



IMPACT OF FDI ON THE GROWTH OF SELECTED PHARMACEUTICAL FIRMS - AN AGGREGATE ANALYSIS

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Abstract

The Foreign Direct Investment is a main source of capital fund for different economies and leading source of external financing. In India, the liberalization of FDI policies offers opportunities as well as threats for firms. It is also observed that FDI has an impact on the growth, performance and efficiency of the firms as well as its contribution to the nations economy. The most important issue is the difficulty in choice FDI policies is faced by most of the countries. This is mostly due to conflicting objectives such as desire for rapid growth along with desire for equitable distribution of income. The present study focuses on assessing the impact of FDI on the growth of select firms measured in terms of forex earnings, sales, profit and assets. For the present study firms aggregates of the FDI based pharmaceutical firms are considered. The study is carried out for a period of 10 years from 2000-01 to 2009-2010.

Key words: FDI, Liberalization, Pharmaceutical firms, FDI firms, Aggregates.

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Introduction

The rise in volume of FDI is accompanied by a marked change in its composition. FDI has an impact on country's trade balance, improving labor skills and standards, transfer of technology and innovative ideas, infrastructure development and the general business environment. Foreign direct investment (FDI) is considered to be the lifeblood for economic development as far as the developing nations are concerned.

Apart from liberalization, the FDI flows in different regions and countries depend upon the factors like global economic trends, stock market movements and the elimination of hurdles such as political instability, issues in corporate governance, terrorism risk etc. create conducive atmosphere for higher FDI flows (Srujan.A, 2006).

Significance of FDI

The role of FDI as a source of capital and technology has grown over time. As other sources of capital have become scarce, FDI became necessary for developing economies to grow rapidly to integrate with international trade and compete with developed economies (Pramod Kumar, 2006).

The liberalisation of government policies that restrict foreign direct investment (FDI) is a recent phenomenon. Although trade policies have been liberalised for many years through the elimination of quotas and the reduction of import tariffs, liberalisation of investment policies is more recent, stimulated by the World Trade Organisation (WTO) in 1995. Liberalization of FDI policies offers opportunities for firms as well as threats. If FDI (and trade) liberalization result in faster



growing national economies, then firms face larger, faster-growing markets domestically (Feinberg & Majumdar, 2001). In addition, more foreign-invested firms mean more potential customers locally with strong purchasing power, and more chances for linkages with them. If technology spillovers occur from foreign firms to other firms in the industry, then those firms can achieve better technical performance.

Overview of Indian Pharmaceutical Sector

The Indian pharmaceutical sector is an interesting and relevant context for several reasons. The Indian pharmaceutical industry is one of the most vibrant knowledge driven industries in India with consistent growth over the past thirty years. Today, more than 90 percent of the modern medicine consumed in India is produced locally. India is among top 5 pharmaceutical producers worldwide in terms of volume and ranks among 15 in value. It is one of the top 20 top exporters of bulk actives and dosage forms. Indian exports are destined to around 175 countries around the globe including highly regulated markets of Australia, Europe, Japan and US.

The policy environment in India towards both technology and FDI was liberal during 1960s, the policies were made stringent during 1970s, attempts were made at liberalization during 1980s, and the liberalization took place during 1990s. But during this period, the policy environment was characterized by lack of transparency and discretionary control. This environment has had profound effects on the investment and research activities of both MNCs and domestic pharmaceutical firms in India.

The pharmaceutical sector is R&D intensive and multinational companies have a presence in the Indian market. The Indian pharmaceutical sector also has a long history of multinational participation in both manufacturing and research and development (Vijay et.al 2022).

The Indian pharmaceutical sector is also subject to a complex and changing mix of sector-specific policies aimed at the objectives of equality of income distribution and self-determination. All the policies that affected firms, both foreign and domestic in the

pharmaceutical sector, have the combined intention of developing domestic industry and making drugs available to India's poor. (Management Accountant, Nov 2010, Special issue on Indian Pharmaceutical Industry).

Literature Review

Chalapathi Rao K.S., Murthy MR and Ranganathan KVK (1999), in their work made an attempt to study the Foreign Direct Investment in India in the Post-liberalization period. This study seeks to provide empirical content to the developments during the first seven years of liberalization. The study further revealed that a pattern of FDI inflows in infrastructure is not significant and the increasing dominance of foreign companies in consumer goods sector makes it more significant and FDI approvals in the postliberalization period are increasing for setting up of subsidiaries.

