CHAPTER IX
CONCLUSIONS, IMPLICATIONS, AND POTENTIAL EXTENSIONS

9.1 Major conclusions
The major conclusions are:

- The share of registered units to the total number of SSI units is marginal over the period. But, the growth rates of unregistered SSIs are stagnant and in most of the years less than registered units. This is due to current Government policies and incentives encouraging higher growth of the registered units. Growth of production per unit of the SSIs is less than growth of total production due to low levels of technology leading to no significant technological improvement. Employment growth per unit is stagnant and there is falling employment elasticity over the periods from the SSIs sector. Annual growth rate of export is fluctuating over time i.e. there is instability in export growth. SSIs sector contribution to total industrial production, GDP, and employment is rising. There is consistent decline in the SSIs export shares in the recent times. For majority of the industries, contribution of registered sector to output, value added, and export is higher while employment contribution of unregistered sector is higher. Food, textiles, apparel, wood, metals, and furniture are some of the important industries in terms of economic performance indices in the unregistered sector. There is an increasing capital structure in the unregistered SSIs sector.

- The unregistered manufacturing micro and small enterprises of India has low levels of technical efficiency performance at various industry level disaggregates. Chemicals, transport equipment, and basic metals are the most efficient industries while tobacco manufacturing, textiles, and rubber are some of the least efficient among the industries. Technical efficiency of the unregistered SSIs is very low at the micro enterprise level. TFP growth of the overall unregistered SSIs and by majority of the industries is declining. Only leather and footwear industry has positive TFP growth over time.
Higher scale of operation and productivity improvement of the existing inputs is crucial for raising efficiency of the industries. This often depends on the determinants of technical efficiency at the enterprise level or on the enterprise characteristics. The gender of ownership, location of the enterprise, problems of power supply, credit inaccessibility, lack of demand, financial dues, problem of marketing agreement with large units, and sources of loans are the major determinants of efficiency at the enterprise level. Sub-contracting enterprises are less efficient than others while enterprises receiving informal sources of loan are more efficient. Problems of power supply, credit constraints, and problems of marketing agreement are important barriers for the technical inefficiency of the industries. The major factor behind TFP/GDP decline is technological regress and non-improvement of technical efficiency over time.

Factor market misallocation in terms of factor price disproportion between large and small scale manufacturing results in depressed aggregate manufacturing TFP/GDP over time. Labour market misallocation is stronger than capital in lowering aggregate manufacturing TFP. Given any growth rate of manufacturing GDP per worker and capital-labour ratio of the small scale sector, the time path of TFP would follow an increasing trend if the factor price differentials between large and small manufacturing come down along with an increasing share of the former to total manufacturing employment.

Competitiveness of the unregistered SSIs is determined by efficiency and productivity growth in addition to the other performance indices such as size and contribution. There is strong and positive relationship between competitiveness and indices of efficiency and productivity growth. Similarly, competitiveness is strongly and positively correlated with the indices of contribution such as contribution to GDP, employment, and exports. Both size of exports and export contribution is strongly and positively related to competitiveness. Considering all components, manufacture of wood and furniture, other manufacturer, non-metallic products, and transport equipments are some of the most competitive industries while manufacture of basic metals is least competitive.
• Clusters are important source of higher growth and competitiveness of SSIs through size and productivity improvement and employment generation. Clusters contribute significantly to total number of enterprises, output, investment, and employment of unregistered SSIs sector both at the aggregate and disaggregate level. But, integration between clustered and non-clustered approach is needed at industry level, since, not all industry have a better performance of clusters. Cost of labour input, input-output ratio, capita-output ratio, and state level characteristics such as manufacturing base; infrastructure; and export potential are the major determinants of clustering of small enterprises. Alternatively, these factors are the main sources of growth of clustered SSIs.

