



Multinational Diversification and Pharmaceutical Units Performance: Evidence from Indian Firms

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Abstract

This paper examines the performance of select Foreign Direct Invested (FDI) assisted pharmaceutical units in India for the period from 1st April 1999 to 31st March 2008. The dataset has been retrieved from CMIE Prowess database and Organization of Pharmaceuticals Producers of India (OPPI) for 23 FDI assisted pharmaceutical units and evaluated through the following ratios Capital Structure Ratios, Liquidity Ratios, Profitability Ratios, Du Pont Analysis and Return on Investment. Our findings suggest, that the capital has been efficiently used in gearing profits, but there was a slight decline in return on equity due to over utilization of outsider's capital it was the major reason for showing negative effects. But, all the sample units show a galloping trend during the study period. The liquidity position and short-term solvency positions have improved, because of this the sales have increased, the leverage effects was not found favourable for certain units. Finally, our study suggests that the mark of FDI assisted pharmaceutical units for different ratios report a positive direction throughout the study and provoked the strength of Indian economy for the future.

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Introduction

The tremendous growth of Foreign Direct Investment (FDI) flows is well documented in literature for both developing and developed countries. Over the last couple of decade foreign direct investment have grown at least twice as rapidly as trade Lipsey (2000). As there is shortage of capital in the developed countries, which need capital for their development process, the marginal productivity of capital is higher in developing countries. On the other hand, investors in developed world seek high returns for their capital. Hence there is a mutual benefit in the international movement of capital. In the current international economic setup, the countries progress towards globalization, liberalization and private foreign capital is indispensable. Loans (commercial bank lending's and bonds issued by companies) and Equities (direct and portfolio equity investment), are the two components of private foreign capital, the latter is the predominant and largest components of private capital inflows in most of the countries. Markusen and Venables (1995) studied that multinational should adopt a general-equilibrium trade-theoretic view for Foreign Direct Investment.

The development of foreign private capital are remarkable, but it gained importance only after the unmanageable balance of payments deficits occurred in most of the developing countries after the oil crisis in late seventies; and with the advent of debt crisis in Latin American countries in eighties. The Official Development Finance (ODF) like the World Bank, International Monetary Fund and United Nations which grants loans on concessional terms for individual governments, multilateral institutions and developing countries to find an alternative strategy for reduction in ODF over time. The importance on non-debt creating, long-term private capital to overcome the capital crunch situation of developed countries was realized and FDI which falls into this category was given due importance. Thus the foreign direct investment witnessed dynamic changes over the years and

attracted the global investor's attention towards investing in developing countries like Russia, China, India, Indonesia etc.,

The present study is specifically focuses on pharma industry in the Indian scenario and examines the various measures of financial performance and analyzes their profitability position. The remainder of the paper is structured as follows. Next section presents an overview of pharmaceutical industry. Section 3 deals with earlier literature review pertaining to FDI. Section 4 presents the data and methodology, Section 5 examines the empirical analysis and discussion of FDI assisted pharmaceutical units. Finally, Section 6 summaries and concludes the paper.

Overview of Pharmaceutical Industry

Intercontinental Medical Statistics (IMS) Health has broadly divided the world pharmaceutical market into six major blocks, comprising North America, European Union, Central & Eastern Europe, Latin America, Japan and Asia (excluding Japan), Australia, & Africa. The USA is the largest drug market in world. The other large drug markets are Europe and Japan, each pharmaceutical market has its own unique characteristics in terms of structure of industry, channels of distribution, protection of patents, funding of healthcare costs, etc. The US generic market is nearly 5-6 times of the Indian pharmaceuticals market. This attracts a lot of attention and investment in the Indian Industry to cater this market. On account of this universal assumption the US market is the most regulated market as compared to the others and may be considered the toughest market to succeed for any company. If a company manages to establish its presence in the US market, it is widely believed that accessing other markets would not be a difficult task.

The Indian pharmaceutical industry had 2000 players in the domestic market before 1970 and it was largely dominated by multinational companies (MNCs). The Government of India has introduced two landmark regulations in 1970, viz., the Indian Patent Act and the Drug Price Control Order (DPCO). The Indian Patent Act, 1970 was introduced to encourage domestic producers to manufacture drugs and ensure self-sufficiency in medicines. The

DPCO governed the prices of all bulk drugs and formulations to ensure the widespread availability of medicines at reasonable prices. The introduction of these two regulations and incentives available to small-scale industries (SSIs) led the share of SSIs increasing, due to low entry barriers. Further, owing to introduction of FERA 1974, which required all MNCs to dilute their equity holding, the market share of MNCs declined during 1970-79. During the period 1979 to 1987, the production of bulk drugs by Indian players increased due to a surge in exports. The market share of MNCs continued to decline. In 1991 there was a major turning point for MNCs due to the liberalization of Indian Economy.