Luiz R. De Mello (1999) in his paper made an attempt to estimate the impact of Foreign Direct Investment (FDI) on Capital Accumulation and Output and Total Factor Productivity (TFP) growth in recipient economy. The study is conducted for the period of 1970-1990. Time series and panel data analysis are applied for the sample of OECD and non-OECD countries. The study reveals that although FDI is expected to boost long-run growth in the recipients' economy via technological upgrading and knowledge spillovers, it is found that the extent to which FDI is growth enhancing depends on substitutions between FDI and domestic investment.

Surendra Pradhan (2000) in his study made an attempt to examine the various aspects of FDI from investing firm and as well as from receiving firms' point of view. This study mainly focuses on the risk and return from firms' perspective and also the strategies that attract FDI from host countries point of view. The methodology used in this study for data analysis is based on Brown and Warner. An examination of shareholders responses to the announcement of FDI in emerging markets shows positive response which is indicated by higher risk adjusted rate of returns than expected on investments during the period surrounding the announcements.

Feinberg & Majumdar (2001) found that Liberalisation of FDI policies offers opportunities for firms as well as threats. If FDI (and trade) liberalisation results in faster growing national economies, then firms face larger, faster-growing markets domestically.

Pradhan (2004) examined the nature of relationship between the presence of foreign firms and local productivity growth in Indian pharmaceutical industry and investigated the spill over benefits from FDI. The export intensity of a firm was hypothesized to have a positive impact on its productivity growth. The results showed that exporting had a negative effect on the efficiency of the firms and reached a modest level of statistical significance.

Sebastian Morris (2004) in his work made an attempt to study the regional determinants of FDI in India and Gujarat. The study specifically uses Stephen Flymers' understanding of the parallels and relationship between the international organization of a global firm and the locational choices for the same with spatial aspects of the location of economic activities in general. The results from the study reveal that though Gujarat is not having large and metropolitan cities, the FDI in Gujarat increased over the period when the state grew rapidly in the first six years from the post-liberalization period and after that the slow down of growth has been a retardant to FDI.

Rajit Kumar Sahoo (2005) in his work made an attempt to review the policy and institutional arrangement for attracting FDI and its patterns of inflows since 1991 and also to empirically estimate the impact of FDI on productivity gap in the manufacturing sector/sub-sectors of India. The study reveals that the role of FDI impacting the growth and its spillovers of productivity to domestic firms is limited in India. Direct impact of FDI in manufacturing sector as a whole and limited to three out of six manufacturing sectors i.e. chemical, electrical and electronics and the indirect impact of FDI (spillovers) in raising productivity of domestic firms is limited to one sector, namely, drugs and pharmaceuticals.

Maathai K Mathiyazhagan (2005) in his study made an attempt to examine the long-run relationship of FDI with gross output, export and labor productivity in Indian economy at the sectoral level. In this study, the panel co-integration (PCONT) test has been used and the annual data from 1990-91 to 2000-01 has been considered for the purpose of data analysis. The results from the study reveals that there is no significance co integrating relationship among variables like FDI, gross output, export and labor productivity in core sectors of the economy. The study also reveals that at the sectoral level of the Indian economy, FDI has helped to raise the output, productivity and export in some sectors only.

Annika Bergman (2006) in her paper made an attempt to analyze the impact of FDI on India's domestic pharmaceutical industry through spillover effects and the India's policy environment in which spillover effects can be materialized. The study reveals that the firm with foreign ownership exhibit higher productivity growth than domestically owned firms. The study shows varied results about spillover effects in the Indian Pharmaceutical Industry and reveals that spillover effects of FDI are difficult to compute and it is therefore recommended to include a qualitative approach of analysis in addition to the statistical analysis to get a deeper understanding of the effects of foreign firm in an Industry.

Tanay Kumar Nandi and RitankarSaher (2007) in their work made an attempt to study FDI in India with a special focus on Retail trade. This paper emphasises the need of FDI in India in retail sector and reveals that the effect of FDI on the retail trade have been positive without harming the domestic economy. The study also suggests that FDI in retail sector must be allowed.

