FDI in Health Care - A Study of Pharmaceutical Industry

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Abstract

The pharmaceutical industry in India has become a powerful and self reliant industry during the last decade. This industry has been growing. The Indian healthcare industry is considered to be one of the most profitable markets and is on the way to expand further. The various studies conducted in this regard shows that India is more competitive because of the low cost and the sophisticated treatments offered at hospitals.

The point to be noted here is that India has the advantage of having sophisticated infrastructure, the affordable operations, remarkable quality management and technology have made it one of the most sought after countries. The pharmaceutical industry in India is the third largest in the world today in volume and ranks 14th in terms of value. The sales of every kind of drugs in the country are all set to reach US$ 19.22 billion in the year 2012. The exports of pharmaceutical items from India have also increased and have joined the league of the top 10 pharmaceutical companies in the global market currently. The Indian pharmaceutical companies have made a mark in both the world market and the Indian market with their skills in reverse processing and manufacturing low cost medicines.

This particular fact provides a great opportunity to the FDI flow into India. This further enhances the quality of the health care industry and makes the world class facilities, treatment available at a low cost. This paper seeks to explore this particular aspect of the effect of FDI on the health care sector. It also seeks to explore the opportunities for FDI in health care sector in India.

Key words: Healthcare industry, FDI opportunity, Growth of Healthcare industry, etc.

I. INTRODUCTION

Healthcare is one of India's largest sectors, in terms of revenue and employment, and the sector is expanding rapidly. During the 1990s, Indian healthcare grew at a compound annual rate of 16%. Today the total value of the sector is more than $34 billion. This translates to $34 per capita, or roughly 6% of GDP. It is estimated that by 2012, India's healthcare sector is projected to grow to nearly $40 billion.

Important driver of growth in the healthcare sector is India's booming population which is currently 1.1 billion and increasing at a 2% annual rate. By 2030, India is expected to surpass China as the world's most populous nation. By 2050, the population is projected to reach 1.6 billion. This population increase is due in part to a decline in infant mortality, the result of better healthcare facilities and the government's emphasis on eradicating diseases such as hepatitis and polio among infants.

In addition, life expectancy is rapidly approaching the levels of the western world. By 2025, an estimated 189 million Indians will be at least 60 years of age—triple the number in 2004, thanks to greater affluence and better hygiene. The growing elderly population will place an enormous burden on India's healthcare infrastructure.

The point to be noted here is that despite the efforts aimed at eradicating diseases from the society, the onslaught of new types of diseases and the spread of already known diseases due to the lifestyle of the people, the working atmosphere, etc. are posing greater challenge to the healthcare sector in India. To meet such kind of challenges the health care sector has to gain strength and here the FDI plays an important role.

By bringing technological know-how, finance, experts' support, FDI can help the Indian Healthcare sector to gear up to face the challenges and provide comprehensive health care to the public.

The point to be noted here is that the healthcare sector comprises of many segments such as, hospitals, medical infrastructure, clinical trials, health insurance, pharmaceuticals, etc. As relating to this paper is concerned, it concentrates on the pharmaceutical sector in India. The present study is aimed at understanding opportunities in Indian pharmaceuticals for the flow of FDI. It also seeks to study the effect of FDI on pharma sector in India.

II. THE INDIAN PHARMACEUTICAL INDUSTRY - A HISTORICAL PERSPECTIVE

"The Indian pharmaceutical industry is a success story providing employment for millions and ensuring that essential drugs at affordable prices are available to the vast population of this sub-continent."[1]

……….**Richard Gerster**

This chapter focuses on the Indian pharmaceutical industry and primarily on its evolution. The history of the industry is important in order to understand the growth and the impact foreign firms have had on the industry.

[1] http://www.cci.in/pdf/surveys_reports/indias_pharmaceutical_industry.pdf, visited on 4-5-2012 at 7.30 pm

Due to the pharmaceutical industry‘s capital and know- how intensity, most of the world‘s production is located in the developed countries. India is one of the few developing countries with a large production base in pharmaceutical products. India‘s trade in pharmaceutical products has increased a lot since the liberalization reforms and it has comparative advantages in trade with pharmaceutical products, both bulk drugs and formulations. The Indian pharmaceutical industry ranks very high among developing countries, in terms of technology and quality, and is today in the front rank of India‘s science based industries.

