Chapter 8
SUMMARY AND CONCLUSIONS

INTRODUCTION

FDI is usually focused on rapid industrialization and economic development of a country. The primary objective behind the permit to FDI is building up its industrial sector and the overall economic development of the nation. The means which it adopts usually have a decisive influence on the welfare of the people, the conditions of the economy and its capacity for growth. The increased role of FDI in the technical efficiency, productivity of the resources and increasing capacity in terms of international trade has made it a vital component for the growth of developing nations. Industrial development has a wider connotation with the FDI. The benefits of FDI are highly dependent on efficient utilization of resources. In short, it can be concluded that whether FDI increases the economic development of an economy, the different sectors and the firms operating in it. It is in this background that the present study is a meager attempt in this field to know whether FDI has helped the different firms operating in 8 different sectors in Indian economy to grow and become more profitable, and how it had affected the productivity of the firms.

Present study aims to empirically investigate the impact of inward FDI on the performance of eight Indian sectors and the firms operating in those sectors. The sectors which are included in the study are Steel and Iron; Food, Dairy and Food Processing; Textile, Engineering Goods and Engineering Equipments; Electrical Goods and Electrical Equipments; Automobile and Auto Ancillary; Pharmaceuticals and Drugs and Chemical Sector.

The main objective of the research study is "to understand the impact of inward FDI on performance of Indian firms: an empirical analysis" In addition to the main objective of the research study, the research study attempts to identify various sub-objectives stated as follows:
7. To study the impact of inward FDI on export performance of different firms in India.
8. To study the impact of inward FDI on different measures of profitability.
9. To analyse the role of inward FDI in size and growth performance of different firms of India.
10. To analyze the role of FDI in enhancing the productivity of different sample firms.
11. To analyze the spillover effects of FDI on Indian industry.
12. To draw some conclusions and policy implications from the analysis.

**Organization of the Study**

The study has been divided into 8 chapters. Chapter 1, introduces the study and discusses the theoretical aspect of FDI, its presence in different sectors and its role in enhancing economic development of the host countries by means of exports, productivity, spillovers and growth. Second chapter reviews the empirical studies and third chapter gives an outline of database and methodology. Fourth chapter examines the export performance of different firms in India. Fifth chapter empirically analyzes the role of FDI in increasing the profitability of sample firms. While the sixth chapter attempts to explore the role of FDI in enhancing the size and growth of different firms, the seventh chapter examines the impact of FDI on the productivity of different firms and spillover effects of FDI. The last chapter summaries the findings and brings out the policy implications.

**Data Base and Methodology**

To fulfill the above said objectives a substantial sized sample of firms from various industry groups and sectors has been taken. The sample consists of 195 firms from 8 different sectors which are Steel and Iron; Food, Dairy and Food Processing; Textile, Engineering Goods and Engineering Equipments; Electrical Goods and Electrical Equipments; Automobile and Auto Ancillary; Pharmaceuticals and Drugs and Chemical Sectors. For the desired analysis, various statistical and econometric techniques like Growth rates, Tobit Fixed Effect Model, Granger Causality, Vector Autoregression Model, Dynamic Panel GMM are employed in the study. The main findings of the study are as follows:
FDI and Export Performance

In the research study the growth of exports is analysed and it is found that 57 firms out of the selected firms in the study (195 firms) have mean growth of exports below Rs 5 crores. However the large number of firms showed an average growth of exports between Rs 5 crores to Rs 50 crores. There are 31 firms whose mean export value ranged between Rs 50 to 200 crores and 42 firms recorded marvelous growth in terms of mean exports which are more than 200 crores. It is observed that distribution of firms in different categories is also even, Along with this, the study shows that there are firms that have very small increase in the exports over a period of time but there are firms who showed incremental growth in terms of mean exports over a period of time. Hence it can be concluded that FDI has improved the average mean exports of 70 percent (as indicated in chapter 4) of the firms but there are few firms whose export performance decreased with the FDI.