As part of the reforms process, tariff barriers were lowered and FERA was relaxed. This restored MNC confidence to a certain extent and encouraged FDI in the domestic pharmaceutical industry. During the period 1987 to 2001, the Indian pharmaceutical industry grew faster at a Cumulative Abnormal Growth Rate (CAGR) of 15-16 per cent with bulk drug production surging due to high export demands. In 1995, the government again amended the DPCO and brought down the number of drugs under price control to 74%. Also, the Indian govt. as a member of WTO, agreed in 1995 to adhere to the product patent regime from 2007.

Brief Literature Review

To have a better understanding about the performance of select Foreign Direct Investment (FDI) some of the research studies conducted by matured authors of recent origin. Blomstrom and Zejan (1991), Wheeler and Mody (1992), Serven and Soliman (1992), Morck and Young (1992), Burgers et al (1993) present evidence about the general aspects of Foreign Direct Investment and reported a optimistic sign for the home country production. There are few studies experienced the positive effects of foreign direct investment in the developing countries. Lim (1976) pointed out the foreign-owned and controlled companies have higher capital utilization, because of the technological economies that come with

the large size and operation of these firms. Nayyar (1978) stated the conflict between the capital and labour within the industrialized countries. Kumar (1985), Kokko (1994), Henrik Hansen and John Rand (2006) has favoured new technological transfers and adoption of new technology for the FDI country. Schneider & Frey (1985), Tsai (1991) and Noorbaksh et al. (2001) have studied the determinant of FDI in developing countries has performed the best. Fry (1993) found that FDI has increased the rate of economic growth in the absence of financial repression and trade distortion. Muscatelli and Stevenson (1994) study confirms that there is a significant role for cross-price effects in Least Developed Countries and shows there is efficient gains for the group.

In contrast, limited research is available on sector - wise foreign direct investment performance in India. Most of the studies related to overview of FDI on home country production, determinants of FDI and its spill over effect. Only a few studies, has made an attempt towards sector-wise performance. Mohinder Kaura and Balasubramanian (1982), Muneeswari (2000) studied the drugs and pharmaceutical industry in India continued to maintain steady growth with foreign collaboration. Sharma Kishor (2000) has assessed the effects of FDI on manufacturing export performance. Atherye and Kapur (2001) and John Child et al. (2003) studied the performance of multinational and domestic firms in India and gave clear edge over domestic firms. Ike Mathur Manohar Singh & Kimberly C. Gleason (2004) has explained the degree of multinational diversification is strongly related to superior financial performance and the developing economies continue to show dramatic growth. Moreover, this study will fill the gap on sector wise performance and paved the way for future researchers.

Data and Methodology

The study is based on the secondary data collected from different sources for the analysis. Data set has been retrieved from Organization of Pharmaceuticals Producers of India (OPPI) and it is supported by the annual reports of the companies from CMIE Prowess database. The data used in the study consist of 23 Foreign Direct Invested pharmaceutical companies with capital as the base

during the period from 1st April 1999 to 31st March 2008. The following decision making parameters such as Capital Structure Ratios, Liquidity Ratios, Profitability Ratios, Ratios of Du Pont Analysis and Return on Investment was calculated for the purpose of analysis. The computed data is analyzed with the help of Mean, Standard Deviation, Co-efficient of Variation and Linear Growth Rate was draw for the valid conclusion.

Evaluating Measures

Composition of Capital Structure: Capital Structure refers to the way a corporation finances itself through some combination of equities, bonds, and loans etc., A capital structure looks for opportunities created by the differential pricing of different instruments issued by the same corporation. The long term financial strength measures in terms of its ability to pay the interest regularly as well as repay the instalment of the principal on due dates from can be examined by using leverage of capital structure ratios. Debt equity ratio and Debt to asset ratios was worked out to explore the financial soundness of the firm.

Operating Performance of Managing Funds: Liquidity ratios seem to have predictive ability, particularly in signalling strengths and weakness of a firm in utilization of funds. These ratios are also termed as 'working capital ratio' or 'short term solvency ratios'. An enterprise must have adequate working capital to run its day-to-day operations. Inadequacy of working capital may bring the entire business operation to a grinding halt because of inability of the enterprises to pay for wages, materials and other regular expenses. Current ratio and Quick ratios are used to examine the liquidity position of the firm.

Overall Profitability: Profitability is an indicator of the efficiency with which the operations of the business are carried on. Poor operational performance may indicate poor sales and hence poor profits. A lower profitability may arise due to the lack of control over the expenses. Bankers, financial institutions and other creditors look at the profitability ratios as an indicator whether or not the firm earns substantially more than it pays interest for the use of borrowed funds and whether the ultimate repayment of

their debt appears reasonably certain. Owners are interested to know the profitability as it indicates the return that they can get on their investments.

Overall Efficiency (Du Pont Analysis): Return on Investment (ROE) represents the earning power of the company. ROE depends on two ratios: (a) Net Profit ratios, and (b) Capital Turnover Ratios. A change in any of these ratios will change the firm's earning power. These two ratios are affected by many factors. A change in any of these factors will change these ratios also. This chart is known as the Du Pont Control Chart since it was first used by Du Pont Company of USA.