The growth of the Indian pharmaceutical industry has been remarkable. The government started to encourage the growth of drug manufacturing by Indian companies in the early 1960s. In the year 1970 the Patents Act was enacted which further provided the way for the development of pharmaceuticals in India. However, economic liberalization in 90s enabled the industry to become what it is today.
The point to be noted here is that the lack of product patent protection made the Indian market undesirable to the multinational companies. It provided an opportunity to Indian companies to carve a place for them in both the Indian and world markets with their expertise in reverse-engineering new processes for manufacturing drugs at low costs. And Indian companies succeeded in it.

The industry is today the fourth largest globally, in terms of volume, and 13th largest in terms of value. The industry accounts for 8% of the global sales in volume but in terms of value it is barely 1%. The role of the Indian pharmaceutical industry in the international market today is as a supplier of good quality, low cost generic bulk and formulation.[2]

The Indian Pharmaceutical industry, now a $ 4 billion industry has shown tremendous progress in terms of infrastructure development, technology base and wide range of products. The industry produces bulk drugs belonging to all major therapeutic groups requiring complicated manufacturing process and has also developed excellent Good Manufacturing Practices, compliant facilities for the production of different dosage forms. The strength of the industry is developing cost effective technologies in the shortest possible time for drug intermediates without compromising on quality. The country's fame as a low cost producer of drugs and supplier of the same to international organizations and more importantly by the needy African markets has been well established.

[2] Foreign Direct Investment: Contemporary Issues by Usha Bhati, Deep and Deep publication , New Deli, 2006, p. 45

The potential growth of the Indian pharmaceutical industry is great. Nearly 65% of India's population does not enjoy comprehensive access to quality healthcare today. Adding to it the onslaught of new types of diseases led to the greater need for the qualitative healthcare system in India. This situation warrants the greater research and development in the pharma sector so as to face the challenges. Here the FDI plays a vital role. It not only provides the finance to the pharma industries but the technical know-how also.

Realizing this aspect the Indian Government carried out liberal FDI policies and provided incentives so as to invite foreign firms to start manufacturing facilities in order to get an inflow of know- how in the sector. As such now one can see that even the multinationals are, in addition to the public sector, a part of India's pharmaceutical foundation. Taking this opportunity the leading pharmaceutical companies from the West came to India and established manufacturing facilities. Subsequently, the multinationals brought in technology and international manufacturing practices. Domestic firms were encouraged to tie up with foreign firms, with participation in capital, and there were collaboration agreements in the private sector.

During this time product patent laws, which were favourable for the MNCs, was brought in force. This step made the multinational companies to explore the Indian market. Thus the pharmaceutical sector developed in India. And presently it has been recognized as the world leader in the manufacturing and marketing of generic, low cost drugs. Further its potential for the development is attracting the foreign direct investment also.

III. FDI IN THE INDIAN PHARMACEUTICAL INDUSTRY

The inflow of foreign direct investments into India has increased since the liberalization reform started. In the following chapter the FDI in the pharmaceutical industry is reviewed. An overview of the FDI policies in the pharmaceutical industry and the reasons why MNCs invest in India are given.

- **Policies regarding FDI in the pharmaceutical sector:**

The policy regarding FDI in the pharmaceutical sector can be studied under three phases, that is, first phase is from 1950 to 1970, second phase is from 1970 to 1990, and the present position.[3] In the initial days the foreign pharmaceutical firms in India have met a restrictive environment. There used to be performance requirements, such as establishing R & D unit, having equity shares, technology transfer, etc. for the foreign firms investing in the Indian pharmaceutical industry, in order to create linkages between foreign and domestic firms.

The above mentioned performance requirements for foreign firms, except export and employment, have been in force during the development of the Indian pharmaceutical industry. The requirements were predominantly in place during the first and the second phase in the history of the Indian pharmaceutical industry, when the

[3] *Ibid*, p. 48

industry was most protective. The 1978 Drug policy was intended to use the foreign firms' strength and to generate linkages within the industry and support the domestic industry.