In the research study the analysis is done in order to study the long term trend of exports. In the study it is found that there are 17 firms whose trend values (growth per year) are more than 100 crores. It is observed that for the large number of firms, long term performance (trend) of exports is positive and indicates that there is increasing trend in maximum number of firms. In addition to this, 43 firms had shown the negative trend in terms of exports which is 22 percent out of the total firms included in the study. There are 30 firms that have shown a trend of increase in exports up to Rs 1 crore annually, 35 firms showed the increase in trend of exports from Rs 1 crore to Rs 4 crore. There are 46 firms which had shown the increase in trend of exports from Rs 4 crore to Rs 30 crores annually. Forty one firms out of the total sample have shown an increasing trend of exports which is more than 30 crores annually. It clearly indicates that the sample firms had shown an increasing as well as decreasing trend in terms of exports.

In case of the compound annual growth rates (CAGR/EGR), the results indicate that there are 5 firms who had shown negative growth rate in the Steel and Iron industry,4 firms in the Food and Dairy Processing industry,3 firms in Textile sector, 5 firms in Pharmaceuticals and Drug sector,3 firms in Electrical and Electrical Equipments sector,
3 firms in Engineering Goods sector, 5 firms in Chemical sector and only 1 firm in Auto and Auto Ancillary sector which had shown negative growth rate annually. On the contrary individually few firms like JSW steels, Jindal Saw ltd., Monnet Ispat ltd., Man Industries, Welspun ltd., Harrisons Malayalam Ltd., Shree Renuka Sugars ltd., Gayatri Biorganics ltd., Aunde India ltd., Bombay Rayon Fashions ltd., Birla Cotsyn India ltd., Astrazenacea Pharmaceuticals ltd., Alicon Castalloy ltd. performed very well and their growth rates are more than 30 percent. One firm Aunde India ltd. had shown an exceptional growth of 104 percent during the study period.

The sectoral summary descriptives of the average growth performance of different sectors of exports indicate that the mean sectoral growth of Chemical sector is lowest followed by the Engineering Goods and Equipments. The sectors that has shown phenomenal growth in terms of their mean exports as well as the standard deviation are Steel and Iron followed by Auto and Auto Ancillary sector.

The trend values among the different sectors computed in the study indicate that the value in the Engineering Goods and Equipment sector is lowest in terms of exports while the trend value in Steel and Iron is highest. The two sectors i.e. Engineering Goods and Chemical have shown almost similar trend of approximately 200 crores in exports while two sectors (Electrical Goods & Equipments and Food & Food Processing Industry) have shown an average trend of 800 crores annually. Steel and Iron sector has shown the trend value of Rs 1930 crores annually.

The sector wise compound annual growth rates (CAGR) during the study period explain that Textile sector has shown a CAGR of 9.5 percent which is the lowest in sample where as the Auto & Auto Ancillary sector has shown the highest compound annual growth rate in terms of exports. Pharmaceuticals & Drugs sector has shown the second lowest growth rate in terms of exports. Three sectors had recorded CAGR of more than 15 percent, while Steel and Iron had shown CAGR of more than 20 percent and one sector i.e. Auto and Auto Ancillary has shown CAGR of more than 25 percent. The study indicates one important result that with the increase in FDI in different sectors over a period of time, few sectors like Auto sector and Steel & Iron have performed outstandingly while sectors like Chemicals and Engineering Goods & Equipments have not performed very well. Here the growth rate has remained limited to 10 percent.
FDI and Profitability of Indian Firms

In this chapter the extent of foreign direct investment is analysed in different firms in order to know about the summary statistics of FDI. It has been observed that there are few firms whose mean FDI is less than 20 percent; On the contrary there are few firms whose mean FDI is more than 50 percent or in other words, FDI is very high. Substantial differences exist between the different sectors. There are 39 firms where the extent of foreign presence is low whereas there are 59 firms, where the extent of foreign direct investment is moderate, and there are 44 firms, where the extent of foreign investment is very high which is above 69 percent. The results also indicate that maximum number of firms were in the range of 20 to 40 percent of FDI.

