CHAPTER 8

SUMMARY, FINDINGS, SUGGESTIONS AND CONCLUSION

8.1 SUMMARY

The present study comprises of eight chapters.

The first chapter deals with Introduction, Growing Importance of FDI, Indian Pharmaceutical Sector, Objectives of the Study, Summary of Review of Literature, Need for the Study, Objectives of the study, Methodology of the study, Secondary Sources of Data, Sample Selection, Scope of the study, Limitations of the study and Cauterization Scheme.

The second chapter deals with Review of Literature which is categorized as

iii. Studies on FDI in general

iv. Impact Studies of FDI

In Indian context, due to the change in Foreign Direct Investment policy across the industries and difficulty in obtaining the firm level data for a longer time period, it is recommended that there is need to study the impact of FDI on performance of the firms (Chibber and Majumdar, 1999).

It is found in most of the studies that the impact of FDI has been assessed on the macro-economic factors such as GDP, growth rate, forex earnings, employment rate, inflation rate, poverty etc. as well as micro economic factors such as labor productivity, firm level imports, exports, spill over effect (operational efficiency, managerial efficiency) etc., but firm level studies to assess the impact of FDI on the financial
performance of FDI-based companies individually and also the impact of magnitude of FDI on the financial performance of FDI-based companies has not been conducted. (Sudershan K, 2007)

The third chapter deals with Foreign Direct Investment in India: Concept, Regulatory Framework and Growth which includes Introduction, Conceptual issues, Definitions, FDI Entry Routes and CAPS, FDI Policy in India1991, 2006 and 2010, FDI Prohibited Sectors, FDI Equity Inflows in India since 1991, Country-wise FDI inflows in India, Sector-wise FDI Inflows in India, trends of FDI inflows in India and growth rate.

The fourth chapter deals with Indian Pharmaceutical Sector: An Overview which includes Introduction, Global Pharmaceutical Market, History Indian Pharmaceutical Industry, Growth of Indian Pharmaceutical Industry, Indian Pharmaceutical Industry and TRIPS, Indian Pharmaceutical Sector and R&D, Six Sigma in Indian Pharmaceutical Industry, Mergers and Acquisitions in Indian Pharmaceutical Industry, Indian Pharmaceutical Industry and Foreign Trade, Global Recession and Indian Pharmaceutical Industry, Foreign Direct Investment in Indian Pharmaceutical Industry, Indian Pharmaceutical Industry and FDI- Government initiative, Trends in FDI Equity inflows in Indian Pharmaceutical Sector with Growth rate and Share of Pharmaceutical FDI in Total FDI Equity inflows.

The fifth chapter deals with the financial performance analysis of the select FDI-based companies using selected financial ratios. The ratio
used in this study for analyzing financial performance are broadly classified as

i. Profitability Ratios

ii. Liquidity Ratios

iii. Capital Structure Ratios

iv. Turnover Ratios

v. Expenses Ratio

vi. Growth Ratios

Eighteen (18) Select-FDI based Companies in the Indian Pharmaceutical Sector are considered for the study.

The sixth chapter deals with Financial Performance of FDI and Non-FDI Companies in the Indian Pharmaceutical Sector. A sample of 170 companies are considered for the study, from which 18 companies are identified as FDI-based companies and the remaining 152 companies as Non-FDI Companies. The Pharmaceutical companies in India consistently listed for a period of 10 years from 2000-01 to 2009-10 and whose data is available at least for a period of 5 years are considered for the study. The analysis has been done using selected financial ratios.

The seventh chapter deals with Impact of Foreign Direct Investment on the Growth of Pharmaceutical Sector in India. Promoter's pattern i.e. percentage of Foreign Promoters in the capital structure of the companies (based upon IMF, BOP, Definition) and amount of FDI separately have been considered as dependent variables are considered as independent variable and selected financial ratios and important variables (amount)
are considered as dependent variables. Simple regression analysis has
been run using SPSS 16.0 version to assess the impact of FDI on the
growth of Indian Pharmaceutical Sector.

Eighteen (18) consistently Listed FDI-based companies have been
considered for the study. The analysis has been carried out for the
companies on both individual basis and aggregate basis. This Chapter is
divided into two (2) parts. Part I and Part II.