Joint venture and equity ownership requirements were in force during the first and second phase. This provided an opportunity for the local firms to have a better chance to share the knowledge and inputs from the foreign firm. In India domestic equity requirements have helped to promote the formation of joint ventures and generate externalities in the form of local learning and absorption of knowledge brought in by the foreign partners. For instance, Ranbaxy and Eli Lilly formed a joint venture because of the requirement.

Further R&D requirements have been a condition for foreign firms in India. For instance, it was compulsory for foreign pharmaceutical companies to set up R&D facilities and spend at least 4 percent on R&D of their turnover annually, if their turnover was more than Rs. 5 Crores. Furthermore, *technology transfer* is one of the main objectives for host countries attracting FDI. The Government of India encouraged technology transfer but did not adopt any requirements.

Today, there are no performance requirements in the pharmaceutical industry. The Foreign Direct Investment policy in India is liberalized and the government tries to get less involved in the private sector and leave it to market forces. FDI up to 100% foreign ownership is allowed in the pharmaceutical industry through the automatic approval route. FDI Circular 2011gives the consolidated FDI policy and is a single reference point for foreign investors. Presently 100% FDI is permitted under the automatic route in 'industrial parks'. An industrial park has been defined as a project in which quality infrastructure in the form of plots of developed land or built up space or a combination with common facilities is developed and made available to all the allottee units for the purpose of industrial activity. The terms 'industrial activity' is defined to include basic and applied R&D on bio-technology and pharmaceutical sciences/life sciences. Pharmaceutical sector was specifically included in the FDI Circular given the urgent need to augment research and development infrastructure in this area and to expand the production facilities.[4]

Further the Government of India has reviewed the extant FDI policy in relation to pharmaceutical sector and has revised it *vide* Press note no. 3 of 2011 ("**Press Note**"). The Press Note stipulates the following changes:

a) FDI up to 100% under the automatic route would continue to be permitted under the pharmaceutical sector for green-field investments[5].

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[4] http://www.business-standard.com/india/news/drug-industry-hails-100-fdi-in-pharma/452287/, visited on 4-5-2012 at 7.45 pm

[5] This is a form of direct investment where a parent company starts a new venture in a foreign country by constructing new facilities from scratch.

b) FDI up to 100% would be permitted for brown field investments[6] in the pharmaceutical sector under the Government approval route.

Policy initiatives that have been imposed to liberalize the economy in respect of FDI are for example; industrial decontrol, simplifications of investment procedures and commitment to safeguarding intellectual property rights.

There are many factors that are important to MNCs when deciding where to locate new affiliates and production. In a high technology industry, such as the pharmaceutical, factors such as; skilled/ semi skilled labour, well- developed local supply chains, well functioning infrastructure and knowledge producing institutions are important for a firm to consider. Some of these factors are reasons why pharmaceutical multinationals have invested in India.

The FDI in the Indian pharmaceutical industry is mainly market- seeking. India's advantage for MNCs in the pharmaceutical industry is, first of all, the large domestic market with a 1.1 billion population and an annual increase of 2%. India's large population and wide disease pattern make the country attractive for pharmaceutical firms. Relatively cheap manpower and skilled labour are other factors that attract foreign investors. India has an exceptional advantage in pharmaceuticals due to its good human resources and highly skilled work force. English is widely spoken, which makes communication easy for foreign investors.

The production of pharmaceuticals is also relatively cheap in India and there is a strong production base in the country. It is easy to get good quality bulk drugs, which is attractive for foreign firms. Because of India's focus on reverse engineering and development of production processes, it has high technical competence in production in the pharmaceutical industry, which makes its industry attractive for foreign investors. The industry is also very highly competitive among suppliers, which gives the MNCs a good bargaining position. India has many advantages for foreign investors and consequently, the country has future potential to become an attractive destination for outsourcing in drug discovery and clinical research.

Another factor which makes the foreign investors to think of Indian pharmaceuticals is the production costs.[7] The production costs have risen in the pharmaceutical industry by reason of increased complexity of the chemical structure of drugs. Outsourcing production or research activities can lead to cost reduction for the

[6] This is a form of direct investment where a foreign company purchases/leases an already existing facility to launch its operations.