In order to analyse the profitability of the firms, three measures of profitability operating profit, earning per share (EPS) and profit after tax (PAT) were analysed with the help of fixed effect model. The results of the study depict that there exists significant impact of FDI on the profit after tax of the firms. The firms which had best utilized FDI in order to increase its PAT are Tata Steels Ltd. followed by Bharat Heavy Electrical Ltd. Among the top 10 firms which had utilized FDI in order to increase its PAT, 4 belong to Steel and Iron, while 2 belong to Auto sector, 2 belong to Pharmaceutical sector while 1 each belonged to Engineering and Food & Dairy sector. One of the findings of the study indicates that there exists significant impact of FDI on the operating profits of the firms. Further, FDI has positive impact on the profitability of selected firms. The firm which had best utilized FDI in order to increase its profitability is Tata Steels Ltd out of total firms included in the study. Eaton Fluid Power Ltd. is the firm which had performed worst out of all 195 firms included in the study. The results of the time period fixed effect model indicate that the impact of FDI on operating profits significantly varied with time.

Another finding of the study indicates that there exists a significant impact of FDI on the earnings per share of the firms. The results of the time period fixed effect model indicate that the impact of FDI on EPS significantly vary with time. The results also indicate that after FDI coming into Indian corporate firms, the EPS initially decreases;
then after 5 to 6 years the EPS of the firm increases exponentially then it again decreases. Although the decrease is not in negative terms but the growth in performance has decreased.

**FDI and Growth Performance of Different Firms**

The results of the study concluded that there exists significant impact of FDI on the sales growth of the firms. Also FDI has a positive impact on the sales of selected firms. BHEL is at the top among all the firms included in the sample whose sales performance is highest followed by Tata Steels Ltd., Siemens Ltd. is at the bottom among all the firms included in the sample whose sales performance is lowest.

The research study concluded that FDI has positive impact on market capitalisation of the firm. Hindustan Unilever Ltd. is at the top among all the firms included in the sample whose market capitalisation is highest followed by BHEL Eaton Fluid Power is at the bottom among all the firms included in the sample whose market capitalisation performance is lowest. The results of the time period fixed effect model indicate that the impact of FDI on market capitalisation growth performance does not vary with time.

In the research study, the Pair wise Granger Causality between market capitalisation and FDI is tested. The results indicate that there is no causal relationship between market capitalisation and FDI. The reason of no causality may be due to no direct impact of FDI on capitalisation. Similarly, the Pair wise Granger Causality between sales and FDI, and total assets and FDI is tested, the results indicate that there is causal relationship between sales, total assets and FDI.

In the study panel VAR/Block Exogeneity Wald test is applied to further find the causality between FDI and other variables. It has been concluded in the study that market capitalisation is having strong significant causal relationship with the sales revenue of the firm. Sales are having strong significant causal relationship with the market capitalisation, fixed assets, total assets and net current assets of the firm. Total assets are having strong significant causal relationship with the market capitalisation,
fixed assets, net current assets of the firm. FDI is having strong significant causal
relationship with the market capitalisation, fixed assets, sales of the firm, total assets of
the firm.
In order to prove the validity of Gibrat’s law and Evan’s model, Dynamic Panel GMM
has been applied. The results indicate that all the three lagged values of size have a
significant impact on the growth of the firm. In this model the three lagged values of the
growth of the firm are considered as instrument variables and found to be significant.
Hence the study concluded that Gibrat’s law could not been proved because the present
size and its past growth history has affected the firm size. The size is also influenced by
FDI and the interaction of age and size.

**FDI and Productivity of Firms**
In another chapter, the results of cross section fixed effect model suggest that there
exists significant impact of FDI on the labour productivity of the firms. The positive
regression coefficient of the model indicates that FDI has a positive impact on the
labour productivity of selected firms. Jindal Stainless ltd. is at the top among all the
firms included in the sample whose labour productivity is highest followed by BHEL.
GKN Driveline (India) ltd. is the firm among all the firms included in the sample whose
labour productivity is lowest. Also the study indicates that the impact of FDI on labour
productivity does not significantly vary with time. The labour productivity of the firms
initially decreased; then after 7 to 8 years the labour productivity of the firms increased
exponentially.

