Nagarjuna Hills, Punjagutta Hyderabad, pp. 30-34. Wang Dong Seok, " The Development of E-Finance : Implications for SMEs", Financing of Small and Medium Enterprises (SMEs), November, IB The ICFAI University Press 52, Nagarjuna Hills, Punjagutta Hyderabad, PP.73-89.
- Govt. Publications Annual Report 2010- 2011, Government of India, Ministry of Micro Small and Medium Enterprises.
- Directorate of Industries, Government of Assam, Dispur, 2008-09.
- Government of India, Ministry of small industries, Economic Survey, 2010-2011.
- Government of India, Ministry of Small Scale Industries, Economic Survey, 2006-07.