[7] Transnationalization Of Indian Pharmaceutical by Jaya Prakash Pradhan & Partha Pratim Sahu, Bookwell publishers, Delhi, 2008, p.24

company and many foreign pharmaceutical companies outsource parts or their entire production in India. Today, GlaxoSmithKline outsources 70% of its production and Novartis 100% of its production. Pfizer and Organon have sold out some or all of their manufacturing units in India, since they find it more profitable to outsource their production to local manufacturers instead of producing in their own factories. Outsourcing may lead to reduction in the investment required and offer better financial returns.

Regarding R&D in the Indian pharmaceutical industry, the investments are very low, compared to global expenditures. The Indian industry has developed through reverse engineering and process technologies, rather than innovation of new products. One of the obstacles for Indian firms in product innovation is the large financial means required. Here the finance through FDI and the making the know-how available surely improves the strength of Indian R & D sector.

As regard to FDI in pharmaceutical sector is concerned, FDI has come in the form of mergers and acquisitions of Indian firms by the foreign firms. Since 2006, as many as six big Indian pharma companies have been taken over by foreign firms. About $4.73 billion or 50 percent of the recorded FDI in the sector since the year 2000 has been in the form of mergers and acquisitions. In the year 2006, Matrix Lab was sold to the US-based company Mylan. In 2008, Dabur Pharma was bought by Singapore-based Fresenius Kabi. Again in the same year, Ranbaxy was taken over by the Japanese company, Diachii Sankyo. The year 2009 witnessed two major deals in which Shantha Biotech was taken over by the French major Sanofi Aventis and the US-based company Hospira took over Orchid Chemicals. The latest example is of Piramal Healthcare, which was bought in the year 2010 by the US multinational, Abbot Laboratories.

IV. THE EFFECTS OF FDI ON PHARMACEUTICAL SECTOR IN INDIA

FDI is often seen as a catalyst for a country‘s development and economic growth, which is the reason for attracting FDI to the country. There is extensive economic literature that stresses the importance of FDI and its spillover effects to the host economy. Reasons for the importance of FDI is not only the fact that the foreign investor finances the “hardware” such as investment in new plants and equipment, but FDI can be a major transfer of technology, knowledge and capital for the host industries. With FDI comes financial and managerial resources, access to larger markets, technical assistance and strategic assets, for instance; brand name, which can give the host firms, domestic and international, comparative advantage.

Spillover effects may take place when the entry or presence of foreign firms leads to productivity and efficiency benefits in the host country‘s local firms. A positive spillover occurs when “local firms benefit from the foreign investment enterprise superior knowledge of product or process technologies or markets, without incurring a cost that exhausts the whole gain from their improved performance”. [8]

- **Inter- and intra industry spillover effects:**

The spillover effects of foreign firms to the local industries can be divided into two groups; Inter- and intra-industry spillover effects. Inter- industry (vertical) spillovers occur through foreign companies’ impact on the local suppliers.[9] Vertical spillovers take place when the foreign firm and a local supplier, in different industries, are engaged in a long- term relationship. Inter- industry spillovers appear through creation of linkages between the foreign company and domestic firms and it is a process that is usually multi- sectorial.

Spillovers occur when the local suppliers have to meet the demand from the foreign firm in the form of higher quality, price and delivery standards. Another implication of inter- industry spillover effects is the increased demand by the MNC for local intermediate inputs, thus increasing production possibilities in the host economy. If the foreign firms use intermediate goods, produced by domestic firms, spillover effects may arise when FDI allows domestic suppliers to expand their production and thus reduce their average costs due to increasing returns to scale. Moreover, if there is a technology gap between the foreign and the domestic firms, there is potential for technological improvement in the host economy. The local firms must upgrade their products in order to meet the foreign firm‘s demand for advanced products.