Part I: It deals with assessing the Impact of FDI (quantum) on Select
Financial Variables considering Individual and Aggregate parameters

Part II: It deals with assessing the Impact of FDI (foreign promoter quota)
on the Financial Performance of Selected FDI-based Pharmaceutical
Companies considering Individual and Aggregate parameters

8.2 FINDINGS OF THE STUDY:

8.2.1 FDI in India and Indian Pharmaceutical Sector

- During the post-liberalization period, the FDI inflows in India is on an
  increasing trend. The FDI inflows increases continuously from 1991-92
to 1997-98 and 2000-01 to 2009-10, but decreases during 1999-2000,
2002-03 and 2003-04.

- During the year 2007-2008, FDI inflows are Rs.98,664 crores with an
increase of more than Rs.18000 crores over the previous year, which
reveals that there is no influence of global financial crisis on FDI
inflows in India.

- For the years 1992-93, 1994-95 and 2006-07, the increase in FDI
inflows is very high and has recorded more than double over the previous year.

- The country-wise FDI inflows in India is highest from Mauritius which contributes to more than 40% of the total FDI inflows.

- The sector-wise FDI inflows in India showed a varying trend. In the early 1990s, the manufacturing sector, automobile sector and electrical equipments sector attracted maximum FDI inflows but later on the service sector is seen as the top sector attracting maximum FDI inflows.

- The Drugs and Pharmaceutical Sector during the years 1991 till 2005 ranked among the top 10 sectors attracting the highest FDI inflows but during the years 2007 to 2010, the FDI inflows gradually got reduced and the Pharmaceutical Sectors’ ranking fall down and declined to 16th position.

- The growth in FDI declined during the years 1992-93 to 1999-2000, but further increased in 2001-02. The growth in FDI again declined in 2002 to 2004. For the years 2006-2007 to 2009-2010, the growth in FDI inflows increased over the previous years. It is highest during 2006-07 and negative during the years 1998-99, 1999-2000, 2003-04 and 2004-05. During the years 1992-93, 1994-95 and 2006-07, the growth rate recorded is more than 100% over the previous years. For the year 2009-10, the growth rate recorded is 0.37% which is very low.

- The FDI in IPI during the year 1991-92 is 11.75% of the total FDI inflows in to the country, but gradually decreases to 0.7% in 1992-
93, 7.6% in 1993-94 and 0.7% in 1994-95. FDI as a percentage of total FDI considerably showed a higher percentage in the years 2003-04 and 2004-05 and 2005-06 amounting to 4.1%, 7.8% and 3.1% respectively. FDI further declined to 0.6% in 2008-09 and 0.8% in 2009-10. It is also evident that the rate with which FDI inflows are increasing in India is higher than that of FDI inflows in Indian Pharmaceutical Industry.

- The growth rate of FDI in IPI is high during the years 2003-04 and 2004-05 to an extent of more than 100% over the previous year.
- The Compounded Annual Growth Rate (CAGR) of FDI inflow in India is 35.05% and FDI inflows in Indian Pharmaceutical Sector is 17.36%.

### 8.2.2 Financial Performance of Select-FDI based Companies

- The financial performance analysis of Abbott India Ltd reveals that the profitability and liquidity position is satisfactory whereas the long-term solvency and activity ratios reveal a poor performance. The R&D expenses ratio is very low. As far as growth ratios are concerned sales and assets show a consistent growth.

- The financial performance analysis of Astrazeneca Pharma India Ltd reveals that the profitability, liquidity and efficiency(measured through activity ratios) is satisfactory whereas the long-term solvency ratios reveal a poor performance. The R&D expenses ratio is very low. As far as growth ratios are concerned sales and assets show a consistent growth.
• The financial performance analysis of Aventis Pharma Ltd reveals that the profitability and liquidity position is satisfactory whereas the long-term solvency is poor and activity ratios reveal a good performance marginally. The R& D expenses ratio is very low. As far as growth ratios are concerned assets show a consistent growth.

• The financial performance analysis of Biocon Ltd reveals that the profitability and liquidity position is satisfactory whereas the long-term solvency is poor and activity ratios reveal a good performance marginally. The R& D expenses ratio is very low. As far as growth ratios are concerned sales and assets show a consistent growth.