Chalapati Rao K.S., Ranganathan VK and Murthy M.R. (2007), in their work made an attempt to study the policies and procedures related to actual FDI inflows in selected sectors in India. The study reveals that information technology, transport equipment and other engineering industries, food processing sector and drug and pharmaceuticals offer a mix of export

potential, technology intensity and employment generation and also accounted for a significant portion of FDI inflows into India in the new policy period.

Philippe Gugler S. Brunner (2007) in this paper made an attempt to assess the effects of FDI on National competitiveness. The study reveals that MNEs potentially have a beneficial impact on the host country, as they are a source of technology in a broad sense and can lead to an upgrading of human capital. The effective impact of FDI depends on the type of activity undertaken and the absorptive capacity of the host state.

Aditya K.R. Bajaj and Swastik Nigam (2007) in this work made an attempt to study the impact of globalization in the pharmaceutical industry and FDI spillovers in various forms to the domestic pharmaceutical industry in terms of domestic productivity and competitiveness. The analysis of the study reveals that the FDI have had spillover effects on the Indian Pharmaceutical Industry. With the new WTO patent regime introduced in 2005, the foreign players have found greater security in operating in India and due to the spillover effects of a competitive environment, the domestic players have substantially increased their productivity and hence compete on stranger footing with the incoming pharmaceutical firms.

Ramesh Kumar S and Alagappan V (2008) in their work made an attempt to examine the trends and patterns in Foreign Direct Investment (FDI) inflows in India during the post-liberalization period. The analysis of the study reveals that the actual FDI inflow into the country had maintained a fluctuating and inconsistent trend during the study period. The study also finds that the approvals for FDI inflows had been very slow in materializing themselves into actual inflows.

Sambrita Chattopadhyay (2008) made an attempt to analyze the impact of the FDI in terms of its spillovers effects and promotion of exports based on both industry and company level data. This study has been conducted for electrical & electronics, Auto-ancillary, Engineering, Chemicals and Pharmaceuticals sector. The study reveals that although India experienced greater magnitude

of FDI inflows during economic liberation, the liberal FDI policy of government of India has failed to bring in the "attendant advantages of technology transfer" and "new possibilities for promotion of export".

Bharathi Kamath G (2008) in this study made an attempt to analyze the impact of Foreign Direct Investment (FDI) on Gross Domestic Product (GDP) and exports in India during the post liberalization period i.e. 1991 to 2005. The analysis of the study reveals that a greater inflow of foreign capital has led to growth in the exports of goods and services and also growth of the economy over the period of study.

Syed Khaja Safiuddin (2010) in his paper made an attempt to analyse the FDI inflows in India with reference to sectors wise inflows and also opportunities attached with these sectors and benefits of FDI to these sectors. The paper reveals that though FDI inflows show a varying trend in Indian Industry, but acts as a catalyst for growth in quality maintenance and development of Indian Industries.

Syed Khaja Safiuddin and Sreenivasa Murthy S (2011) in their paper studies the trends in FDI inflows in the Indian Industry and revealed that varying trend of FDI inflows in Indian Industry is evident in the post-liberalisation period and depends on the industry demand and reveals that service sector in India attracts the maximum FDI inflows followed by Computer Software and Hardware.

Syed Khaja Safiuddin and Sreenivasa Murthy S (2011) made an attempt to study the trends of FDI inflows in India and the Indian Pharmaceutical Industry with reference to Post-Liberalisation Period. The analysis of the study reveals that FDI inflows in India marginally influences the FDI inflows in the Indian Pharmaceutical Sector and inflows of FDI in IPI may be due to several other factors. Though 100% FDI is allowed into the Indian Pharmaceutical Sector, the proportion of Pharmaceutical FDI in total FDI is very low.

Need for the Study

The importance of FDI extends beyond the financial capital that flows into the country. It is observed that the presence of foreign ownership in the ownership pattern of the firms showed relatively superior performance



of those firms than other firms. global managerial skills and practices, optimal utilization of human capabilities and natural resources, making industry internationally competitive, opening up export markets, providing backward and forward linkages and access to international quality goods and services and augmenting employment opportunities. Hence it is interesting to study the role played by FDI in a world of increased competition and rapid technological change. The extent to which FDI contributes to the growth of economy in general and Indian Pharmaceutical sector in particular especially in the context of postliberalization scenario is seen as a major area of focus. There is a need to assess the impact of FDI on the growth of FDI-based companies.