The study points towards the significant impact of FDI on the capital productivity of the
firms. Tata Steels Ltd. is at the top among all the firms included in the sample whose
capital productivity is highest followed by JSW steels ltd. Tudor India Ltd. is at the
bottom among all the firms included in the sample whose capital productivity
performance is lowest.
It is concluded in the study that although the labour is considered as one of the
important input for production of the firms but the results of Pair wise Granger
Causality between labour and FDI indicate no causal relationship between labour and
FDI. Panel VAR Granger Causality/ Block Exogeneity Wald Test also indicate about no causal relationship between FDI and labour productivity.

Further, the results of Pairwise Granger Causality between capital and FDI indicate that there exists significant causal relationship between capital and FDI. Panel VAR Granger Causality/ Block Exogeneity Wald Test also confirm the causality of FDI and capital. The reason of causality is the direct impact of FDI on purchase of machinery, equipments and other physical assets which will lead to technology upgradation in the firms. It implies that even labour productivity can be improved by use of better technology.

The results of Pairwise Granger Causality between levels of output and FDI indicate significant causal relationship between FDI and output levels. It may be concluded that FDI helps in increasing the level of output. The results of Panel VAR Granger causality/ Block Exogeneity Wald Test of FDI with other variables indicate that FDI is not having strong significant causal relationship with the output, labour, capital and material inputs of the firm. It can also be concluded that level of foreign investment in a particular firm is not influenced by any of the measures of productivity. It can be concluded from the combined model of productivity (Fixed Effect) indicates that labour, capital, material inputs and FDI are found to have significant impact on the output level of the firms. The results of the Dynamic Panel GMM model indicate that the three lagged values of output have a significant impact on the current output of the firm. The three lagged values of the output of the firm are considered as instrumental variables and found to be significant. In addition to this the productivity or output levels of the firm are significantly influenced by labour, capital and the material inputs.

The study also concluded the presence of horizontal spillovers in two sectors i.e. Engineering Good and Engineering Equipments and Electrical Goods and equipments. In rest of the sectors there is no clear evidence regarding the existence of horizontal spillovers.
Implications

There is no doubt that FDI has worked as a panacea for the economic development of different countries and the firms operating in those countries.

- According to the present study, exports growth performance of different firms is significant. This implies that with the exposure of the firms to competition, their performance in exports had improved.
- There are mixed results in case of the profits of the sample firms. Few firms have become highly profitable after receiving FDI and few firms did not respond to FDI in terms of profitability. There is one interesting fact revealed in the study that profitability does not increase in the same year or next following year in which it has received FDI. The effects have been realized after few years (say 5-6 years).
- The firm’s growth has not been related to FDI. This is a clear indicator that foreign firms although invest in Indian firms but it does not lead to growth of these firms because of the high expenses being incurred on the purchase of raw material, hefty fee licenses from the governments and transfer of the resources into their home country. So not only FDI but congenial domestic factors also determine the growth of any firm.
- Productivity of the labour does not improve even after receiving for considerably longer period of time. This puts light on the fact that foreign firms do not provide skill efficiency to the Indian labour.
- Multinationals offer more lucrative contracts to its potential suppliers, contracts that can be obtained under certain conditions such as improved quality, on time delivery, and technological sophistication. This improves the production climate.
- The multinational corporations increase the competition in the local market that in turn forces the local firms to use their resources more efficiently. The presence of MNCs enables domestic firms to increase their efficiency by observing the MNC’s more sophisticated operations. This argument has also been supported by the study as there are few sectors that have realized...
Horizontal spillovers. The presence of FDI in those sectors had exposed them to new technologies and effective use of resources in order to enhance their productivity. It can be implied that the expected benefits of the FDI are not being reaped to a desirable extent in this context; based on the above observations in the study in India, the following suggestions are drawn in this context;

- One of the important expected benefits from FDI is the increase in profit level of different firms. Most of the time the profits of the firms are either not reinvested or ploughed back to their home country. This acts as a hindrance in the future growth performance of the domestic firm. To continue with the same momentum the profits earned from the host countries should be either reinvested or there should be some time limit for ploughing back their profits.