• The financial performance analysis of Fresenius Kabi Oncology Ltd reveals that the profitability position is poor and liquidity position is below the standard norms. The long-term solvency and activity ratios reveal a poor performance. The R& D expenses ratio is very low. As far as growth ratios are concerned sales and assets show a consistent growth.

• The financial performance analysis of Fulford (India) Ltd reveals that the profitability position is marginally good and the liquidity position is satisfactory. The long-term solvency shows a poor performance whereas activity ratios reveal an improvement in performance. The R& D expenses ratio is very low and negligible. As far as growth ratios are concerned, these ratios show a mixed trend with a low growth rate.

• The financial performance analysis of Glaxosmithkline Pharmaceuticals Ltd reveals that the profitability and liquidity
position is satisfactory whereas the long-term solvency is poor. The activity ratios show an improvement in performance. The R&D expenses ratio is very low and negligible. As far as growth ratios are concerned assets show a consistent growth.

- The financial performance analysis of K D L Biotech Ltd reveals that the profitability and liquidity position is unsatisfactory and below norms. The long-term solvency and activity ratios also reveal a poor performance. The R&D expenses ratio is very low. As far as growth ratios are concerned, these ratios are very low and the growth performance is poor.

- The financial performance analysis of Kerala Ayurveda Ltd reveals that the profitability and liquidity position is unsatisfactory and below the norms. The long-term solvency performance is good whereas the activity ratios reveal a poor performance. The R&D expenses ratio is very low. As far as growth ratios are concerned sales and assets show a mixed trend.

- The financial performance analysis of Matrix Laboratories Ltd reveals that the profitability performance is satisfactory whereas the liquidity and long-term solvency position is poor. The activity ratios reveal a poor performance. The R&D expenses ratio is very low. As far as growth ratios are concerned, these ratios are positive with a consistent growth.

- The financial performance analysis of Merck Ltd reveals that the profitability and liquidity position is satisfactory whereas the long-
term solvency position is poor. The activity ratios reveal a healthy performance. The R&D expenses ratio is very low. As far as growth ratios are concerned, these ratios are positive with a consistent growth.

- The financial performance analysis of Novartis India Ltd reveals that the profitability and liquidity position is satisfactory whereas the long-term solvency position reveals a poor performance. The activity ratios reveal a healthy performance. The R&D expenses ratio is very low. As far as growth ratios are concerned, they show a mixed trend with a low growth rate.

- The financial performance analysis of Pfizer Ltd reveals that the profitability and liquidity position is satisfactory whereas the long-term solvency position reveals a poor performance. The activity ratios reveal a healthy performance. The R&D expenses ratio is very low. As far as growth ratios are concerned, they show a mixed trend with marginally better growth rate in sales.

- The financial performance analysis of Ranbaxy Laboratories Ltd reveals that the profitability position shows a mixed trend with a marginally good performance. The liquidity position measured is satisfactory whereas the long-term solvency and activity ratios reveal a poor performance. The R&D expenses ratio is slightly high and above the industry standards. As far as growth ratios are concerned, they show a mixed trend with marginally better growth rates.

- The financial performance analysis of Sandu Pharmaceuticals Ltd
reveals that the profitability is marginally good but with a decreasing trend. The liquidity position measured is satisfactory whereas the long-term solvency and activity ratios reveal a poor performance. The R&D expenses ratio is negligible. As far as growth ratios are concerned sales and assets show a positive growth rate.

• The financial performance analysis of Solvay Pharma India Ltd reveals that the profitability and liquidity position is satisfactory whereas the long-term solvency position is very poor and activity ratios reveal a poor performance with a declining trend. The R&D expenses ratio is negligible. As far as growth ratios are concerned sales and assets show a consistent growth.

• The financial performance analysis of Wanbury Ltd reveals that the profitability position is marginally good with a mixed trend and liquidity position is unsatisfactory. The long-term solvency position is improving but the activity ratios reveal a poor performance. The R&D expenses ratio is negligible. As far as growth ratios are concerned, these ratios are positive with a consistent growth.

• The financial performance analysis of Wyeth Ltd reveals that the profitability and liquidity position is satisfactory whereas the long-term solvency position is very poor and the activity ratios reveal a mixed trend. The R&D expenses ratio is very low. As far as growth ratios are concerned, these ratios show a mixed trend.