9.2. Select implications

The unregistered SSIs play a very important role in number of enterprise and employment generation. But, the efficiency and productivity of this sector is very low leading to lack of competitiveness. Hence, the unregistered SSIs require to be promoted from the policy perspectives for improved competitiveness. The government of India (or the Ministry of MSMEs) has several policy measures which mainly cover the registered segment of the overall MSMEs sector. The unregistered segment is relatively neglected and thus it requires specific policy attention from the government. Based on the empirical findings of the study the following select implications for the policies pertaining to the growth and development of the unregistered manufacturing MSEs sector of India through improvement in their efficiency, productivity and thereby competitive performance are suggested:

• Industries such as food, tobacco, textiles, apparel, leather, wood, paper, printing, coke, rubber, and furniture and other manufacture need more and specific policy support to raise their present level of technical efficiency. Since, technical efficiency of the majority of the industries in the unregistered MSEs sector is caused by under-utilisation of available inputs, improving the quality or the productivity of the inputs used by the unregistered MSEs is important for increasing technical efficiency. In this context, the policies of the ministry of MSMEs such as (i) Credit Linked Capital Subsidy Scheme (CLCSS) for technology upgradation through purchase of plant and
machinery, (ii) Credit Guarantee Fund Scheme (CGFS) for availing credit to micro and small enterprises without collateral guarantees, (iii) Schemes of Micro Finance Programme for providing micro credit facilities to the MSMEs through different micro finance institutions and NGOs are crucial for increasing productivity of the capital inputs used by the unregistered MSEs. However, these policies alone are not sufficient. There is need for supplementing different policy measures to increase labour productivity of the unregistered MSEs. The government of India along with the ministry of MSMEs have taken different policy initiatives such as (i) setting up of the Prime Minister Task Force on MSMEs for skill development and labour rehabilitation, (ii) different policy measures under the National Manufacturing Competitiveness Programme (NMCP) such as schemes for providing support for entrepreneurial and managerial development of MSMEs through incubators; different training programmes under Entrepreneurship Development Programmes (EDPs); Entrepreneurship Skill Development Programmes (ESDPs); Management Development Programmes (MDPs), and (iii) Rajiv Gandhi Udyami Mitra Yojana (RGUMY) for providing assistance to entrepreneurs. The results of the study imply that these policies and schemes are important for raising labour productivity and thereby efficiency of utilizing the inputs by the unregistered MSEs.

- Technical efficiency of the unregistered micro enterprises is of prime importance from policy point of view. Special policy attention needs to be directed towards the industries wherein technical efficiencies are quite low. For increasing efficiency at industry/macro level, it is more important to enhance the same at the enterprise/micro level. Therefore, examining the factors hindering efficiency of the micro enterprises and implementing proper policies and schemes to eliminate such factors is crucial. In this context, the result of the study offers a set of significant factors that either positively or negatively influences enterprise level technical efficiency. Understanding these factors is important for policy purpose. These factors are implement a better and easy credit delivery system, ensuring enhanced supply of power, creating induced market demand for products, assisting and supporting the women/female entrepreneurs with various policies and schemes, providing
proper and well structured premises to operate, and assuring enhanced supply of formal loans to the micro enterprises are some of important policy measures that may be taken up for raising the present level technical efficiency of the unregistered manufacturing micro enterprises of India. The limited resources of the informal credit institutions restrict the extent to which they can effectively and sustainably satisfy the credit needs of micro and small enterprises. As microenterprises expand in size, the characteristics of loans they require become increasingly difficult for informal credit sources to satisfy. Hence, formal credit institutions need to play a vital role in delivering credit to these enterprises in an easier and sustainable manner. It may be important to note that promoting subcontracting through various programmes such as anciliarisation, outsourcing etc. is a policy approach of the government to encourage productivity and growth of the small enterprises. However, in this regard, the result of this study suggests inter-firm linkages in terms of agreements with the bigger enterprises unfortunately lead to lowering of efficiency of the small enterprises. This could be due to the deficiencies of such programmes. The government therefore may reconsider and evaluate such programmes to potentially impinge on subcontracting linkages for optimal outcomes. Providing financial and technological support to small enterprises and enforcement of appropriate legislation to minimize the problems of subcontracting is required for successful and effective operation of subcontracting.

- The results offer some important policy implications for long term growth of the unregistered SSIs sector of India. Both technical efficiency increase and technological progress is essential to ensure a positive growth of TFP over time. From policy point of view ensuring long term technical efficiency increase of the unregistered SSIs is essential for their long term productivity growth. However, policies for enhancing technical efficiency are not alone sufficient. Lacks of technological growth remain a major constraint for TFPG of the unregistered micro and small enterprises during all the phases of the entire period of the study. Therefore, recent government policies for the unregistered segment of the SSIs sector should focus primarily on technological upgradation along with efficiency improvement. Some of the
important factors restraining technological growth of this sector are lack of technological information, non-availability of skilled labour force, entrepreneurship problems, lack of managerial skills, high cost of production due to lack of capital resources, etc. Hence, policy efforts are needed to enable micro and small enterprises overcoming these constraints. In this context, the policy measures and schemes of the Ministry of MSMEs and the government of India for technology upgradation and productivity enhancement under the National Manufacturing Competitiveness Programme (NMCP) during 2008 would be very crucial for ensuring technological growth and thereby long term economic growth of the unregistered SSIs sector of India.