Intra- industry (horizontal) spillovers result from the presence of MNCs in a particular sector and its influence on the host industry‘s competitors. Five transmission channels, through which intra- industry spillover effects might occur, are (i) competition (ii) demonstration and imitation effects (iii) transfer of technology and R&D (iv) human capital and labour turnover (v) industrial management.[10]

As far as inter industry spill over is concerned, it is evident from the fact that the foreign pharma companies are involving in joint venture with the Indian companies. For instance, Ranbaxy and Eli Lilly formed a joint venture. As regard to intra-industry spill over is concerned, FDI flow in the pharma has increased competency of the Indian pharma sector. Presently the pharmaceuticals are engaging not only in manufacturing of generic

[8] The WTO and India's pharmaceuticals industry: patent protection, TRIPS, and developing countries by Sudip Chaudhuri, Oxford University Press, New Delhi, 2005, p. 14

[9] FDI and Spillover Effects in the Indian Pharmaceutical Industry by Annika Bergman, Lunds Universitet, School of Economics and Management, Department of Economics, 2006, p 16

[10] *Ibid,* p. 22

drugs but also in inventing new drugs. The FDI has helped the pharma companies to have strong R & D unit and also the expertise of the foreign scientists.

The increase in FDI Inflows to Drugs and Pharmaceuticals industry in India has helped in the expansion, growth, and development of the industry. It is evident from the fact that sthe Pharmaceutical industry has grown from mere US$ 0.3 billion turnover in 1980 to about US$ 21.73 billion in 2009-10. Pharmaceutical industry accounts for about 2.91% of total FDI into the country. The FDI in pharmaceutical sector is estimated to have touched US$ 172 million, thereby showing a compounded annual growth rate of about 62.6%. Drugs and pharmaceuticals sector is at 8th rank in India's top 10 FDI attracting sectors.[11] India saw foreign direct investment (FDI) of $341.49 million in the drugs and pharmaceuticals sector between April 2009 and February 2012.

V. CONCERNS OVER THE FDI FLOW IN PHARMACEUTICALS

The FDI flow into pharmaceutical sector in India has brought the tremendous changes in the performance of the sector. It has helped the sector to expand its business, strengthen R & D capability, etc. On one hand it has paved way for the development but on the other hand it has made some scholars to think of its feasibility in terms of its negative consequences.

There is a general belief that MNCs will cause prices of medicines to go up and will reduce availability of generics in the market.[12] It is said that this price rise makes the drugs out of reach of the poor section of the society. The concerned expressed is as the MNCs are profited oriented than providing service, they think of profit only. This will result in high prices of the drugs. It will make the health care facility out of the reach of the poor section of the society.

Further it is also believed that there may be a concerted strategy by foreign companies to take over the Indian drug industry and divert its capacity towards Western markets thus depriving Indian consumers of low cost medicines. In other words the MNCs may gain monopoly in over the manufacturing and marketing of the drugs and may hike the price so as to exploit the monopoly status. This ultimately burdens the consumer and makes the healthcare facility out of the reach of the common man.

[11] http://www.aims-international.org/aims9/aims9cd/pdf/P9906-Final.pdf, visited on 5-5-2012 at 7.30 pm

[12]http://integraluniversity.academia.edu/SrikantMisra/Papers/1279711/Study_of_Implications_of_FDI_on_Indian_ Economy, visited on 5-5-2012 at 7.15 pm

However, these concerns do not hold water in the light of the report of the Department of Pharmaceuticals. It has analyzed data regarding prices and availability of medicines over the past few years and also exports and imports. The data does not substantiate that acquisitions so far have led to stoppage of nationally relevant drugs. Also a relationship between acquisition and increase in prices is not seen.

Moreover if there occur price rice as to the drugs, then the government has got the power to procure the essential drugs and provide them to the public at a cheaper cost. As such these concerns have no merit in it.

VI. CONCLUSION

The pharmaceutical sector in India is a rapidly growing sector. Due to increase in population, onslaught of new types of diseases, spread of already known diseases have paved the way for the development of this sector. This sector has the great potential for the development.

The flow of FDI has further increased the capacity of Indian pharmaceutical sector. Initially the Indian pharmaceuticals used to manufacture generic drugs only. But presently they are taking up the research and development activity whereby they are involved in the discovery of new drugs. The exports are increasing; net worth of the pharmaceutical sector is increasing. Thus FDI has helped Indian pharmaceutical sector achieve growth at a rapid rate.

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