• The profitability performance of FDI-based companies measured through NPM, ROTA, RONW and ROCE is satisfactory for Abbott
India Ltd, Astrazeneca Pharma India Ltd, Aventis Pharma Ltd, Biocon Ltd, Fulford (India) Ltd, Glaxosmithkline Pharmaceuticals Ltd, Matrix Laboratories Ltd, Merck Ltd, Novartis India Ltd, Pfizer Ltd, Ranbaxy Laboratories Ltd (marginally good with a mixed trend), Sandu Pharmaceuticals Ltd (marginally good with a decreasing trend), Solvay Pharma India Ltd, Wanbury Ltd. (marginally good with a mixed trend) and Wyeth Ltd

- The liquidity position of the companies measured though current ratio & quick ratio indicates the ability to meet current obligations is satisfactory and has improved during the period of study for the companies such as Abbott India Ltd, Astrazeneca Pharma India Ltd, Aventis Pharma Ltd, Biocon Ltd, Fulford (India) Ltd, Glaxosmithkline Pharmaceuticals Ltd, Merck Ltd, Novartis India Ltd, Pfizer Ltd, Ranbaxy Laboratories Ltd, Sandu Pharmaceuticals Ltd, Solvay Pharma India Ltd and Wyeth Ltd.

- The long-term solvency (capital structure) measured though debt equity ratio & proprietary ratios is very poor and most of the firms are managing with negligible debts. These firms include Abbott India Ltd, Astrazeneca Pharma India Ltd, Aventis Pharma Ltd, Biocon Ltd, Fresenius Kabi Oncology Ltd, Fulford (India) Ltd, Glaxosmithkline Pharmaceuticals Ltd, K D L Biotech Ltd, Matrix Laboratories Ltd, Merck Ltd, Novartis India Ltd, Pfizer Ltd, Ranbaxy Laboratories Ltd, Sandu Pharmaceuticals Ltd, Solvay Pharma India Ltd and Wyeth Ltd.

- An efficiency of the FDI-based companies measured through stock
turnover ratio, inventory ratio & assets turnover ratio is satisfactory for the companies such as Astrazeneca Pharma India Ltd, Aventis Pharma Ltd (marginally good), Biocon Ltd (marginally good), Fulford (India) Ltd (improvement in performance), Glaxosmithkline Pharmaceuticals Ltd (improvement in performance), Merck Ltd and Novartis India Ltd.

- The R&D expenses ratio is very low and marginally increased during the period of study but is below the industry average for companies such as Abbott India Ltd, Astrazeneca Pharma India Ltd, Aventis Pharma Ltd, Biocon Ltd, Fresenius Kabi Oncology Ltd, Fulford (India) Ltd, Glaxosmithkline Pharmaceuticals Ltd, K D L Biotech Ltd, Kerala Ayurveda Ltd, Matrix Laboratories Ltd, Merck Ltd, Novartis India Ltd, Pfizer Ltd, Sandu Pharmaceuticals Ltd, Solvay Pharma India Ltd, Wanbury Ltd and Wyeth Ltd.

- As far as growth ratios are concerned, the growth in sales and assets is consistent for the companies such as Abbott India Ltd, Astrazeneca Pharma India Ltd, Aventis Pharma Ltd, Biocon Ltd, Fresenius Kabi Oncology Ltd, Glaxosmithkline Pharmaceuticals Ltd, Matrix Laboratories Ltd, Merck Ltd, Pfizer Ltd, Ranbaxy Laboratories Ltd, Sandu Pharmaceuticals Ltd, Solvay Pharma India Ltd and Wanbury Ltd.

- Irrespective of the percentage of foreign promoters in the promoters’ quota, the profitability and liquidity position of FDI-based companies is satisfactory.
8.2.3 Financial Performance of FDI and Non-FDI based Companies

- The Profitability performance of FDI based companies (measured through NPM) is better than Non-FDI based companies. The profitability performance measured for both FDI Companies and Non-FDI companies is least during the year 2008-09 which may be due to the impact of global financial crisis.

- The liquidity position measured through current ratio reveals that the liquidity position over the period of study is better for FDI-based companies as compared to Non-FDI based companies.