Objectives of the Study

The objectives of the study are

1. To assess the impact of FDI on the growth in forex earnings of select firms.
2. To assess the impact of FDI on the growth in exports of select firms.
3. To assess the impact of FDI on the growth in sales of select firms.
4. To assess the impact of FDI on the growth in profit of select firms.
5. To assess the impact of FDI on the growth in assets of select firms.

Hypotheses of the Study

After the detailed review of literature and certain assumptions, the following null hypotheses have been framed for the study.

H01: There is no significant impact of FDI on the growth in forex earnings of select firms.

H02: There is no significant impact of FDI on the growth in exports of select firms.

H03: There is no significant impact of FDI on the growth in sales of select firms.

H04: There is no significant impact of FDI on the growth in profit of select firms.

H05: There is no significant impact of FDI on the growth in assets of select firms.

Methodology of the Study

The present study examines the impact of Foreign Direct Investment on the performance measures of select pharmaceutical firms in India. FDI based companies and the regression analysis was run to assess the impact of FDI on the financial performance of

Pharmaceutical firms in India. FDI as defined by OECD and IMF has been taken into consideration.

The study is carried out with the help of secondary data collected mainly from sources such as CMIE-Prowess Database, DIPP, Ministry of Commerce & Industry, GOI.

The present study focuses on one specific industrial sector i.e the Indian Pharmaceutical Sector. From this sector 18 companies which are identified as FDI-based companies have been considered for the study. The financial aggregates of the companies is considered for analysis.

Scope of the Study

The scope of the study is confined to select financial ratios of FDI based pharmaceutical companies consistently listed in NSE and BSE. The ownership pattern of the companies has been considered for identifying and classifying FDI based companies (based upon IMF BOP Definition). The study is conducted for a period of 10 Years i.e. 2001-2010.

Limitations of the Study

In this study, only those pharmaceutical companies consistently listed for a period of 10 Years i.e. from 2001-2010 and whose data is available at least for a period of five years are considered for the study. Further, this study is based on secondary sources of data only.

Impact of FDI on the growth of FDI-based Pharmaceutical Companies in India on an Aggregate Basis

Impact of FDI (foreign promoter) on the Financial Performance of Selected FDIbased Pharmaceutical Companies - An aggregate analysis

In case of aggregate analysis, FDI (% of foreign promoter in the Share holding pattern of the company) is considered as dependant variable and financial indicators are considered as dependant variables. 18 Companies averages are considered for calculating aggregate figures)

I. Impact of FDI on growth in Foreign Exchange Earnings

Table 1 : Regression analysis for Impact of FDI on Growth in Foreign Exchange Earnings

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.239 ^a	.057	-.077	154.1656185

a. Predictors: (Constant), FDI (%)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10100.004	1	10100.004	.425	.535 ^a
	Residual	166369.3	7	23767.038		
	Total	176469.3	8			

- a. Predictors: (Constant), FDI (%)
- b. Dependent Variable: Growth in Forex earnings (%)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	535.581	707.034		.758	.473
	FDI (%)	-9.852	15.113	-.239	-6.52	.535

The simple regression analysis has been run to assess the impact of FDI on growth of FOREX Earnings of IPI. FDI is independent variable and growth of Forex Earnings is dependent variable. The results showed that the R square value is .057 and Beta(t) value is 6.52 with a significant value of .535 which reveals that FDI has not significantly influenced the forex earnings of the FDI based pharmaceutical companies on an aggregate basis.

