Chapter 5
Conclusion and Suggestions
CHAPTER 5

CONCLUSION AND SUGGESTIONS

The present study is a multi-dimensional approach covering literature from entrepreneurship (meaning, measurements and determinants), economic reforms (performance, impact on manufacturing industries) and small business (constraints, role of government and importance of small business). This chapter deals with main findings of the study, suggestions and areas open for research.

5.1 Main findings of the study

This study contributes to the existing literature in 3 ways. First, it covers the literature concerning entrepreneurship and discusses the different definitions cited by various authors along with different measurements and proxies used for entrepreneurship. Second, it assesses the impact of reforms through absolute growth variables along with productivity growth variables, which is a rare phenomenon in literature. Lastly, to analyse the impact, the study uses rare techniques (in particular fields) of multiple linear regression and data envelopment analysis (DEA).

It has been found that the concept of entrepreneurship evolved more than 150 years ago (Mill, 1848) but till date there is no consensus on what constitutes entrepreneurship. More than a century had passed but the researchers had failed to integrate these theories into a single universal theory. Cole (1969) mentioned that even after 10 years of research in a research centre, it was not possible to carve out a single definition of entrepreneurship as every researcher had a different notion of it.

Moving to the study of entrepreneurial venture, Bruyat & Julien (2000) find it one of the most complex in social sciences. The measurement and determinants of entrepreneurship also differs in every other study and brings out several measures of entrepreneurship. However, these different approaches helped the researchers to broaden the base of literature on entrepreneurship in regard to particular region and the prevailing conditions. The approach for measuring entrepreneurship is different in a developing country with that of a developed one. The most famous measures evolved after reviews are the TEA index by global entrepreneurship monitor (GEM), measures by OECD and by the World Bank along with measuring the start-ups within a recent time period, establishment measure of entrepreneurship, number of private businesses, number of small businesses etc. Very few researches have been done in
Indian context to conceptualise entrepreneurship or to measure it in any of the above mentioned criteria. Hence, this study tries to draw the measures of entrepreneurship in Indian context and further determine the variables for its estimation.

To accomplish its first objective, the study investigated impact of reform policies on variables concerning absolute growth of all the selected industries through quantitative analysis of industry level data during the period 1981-82 to 2010-11. The industry level data has been extracted from Annual Survey of Industries (ASI) published by Central Statistical Organisation (CSO) and made available through INDIASTAT database. The focus of study is only on registered sector and it does not include the unregistered industrial sector. To explore the impact of reform policies on growth of the concerned industries, the study highlighted three variables of absolute growth i.e., number of units, production and employment. The multiple linear regression has been used for assessing the impact of reform policies and SPSS 19.0 has been used to yield the results.

Heterogeneity is noticed in the results of impact of reform policies on the growth variables. The number of units’ model shows insignificant results in food, tobacco, wood and paper industries. Rather, the trend of time shows significant results in all industries which indicate that various other political and socio-economic factors (as captured by time variable) are responsible for growth in no. of units. On the other hand, results of rubber & plastic, textile and leather industries show significant impact of reform policies on growth of no. of units.

Moving to the production variable, food, rubber & plastic and wood industries have statistically insignificant impact of the reform policies on its growth. It shows that there is no relationship between the reform policies and growth of production in abovementioned industries. But the time variable have a significant impact and causes high variations in the growth of production. Further, tobacco, textile, leather and paper industries’ results show a positive relation between reform policies and growth of production and the impact is found to be statistically significant.

Employment growth is always considered crucial because it results into ultimate goals of reforms i.e., income growth and poverty alleviation. Siggel (2007) expected the employment growth of manufacturing industries to rise in long run but all the industries with an exception of tobacco industry are revealing statistically insignificant results. In tobacco industry, the results are statistically significant and there is a positive relation between reform policies and growth of employment. Also,
Chapter-5

Conclusion and Suggestions

the time variable in this case shows statistically insignificant results which indicates that growth in employment is mainly due to the impact of reform policies. The variation caused by time is very minimal.

To fulfill the second objective, the study compared total factor productivity growth of pre and post reform periods of all the selected industries during the same time period as mentioned before. Same source of data and sector type have also been used. Mathematical technique of Data Envelopment Analysis (DEA) has been used for estimation purpose and inputs and output series has been constructed after deflating from suitable deflators. The index used for estimation of TFP is Malmquist index and DEAP (2.1) computer programme has been used to yield the results. Observing the results, it is revealed that average of TFP during the pre-reform period is greater than the post reform period though the difference is not worth mentioning still it is greater in numbers. Comparing the pre and post-reform TFP values through the independent sample t-test, it is found that the difference between the two time periods is statistically insignificant in all the industries. The annual average growth rate is higher in few industries in post-reform era but it couldn’t signify the positive impact of the reforms. Thus, reform policies did not result in higher productivity in selected industries.

The third objective is fulfilled by using multi-stage output oriented DEA. DEAP (2.1) computer programme is again used and variable returns to scale (VRS) are assumed. The construction of inputs and output is same as above. The averages reveal that technical Efficiency (TE) is higher in the pre-reform era in all the 7 industries. Again, higher values in most of the industries are not worth mentioning. The results obtained from t-test reveal statistically significant difference for leather and rubber & plastic industries. There is a significant decline in TE of leather and rubber & plastic industries after the implementation of the reforms.

This discussion fulfills the fourth objective and observed that the effects of reforms do not vary across all the selected industries. Growth in all the industries is almost in same condition and the boost expected from the reforms is still unachieved.