Here the return on capital employed is affected by a number of factors. Any change in these factors will affect the return on capital employed. The chart helps the management in concentrating attention on different forces affecting profit. An increase in profit can be achieved either more effective use of capital which will result in a higher turnover ratios or better sales efforts which will result in a higher turnover ratio or better sales efforts which will result in a higher net profit ratio. The same rate of return can be obtained either by a low net profit ratio but a higher turnover ratio or low turnover ratio but a higher net profit ratio.

Return on Investment (ROI): For a given use of money in an enterprise, the ROI (return on investment) is how much profit or cost saving is realized. An ROI calculation is sometimes used along with other approaches to develop a business case for a given proposal. The overall ROI for an enterprise is sometimes used as a way to grade how well a company is managed.

It has been observed that although a high profit margin is a test of better performance a low margin does not necessarily imply a lower rate of return on investments of a firm has higher investment/assets turnovers. Therefore, the over-all operating efficiency of a firm can be assessed on the basis of a combination of the investment (RIO) ratio. The earning power of a firm may be defined as the over-all profitability of an enterprise. In reality, most organizations use one or more "financial metrics" which they refer to individually or collectively as "ROI".

Empirical Analysis and Discussion

Table: 1 presents the Capital Structure Ratios of Foreign Direct invested pharmaceutical units for the period from 1999 to 2008 by using two methods such as Debt to Equity Ratios and Debt to Asset Ratios. In Debt to equity ratio the Linear Growth Rate (LGR) of FDI assisted pharmaceutical units with statistically significant for most of the units. In other ratios the LGR stood rational at 0.05 and 0.01 for twelve units with statistically significant. But the remaining units showed an insignificant effect during the study period. From Table: 2 envisage the liquidity position of the FDI assisted pharmaceutical units. Liquidity ratio was divided into current ratio and quick ratios. The LGR of current ratio and quick ratio has shown almost significant for all the units. This suggested the financial position for all the units with a positive sign.

The profitability ratios for FDI assisted pharmaceutical units have been shown in Table 3. Perusal from the above table indicates the trends and growth pattern of Gross Profit margin, Earning Power and Return on Assets has been analyzed. In Gross profit margin the mean and linear growth rate has shown significant effect. But, the earning power ratio and return on assets for the above units was predicted with weak position. This predicted the units have not properly utilized the earning power and assets to reap the fruits of benefits. It is evident from Table: 4 the trends and growth pattern of FDI assisted Pharmaceutical Units. The Du Pont Analysis has been broken into three disciplines; Net Profit margin ratio, Asset Turnover ratios and Leverage Multiplier ratios. Perusal from the table Net profit margin was performed well with significant effect. In asset turnover ratios the means return shows a minimum level, but in linear growth rate it indicated with negative line for the periods. Finally, the Leverage multiplier was not favourable for the units; it is due to over utilization of the outsider's capitals for gearing profits.

Table 5 envisages the trends and growth of Return on equity (Based on Du Pont Analysis) for FDI assisted Pharmaceutical units. The table indicates mean return of Sun Pharma stood higher at 28.37 per cent. The standard deviation indicates a huge volatile for Matrix laboratories and lowers for Wyeth Ltd. In Coefficient of

variation Matrix Laboratories and Aurobindo Pharma predicted with 410.74 and 14.01 times respectively. The last row refers to Linear Growth rate of FDI assisted pharmaceutical units with statistically insignificant for majority of the units during the study period.

Table: 6 show the overall performance of FDI assisted pharmaceutical units for the period from 1999 to 2008. Perusal from the table indicates the linear growth rate shown an inexperienced negative trend for Capital Structure ratios. The liquidity position of the Company was good for the period. As far as the profitability ratios, the Gross profit Margin suggested a healthy sign. Earning power and Return on assets has been scaled up. The results of Profitability Ratios predicted a robust for the overall Pharmaceuticals units. The components of ROE, has been used in Du Pont Analysis, Net profit margin (NPM), Asset Turnover Ratio (ATR) and Leverage Multiplier (LM), was experienced and shown a positive movement, but only in the case of ATR, the trend has been statistically significant. Again, this reveals the improper use of assets by the units. Further, return on equity, which can be considered as proxy for fund position of the company with statistically significant during the period.

Summary and Conclusion

This study focuses on performance of selected Foreign Direct Invested pharmaceutical units for the period 1st April 1999 to 31st March 2008 and it is evaluated through various parameters. During the period of study 23 companies has been taken for the purpose of analysis. From the above analysis, it is found that most of the units have performed well and shown positive growth. But, the remaining units have proved with downward trend. But this insignificant effect is not constant because most of the units was been lagging due to improper utilization of the funds. This can be eradicated when proper measures are adopted by the lagging concerns.

The findings of the study suggest the capital has been efficiently used in gearing profits. But, there was a slight decline in return on

equity due to over utilization of outsider's fund; it was the major reason for showing negative effects. The liquidity position and short-term solvency positions have improved. The long-term debts have decreased because of this sales have escalated, the leverages effects are not found favourable. With reference to mark financial evaluation of the FDI assisted units the different ratios report a positive direction all through the study period. Finally, the structural changes in the present economic policy and out door investment will enhance the growth rate of Indian economy in the future.

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