II. Impact of FDI on growth in Sales

Table 2 : Regression analysis for Impact of FDI on Growth in Sales

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.205 ^a	.042	-.095	11.3656430

a. Predictors: (Constant), FDI (%)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.642	1	39.642	.307	.597 ^a
	Residual	904.245	7	129.178		
	Total	943.887	8			

- a. Predictors: (Constant), FDI (%)
- b. Dependent Variable: Growth in Sales (%)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	41.882	52.125		.803	.448
	FDI (%)	-.617	1.114	-.205	-5.54	.597

a. Dependent Variable: Growth in Sales (%)
 The simple regression analysis has been run to assess the impact of FDI on growth of Sales of IPI. FDI is independent variable and growth of Sales is dependent variable. The results showed that the R square value is .042 and Beta(t) value is 5.54 with a significant value of .597 which reveals that FDI has not significantly influenced the growth in sales of the sector

III. Impact of FDI on Growth in Exports

Table 3 : Regression analysis for Impact of FDI on Growth in Exports

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.374 ^a	.140	.017	54.2928683

a. Predictors: (Constant), FDI (%)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3359.063	1	3359.063	1.140	.321 ^a
	Residual	20634.009	7	2947.716		
	Total	23993.072	8			

- a. Predictors: (Constant), FDI (%)
- b. Dependent Variable: Growth in Total Exports (%)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	308.463	248.998		1.239	.255
	FDI (%)	-5.682	5.322	-.374	-1.067	.321

- a. Dependent Variable: Growth in Total Exports (%)

The simple regression analysis has been run to assess the impact of FDI on growth of exports of IPI. FDI is independent variable and growth of exports is dependent variable. The results showed that the R square value is .140 and Beta(t) value is 1.067 with a significant value of .321 which reveals that FDI has not significantly influenced the exports of the FDI based pharmaceutical companies on an aggregate basis.

IV. Impact of FDI on Growth in Profit After Tax

Table 4 : Regression analysis for Impact of FDI on Growth in Profit After Tax

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.198 ^a	.039	-.098	103.4643411

a. Predictors: (Constant), FDI (%)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3056.662	1	3056.662	.206	.610 ^a
	Residual	74934.089	7	10704.870		
	Total	77990.751	8			

a. Predictors: (Constant), FDI (%)

b. Dependent Variable: Growth in PAT (%)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	256.581	474.508		.541	.605
	FDI (%)	-5.420	10.143	-.198	-5.34	.610

a. Dependent Variable: Growth in PAT (%)

The simple regression analysis has been run to assess the impact of FDI on growth in PAT of IPI. FDI is independent variable and growth in PAT is dependent variable. The results showed that the R square value is .039 and Beta(t) value is 5.34 with a significant value of .610 which reveals that FDI has not significantly influenced the exports of the FDI based pharmaceutical companies on an aggregate basis.



V. Impact of FDI on Growth in Assets

Table 5 : Regression analysis for Impact of FDI on Growth in Assets

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452 ^a	.205	.091	9.9992581

a. Predictors: (Constant), FDI (%)

The simple regression analysis has been run to assess the impact of FDI on growth in Assets of IPI. FDI is independent variable and growth in Assets is dependent variable. The results showed that the R square value is .205 and Beta(t) value is 1.342 with a significant value of .222 which reveals that FDI has not significantly influenced the sales of the company.

Findings and Suggestion

The analysis of the study reveals that FDI does not influence the growth of pharmaceutical companies on an aggregate basis measured through foreign exchange earnings, sales, exports, profit and assets.

It is revealed from the analysis that FDI in pharmaceutical firms do not influence the growth of the select financial paramaterson an aggregates.

Further, to enhance the growth and improve the performance of the pharmaceutical sector, the following suggestions are made

Indian Pharmaceutical companies, in an effort to consolidate their position, will have to increasingly look at merger and acquisition options of either companies or products. This would help them to offset loss of new product options, improve their R&D efforts and improve distribution to penetrate markets.

The Indian pharmaceutical industry also needs to take advantage of the recent advances in biotechnology and information technology. The future of the industry will be determined by how well it markets 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.

References

1. Chalapati Rao KS, Murthy MR, KVK Ranganathan (1999), "Foreign Direct Investments in the post-liberalization period: An Overview", Journal of Indian School of

Political Economy, Vol. XI, No. 4, July Sept. 1999.

2. Chalapati K.S., Ranganathan K.V.K and Murthy M.R. (March 2007), "Impact of Foreign Direct investment on selected sectors of India: A comparative study with selected countries", project completed under institute for studies in Industrial development (ISID), 2007.

3. Chhibber P.K. and Majumdar S.K. (1999) "Foreign Ownership and Profitability; Property rights, Control and the Performance of Firms in Indian Industry", Journal of Law and Economics, April 1999, Pp 209-238.