- The long-term solvency (measured through D/E ratio) reveals that both FDI and Non-FDI companies show a low mix of debt in the capital structure whereas the long-term solvency (measure through proprietary ratio) of FDI Companies is better than Non-FDI companies.

- The efficiency of FDI Companies (measured through stock turnover ratio) is better than Non-FDI Companies.

- The growth in sales of FDI based companies and Non-FDI based companies shows a mixed trend over the period of study.

- The growth in PBIT is better for FDI based companies than Non-FDI companies during the period of study for most of the years.

8.2.4 Impact of FDI on Select FDI-based Indian Pharmaceutical Companies

- FDI significantly influences the sales of Astrazenca Pharma Ltd, Janssen-Cilag (India) Ltd, Galxsmithline Pharma Ltd, Kerala Ayurveda Ltd, Merck Ltd, Novartis India Ltd, Pfizer Ltd, Sandu Pharmaceuticals Ltd,
Solvay Pharma India Ltd.

- FDI significantly influences the profitability (as measured by PBIT) in the case of Fulford (India) Ltd, Glaxosmithkline Pharma Ltd, KDL Biotech Ltd, Kerala Ayurveda Ltd, Sandu Pharma Ltd, Solvay Pharma India Ltd.

- FDI significantly influences the capital employed of Fulford (India) Ltd, Glaxosmithkline Pharma Ltd, KDL Biotech Ltd, Kerala Ayurveda Ltd, Novartis India Ltd, Pfizer Ltd, Sandu Pharma Ltd, Solvay Pharma India Ltd, & Wyeth Ltd.

- FDI significantly influences Net Profit Margin only in case of Kerala Ayurveda Ltd.

- FDI significantly influences ROTA in the case of Abbott India Ltd, Glaxosmithkline Pharma Ltd, Ranbaxy laboratories Ltd & Solvay Pharma Ltd.

- FDI significantly influences RONW in the case of Abbott India Ltd, Matrix laboratories Ltd, Ranbaxy Ltd, Solvay Pharma Ltd.

- FDI significantly influences ROCE in the case of Astrazeneca Pharma India Ltd. Ranbaxy laboratory Ltd. & Solvay Pharma India Ltd.

- FDI significantly influences liquidity performance measured through current ratio in the case of Abbott India Ltd, Astrazeneca Pharma India Ltd, Sandu Pharma Ltd. And Wyeth Ltd and measured through quick ratio in the case of Abbott India Ltd, Fulford (India) Ltd, Merck Ltd, Sandu Pharma India Ltd and Wyeth Pharma Ltd.

- FDI significantly influences solvency of the companies measured
through D/E ratio in the case of Astrazeneca Pharma India Ltd, Biocon Ltd, Fresenius Kabi oncology Ltd, Sandu Pharma Ltd and measured through proprietary ratio in the case of Abbott India Ltd, Fulford (India) Ltd, Wyeth Ltd.

• FDI significantly influences efficiency of the companies measured through STR in the case of Fresenius Kabi Oncology Ltd, Kerala Ayurveda Ltd, Novartis India Ltd, Solvay Pharma India Ltd, Wanbury Ltd, measured through inventory ratio in the case of of Abbott India Ltd, Fulford India Ltd, Ranbaxy Ltd, Sandu Pharma Ltd, Wanbury Ltd, Wyeth Ltd and assets turnover in the case of Biocon Ltd, Fulford India Ltd, Kerala Ayurveda Ltd, Matrix Laboratories Ltd, Ranbaxy Laboratories Ltd, Sandu Pharmaceuticals Ltd, Solvay Pharma India Ltd and Wyeth Ltd.

• FDI significantly influences R&D expenses ratio of Astrazeneca Pharma Ltd, Aventis Pharma Ltd, Matrix Laboratories Ltd, and Wanbury Ltd

• FDI significantly influences growth in forex earnings in the case of Bicons Ltd, Glaxosmithkline Pharma ltd & Merck Ltd,

• FDI significantly influences growth in sales in the case of Aventis Pharma Ltd & Biocon Ltd.

• FDI significantly influences growth in export in the case of Astrazeneca Pharma India Ltd, Biocon Ltd & Glaxosmithkline Pharma Ltd.

• FDI significantly influences growth in PBIT in the case of Ranbaxy
• FDI significantly influences growth in PAT in the case of Ranbaxy laboratories Ltd.