- The firm’s growth has not been influenced by FDI. This is a clear indicator that Foreign firms although invest in Indian firms but it does not lead to growth of firms because of the high expenses being done to purchase raw material, to get licenses from the governments and transfer the resources into their home country.

- Some of the reforms such as those relating to labour laws, elimination of red tape cumbersome bureaucracy, and financial sector reforms should be implemented to reap the benefits from FDI.

- A distortion free economic environment is essential for the growth of both foreign and domestic investments. Some of the proposed incentives for FDI, however, may generate rather than eliminate distortions wherever the spillovers effects are not realised. So the government initiatives and incentives should be intensified in the sectors towards domestic firms where the spillovers effects are not observed like Food and Food Processing, Textiles etc.

- Government should extend more support to the MNCs and intensify FDI in the sectors like Engineering Goods and Engineering Equipments and Electrical Goods and Electrical Equipments where positive spillovers have been observed. More expenditure should be done on R&D, so that the benefits could also be realised in future time period.
Government should encourage domestic investment and local suppliers along with FDI, particularly in Food and Food Processing Sector, where major amount of raw material is to come from agriculture sector. This type of industry being labour intensive will absorb disguisedly employed agricultural workers to industry. These workers should be trained domestically via exposure to the foreign technology so that there is no mismatch between domestic labour and foreign capital.

Increased autonomy over decision-making and implementation of reforms to the state governments in India is yet another suggestion for attracting increased volumes of FDI. There is some merit in the proposal as it would not only stimulate competition between the states for FDI, but also considerably reduce delays and red tape in the approval procedures controlled by the central government.

According to Global Competitiveness Report 2014-15 issued by World Bank, India's low ranking in the “International League Tables on Competitiveness” and its high ranking on corruption, both can be cited as deterrents to FDI. India though ranks high amongst the developing countries on the so-called FDI outlook index which is based on the current market size and its potential for growth. However, when judged on the basis of low rank on competitiveness index, It is at once seen to be a poor bet for FDI. The suggestion here is that if only India could move up the League tables on Competitiveness Index it would be able to attract large volumes of FDI.

There is no reason to believe that inflows of large volumes of FDI alone necessarily promote the growth of the different sectors and economy as a whole. The optimum level of FDI a country should aspire for is conditioned by the history and the stage of its industrialisation, the sources of FDI it has, ease of access to and its endowments of co-operant factors and the sort of institutions it possesses, facilitate and monitor the operations of foreign firms, which further lead to generation of spillovers effects to the host economy.

The study had found that a positive effect of MNC’s and associated FDI on the productivity of Indian domestic firms occurred only, When domestic firms
with in the sector had no wider gaps in their size. It indicates that FDI in a particular sector will be more effective if the smaller firms are given the opportunity to grow to the level of large firms.

- The open door policies, which include relaxation of limits on foreign equity participation, reduction of corporate tax rates, Relaxation of labour laws which at present do not allow retrenchment of workers or closure of loss making enterprises, and promotion of export processing zones (EPZs) are a welcome step to promote FDI.

**Scope for Future Research**

Based on the above results, no clear conclusions can be drawn, concerning Profitability, Productivity and Growth Performance of firms who are receiving FDI. The future work could be extended in various directions not considered in this study. First, the future research on FDI can also be done in the light of vertical spillovers generation in different sectors and the impact of spillover interactions on various productivity and growth measures. It may be possible that both Horizontal and Vertical spillovers together can lead to increase in productivity and growth. Second, using the data on R&D and technology, the knowledge spillovers can be found out and their impact on the productivity of different firms. Third the impact of FDI can be seen country wise, and can be examined that which country specific FDI has more influence or not on the productivity and growth of firms.