The main objective of implementing reform policies was to create a competitive environment which should help in increasing the efficiency and productivity of Indian industry (Neogi & Ghosh, 1998). But this study does not find any rise in productivity and efficiency during the post-reform period. In fact 2 industries reported significant fall in efficiency in the post-reform era. Assessing the absolute growth of selected
manufacturing industries, it is observed that there is very limited impact of economic reforms on the industrial growth. The nature of economic reforms is said to be gradual (Chand & Sen, 2002) but the 20 year period of post-reforms is long enough to observe some gradual impact. However, observing the yearly values of productivity and efficiency, it is found that the decade immediately after policy implementation was registering lowest productivity and efficiency scores. It was only in the latter decade of post-reform period that situation started to improve. Das (2004) gave 2 possible reasons for this slowdown. First is the initiation of macroeconomic stabilisation programmes like import compression, inflationary pressures etc. which acted as a constraint for industrial production during this period. Second is the late commencement of mergers. The author also quoted that beneficial impact of the structural reforms can only be observed gradually. Comparison between the decades before and after policy implementation would have revealed a decline in all the growth and productivity variables and a negative impact of the reform policies. This leads to the conclusion that reforms have started to work gradually in favour of industrial development. But it does not necessarily means that the reform policies implementation was a failure. There are studies where many researchers had shown that the productivity had risen after liberalisation (Driffield & Kambhampati, 2003; Unel, 2003; Goldar & Kumari, 2003; Topalova, 2003; Krishna & Mitra, 1998; Topalova & Khandelwal, 2011). More than the reform policies, the decline in TFP of manufacturing industries is associated with decline in growth rate of agriculture (Goldar, 2004) and capacity underutilisation in the industrial sector (Goldar & Kumari, 2003). The Indian industry was experiencing an investment boom in the mid-1990s due to which the production capacities had raised (Uchikawa, 2001). But due to stagnant demand this investment boom resulted in decline in capacity utilisation.

5.2 SUGGESTIONS

The present study functions as an archetype for the researchers, academicians as well as for the executives by providing a comparative standard from Indian viewpoint. This study may serve the policymakers and academicians who seek to find impact of reform policies on industrial growth from different perspectives. This study also
serves as a guide as it covers vast literature base presenting various aspects of entrepreneurship development.

However, the following suggestions have been offered in the present study:

1. Government should balance the process of economic liberalisation so that those industries which are falling behind in the development process should be able to keep pace with the development and growth.

2. The policy reforms were very much needed due to ‘high cost’ and ‘poor quality’ industrialisation which was a result of India’s pre 1991 protected policies. But what was required and still needed to be controlled is the nature and pace of policy implementation. Though the policies have started to work in favour of manufacturing industries, still a strategic approach towards industrial policy is required for sustaining industrial output and employment growth.

3. The reform policies cannot produce beneficial effects on growth if the human resource lacks education and training. Therefore, it is suggested that proper education and training should be considered imperative for developing the human resource. For this purpose, the government is required to take initiatives and establish entrepreneurship development and training institutes. Along with this, the universities should be made well equipped for conducting regular training programmes.

4. Another bottleneck in the growth and development through reform policies is inadequate infrastructure (Joshi, 2007). In order to cope up with this bottleneck, it is suggested to establish more special economic zones (SEZs) with high level of infrastructure facilities.

5. The entrepreneurship development programmes (EDPs) should be made more diversified by providing technical know-how of business and by expanding the programmes to further levels.

6. It is suggested that the state government should help the entrepreneurs in state by removing major constraints from the path of their growth like financial constraints, economies of scale, infrastructural bottlenecks, etc.

7. The policies should be carried out in such a way that they should promote small business rather than protecting it. It is suggested to accelerate the process of gradual policy implementation to accelerate growth.
5.3 Directions for future research

The estimation of growth is not limited to only 3 variables nor do seven divisions provide a complete picture of whole manufacturing sector. Further, there are multiple approaches to estimate the total factor productivity (TFP) and technical efficiency (TE) and most of the time, they yield different results. Therefore, the debate on impact of economic reforms is in continuity since last two decades and it does not end here. Though significant contribution is done by this study, still there is a need for further enquiry. Several issues require further investigation as they have not been addressed in this study. Following directions for future research have been put forward:

1. This study has taken 7 industrial divisions of manufacturing sector for estimating absolute and productivity growth and the data is limited to the registered sector only. The unregistered sector, too, plays a very vital role in the growth and development of a nation, and is needed to be considered for future research. Examination of absolute and productivity growth in the unregistered sector will let us know whether the reform policies promoted this sector or not.

2. The indicators used for absolute growth are limited in this study. Though these are the most commonly used indicators, still a more vibrant picture can be drawn by adding more indicators. Therefore, future research should take into consideration more indicators of growth like investment, export, import etc.

3. This study is focussed on small business and establishment measures of entrepreneurship. However, there are different proxy measurements for entrepreneurship which need to be considered for future research.

4. The MSME sector is considered as an engine of growth for the economic development and its contribution in a country’s GDP cannot be neglected. Therefore, productivity and efficiency analysis of this sector should be given special attention in future researches.

5. The industries in this study represent main divisions of the manufacturing sector. Future researches can use a breakdown of divisions into lower levels in order to get more aggregated results.
REFERENCES

- Topalova, P. (2004). Trade liberalisation and firm productivity: The case of India (No.4-28). *International Monetary Fund*.
Chapter 5  Conclusion and Suggestions