• FDI significantly influences growth in Assets in the case of Fresenius Kabi oncology Ltd.

• FDI significantly influences the sales and capital employed of nine companies and PBIT of 6 companies.

• The impact of FDI on profitability reveals that FDI significantly influences the NPM of one company and ROTA, RONW and ROCE of three to four companies.

• The impact of FDI on liquidity reveals that FDI significantly influences the CR and QR four to five companies.

• The impact of FDI on long-term solvency reveals that FDI significantly influences the D/E ratio, PR of four companies.

• The impact of FDI on efficiency reveals that FDI significantly influences the STR, IR and ATR of six to eight companies.

• The impact of FDI on expenses reveals that FDI significantly influences the R & D of five companies.

• The impact of FDI on growth reveals that FDI significantly influences the growth in forex earnings, sales and export of two to three companies and growth in PBIT, PAT and Assets of only one company.

• FDI significantly influences the growth of of two companies .

• For the companies whose promoters quota is around 50%, in some cases, it is found that there is significant influence of FDI on the
financial performance of companies and no significant influence in some cases.

8.2.5 Impact of FDI on growth of Indian Pharmaceutical Sector

- FDI significantly influences Profitability as measured through (Return on Net Worth) of Indian Pharmaceutical Sector.
- FDI significantly influences the efficiency as measured through (Assets turnover ratio) of Indian Pharmaceutical Sector.
- FDI significantly influences sales of Indian Pharmaceutical Sector
- FDI significantly influences capital employed of Indian Pharmaceutical Sector.
- However, it can be depicted that FDI inflows have an impact on the growth of Indian Pharmaceutical Sector measured through profitability, efficiency, sales and capital employed.

8.3 SUGGESTIONS:

- The liquidity position of FDI firms is better than Non-FDI firms, which may be due the optimum level of current assets. The FDI companies need to maintain the same level of liquidity in order to meet current obligations without further investments in current assets and Non-FDI companies need to improve the liquidity position in order to reduce over-dependency on current liabilities to meet current obligations.
- FDI inflows in the Indian Pharmaceutical Sector is desirable to improve the profitability performance and enhance the efficiency of FDI-based firms.
• The growth in sales of FDI companies may be enhanced by properly examining the challenges and opportunities available in the pharmaceutical markets and meeting the current market requirements.

• The Indian Pharmaceutical Sector also needs to take advantage of the recent advances in biotechnology and information technology and determine its future market and how well it can market its products to several regions and distributes risks, its forward and backward integration capabilities, its R&D, its consolidation through mergers and acquisitions, co-marketing and licensing agreements.

• The domestic pharmaceutical companies need to attain the right product mix for sustained growth in the future. Core competencies will play an important role in determining the future of many Indian pharmaceutical companies in the post product-patent regime after 2005.

• The domestic pharmaceutical companies may look at merger and acquisition options of either companies or products in an effort to consolidate their position. This would help these companies to improve their R&D efforts, offset loss of new product options and improve distribution to penetrate markets.

• Research and development activities took the back seat amongst most of the domestic pharmaceutical companies. In order to stay competitive in the future, Indian companies will have to refocus and invest heavily in R&D.
8.4 CONCLUSION:

In this study, an attempt has been made to assess trends and growth of FDI in India in general and FDI in Pharmaceutical Sector in particular. An attempt has also been made to study the impact of FDI on the growth of pharmaceutical sector in India. Financial Performance of Select-FDI based companies has been carried out at both individual and aggregate level. Comparative financial performance of FDI Companies and Non-FDI based companies has also been carried out. Based on the findings of the study, suitable suggestions and recommendations have also been made.

This study is different from earlier studies as it focuses on the impact of FDI on the growth of Pharmaceutical Sector in India with special reference to post-liberalisation Scenario.

SCOPE FOR FURTHER RESEARCH:

There is also a need for assessing the impact of FDI on the financial performance of the firms by establishing a relationship between two periods of the same companies i.e period covering before FDI investment and period after FDI investment of the same companies. Further research can also be carried out to examine the impact of FDI on the growth of the firms with the help of non-financial measures also. A questionnaire based survey of FDI companies would provide more insights into studying the impact of FDI on the growth of a particular sector. Panel data analysis for regression would be an effective tool for further research.