- The role of government policy for the development of the manufacturing sector [characterised by dualistic structure in labour and capital markets] is very crucial. The government has to implement policies and programmes pertaining to increased access to education, skill development, etc. that will raise productivity of the labour force engaged in the unregistered small scale sector so that the movement of workers from small scale to large scale sector increases, i.e. the share of large scale employment increases over time. The government should also aim at policies that make labour income/wages more proportionate between the small and large manufacturing sectors. In addition, policies for lowering the cost of capital in the capital markets of small scale sector are extremely important. In this regard, the role of government’s credit policy, trade and industrial policies are very important.

- Productivity growth is often taken as one of the determinants of competitiveness which further depends on technological conditions. From this view point, the results of the study indicate potential for a higher productivity and thereby a greater competitiveness of clustered MSEs industries than non-clustered. Furthermore, it implies clusters have implications of better technology than their non-clusters counterparts. The NMP considers MSEs as the base for the manufacturing sector in terms of enterprise and employment generation.

- The result of the study implies that MSEs clusters are important sources of employment generation in case of food products, textiles, leather and jewellery
industry. These industries have been emphasised in the NMP 2011 for creating large employment opportunities. Promoting clusters is therefore an important source of employment creation for the MSEs and thereby for the overall manufacturing sector. The manufacturing of machine tools industry has been given special emphasis in the NMP for deepening technological capabilities of manufacturing sector. The result of this study shows that for the machine tools industry, clustered MSEs have bigger economic size and higher labour productivity. But, the employment intensity is lower. Thus, promoting clustered MSEs of machine tools industry can be an important source of technological enhancement of the manufacturing sector. Manufacturing of electrical and transport equipment industries have been emphasised in the NMP for as the base for capital equipment for India’s infrastructure growth. Here also the results indicate clusters of MSEs have the capability to raise capital base of the manufacturing sector.

- The industry level disaggregation analysis of size and productivity indices, however, indicates that not all industries have a greater size and productivity of clusters than non-clusters. Hence, from policy point of view, these industries need particular attention on increasing productivity of the unregistered clustered MSEs. From policy perspectives, growth and development unregistered MSEs through enhancement of productivity should be integrated between cluster and non-cluster approaches. The government of India has taken different policy measures including MSE-CDP programme, diagnostic studies of selected clusters, soft and hard intervention, infrastructure development, and strengthening of industry-university linkages for developing and promoting clusters of MSEs. To substantiate these measures, the experiences of clustering of MSEs in other countries can also be taken as guidelines for India’s MSEs cluster development initiatives.

- In general, there is plenty of policy measures of the Government of support and promote of the SSIs of India. However, these are availed mainly by the registered SSIs. This study finds only about 14 percent of the unregistered MSEs are benefited from various policies and schemes in 2006-07. In addition, almost 90 percent of the unregistered enterprises are either not aware
of registration or not interested to register. Therefore, rather than implementing a separate set of policy measures for the unregistered sector, the existing policies need to be extended in a more comprehensive manner either by enforcing mandatory registration or by increasing awareness.

9.3. Potential extensions

- The measurement of growth and economic performance of the SSIs at the aggregate level can be adjusted for definitional changes over time.

- More recent evidence on efficiency performance of the SSIs at the disaggregate level can be provided.

- Determinants of TFPG at the industry level disaggregation can be analysed by considering industry-specific factors.

- The comparative analysis on performance of clusters and non-clusters can be made dynamic by extending the analysis for multiple time periods. Similarly, a panel framework may be considered for analysing the determinants of clustering of small enterprises.

- Allocation of the factors of production and measurement of productivity growth can be studied in disaggregate level such as state or industry level.

- The issue of inter-linkage between small and large enterprises and competitiveness of the SSIs can be studied from the perspective of promotion and development of clusters.