4. Feinberg, Susan & Majumdar, Sumit K. (2001), "Technology spillovers from foreign direct investment in the Indian pharmaceutical industry," Journal of International Business Studies, vol. 32, no. 3 (Third Quarter), Pp.421-437

5. Luiz R. De Mello (1999), "Foreign Direct Investment-Led Growth: Evidence from Time Series and Panel Data", Oxford Economic Papers, Series No.51, Oxford University Press, 1999, Pp.133-151.

6. Pradhan J.P. (2004) "FDI Spillovers and Local Productivity Growth; Evidence from Indian Pharmaceutical Industry", Jawaharlal Nehru University, New Delhi, 2004

7. Pradhan, J.P and Sahu, PP, Transnationalisation of Indian Pharmaceutical SMEs, Book Well Publishers, 2008

8. Pramod Kumar (2006), "Role of FDI in Economic Development of Developing Economies", FDI Issues in Emerging Economies by Seethapathi K, ICFAI University Press, 2006, Pp 16-26.

9. Parimal Kr. Sen, Indrani Saha and PalashGarani(2010), "Challenging Role of Indian Pharmaceutical Industry in Global Market :The Way Ahead" The Management Accountant, ICWAI, November 2010, Pp 900-901.

10. Ramesh Kumar S an Alagappan V (2008), "Foreign Direct Investment in India during the Post-liberalization Period", ICFAI journal of Finance (IJPE) , ICFAI University Press, February, 2008.

11. Ravi Kiran(2009), "Changing Pragmatics of Indian Pharmaceutical Industry, in the Pre & Post TRIPS Period", International Journal of Business & Management, Sept 2009.



12. Sambrita Chattopadhyay (2008), "Impact of FDI on Indian Industry" is a doctoral dissertation submitted to department of economics, Osmania University, 2008.

13. Santanu Sarkar (2006), "Impact of Inward FDI on Host Country-Case of India", Tata Institute of Social Sciences, Mumbai, and Paper presented at professional development workshop, Paper 05, Asian Academy of management, Chunne University of Hong Kong, 2006.

14. Satyanarayan Reddy Ch. And Renuka C (2008), "Foreign Direct Investment in India: A Retrospection," ICFAI Reader, ICFAI University Press, Oct. 2008.

15. Sebastian Morris (2004). "A Study of the Regional Determinants of Foreign Direct Investments in India and the case of Gujrat", Working Paper No. 2004/03/07, Working Paper Series of Indian Institute of Ahmedabad (IIM-A), March 2004.

16. Seethapathi K, FDI issues in emerging economics, ICFAI University Press, 2006

17. Shiralashetti AS and Hugar SS (2009), "Foreign Direct Investment and Economic Development of India: A Diagnostic Study", ICFAI journal of Managerial Economics (IJME), ICFAI University Press, February, 2009.

18. Sudarshan Maity (2010), "Growth Scenario in Pharmaceutical Sector", The Management Accountant, ICWAI, November 2010, Pp 890-892.

19. Sumana Chatterjee (2009), " An Economic Analysis of Foreign Direct Investment in India", Doctoral thesis submitted to Department of Economics, Faculty of Arts, The Maharaja Shivajirao University of Baroda, 2009

20. Srujan A (2006), "Emerging Trends in FDI Emperical Evidence", FDI issues in Emerging Economies by Seethapathi K, The ICFAI University Press, 2006, Pp. 3-15.

21. Varala, R., Dubasi, N., & Madhavedi, S. (2022). Status of Pharmaceutical Patents during COVID-19 Pandemic. *Caribbean Journal of Sciences and Technology*, 10(1), 16-19.

22. Vijay, K., Mallem, D., Kanuri, A. K., Burra, M. R., Nyamathullah, S., Ying, L. S., ... & Ming, L. C. (2022). Anti-SARS-CoV-2 Biotherapeutics and Chemotherapeutics: An Insight into Product Specifications and Marketing

Dynamics. *Progress In Microbes & Molecular Biology*, 5(1).

23. Vijay, K., Sudhakar, M., & Ravi, V. (2022). Covid-19 Pandemic: Is it a Challenge or Opportunity for Pharmaceutical Industry around the Globe. *J Pharmaceutics and Pharmacology Research*, 5(7).

