"A STUDY OF FOREIGN DIRECT INVESTMENT IN INDIAN PHARMACEUTICAL SECTOR"

Twinkle Maheshwari  Hiral Vasadiya  Vivek Rohit  Raj Maheshwari
MBA Student  MBA Student  MBA Student  MBA Student

Assi.Prof Chintan Prajapati
Parul Institute of Engineering & Technology,
Parul University, Vadodara, India.

Abstract: India is a prominent and rapidly growing presence in global pharmaceuticals. It is the largest provider of generic medicines globally, occupying a 20% share in global supply by volume, and also supplies 62% of global demand for vaccines. What is clear is that the time is right for all stakeholders, from government, academia and industry to invest in this future, to achieve the Indian government’s target of becoming a $5 trillion economy by 2025. However, to do so, the pharma industry will need to take some well-thought-out risks, embrace the right opportunities and, importantly, fire on all cylinders! One solution to reduce risks is to optimise the potential of digital technologies to help Indian pharma companies improve the efficiency and effectiveness of their drug development process, from discovery, through clinical trials to regulatory approval, making the whole process faster and cheaper than what is currently possible. I will explore the role of AI in the digital transformation of the pharma value chain in my next blog.

Key Words:- FDI, India Pharmaceutical Sector, Pharma Industry, FDI Inflows

I. INTRODUCTION

India is recognized as global hub for cost effective generic medicines, which is vital in protecting the right to health in developing and underdeveloped countries. FDI is necessary to bring newer and safer technology in India. However, present policies on FDI in India need a relook. Government in India should also make sure that excessive foreign investment does not hamper the local business and companies (especially one involved in Generic medicine), market and the pricing of medicines in India. The startup policies of current NDA government, Pharma Vision 2020 and its proper implementation are important in this regard. The FDI in pharma sector will serve its purpose if suggestions mentioned herein above are implemented properly. Pharmaceutical industry India plays a very crucial role in implementing the welfare state of the people. The economic growth of the industry along with the availability of generic goods and healthy competition is the need of the hour for India. After analyzing the pros and cons of the FDI in the Indian Pharmaceutical Industry,
it is established that India needs adequate FDI and its spillovers for the growth of the industry. The government has remained active in formulating policies to ensure overall growth of the industry. From 2001 onwards 100% FDI in pharmaceutical Industry has been allowed. This has benefitted the pharma sector. From 2006-10, as many as 6 top Indian Companies have been acquired by the MNCs. This has not resulted in price rise or limited supply of generic goods. India is a huge potential market for the MNCs with competent and cheap workforce. However the concerns relating to FDI in pharma sector remain. Though the statistics don’t show them, they may surface over a period of time. For this purpose some control of government over the FDI in pharma sector was needed. The Central Government has notified that in cases of Brownfield investments in the pharmaceutical sector, FDI will be allowed through the FIPB approval path for a period of up to six months. In this period, the government will put in place the essential enabling mechanism for oversight by the competition commission of India. After six months, the oversight will be done by the Competition Commission of India (CCI) entirely in accordance with the competition laws of the country. It seems that the current (FIPB) and the proposed (CCI) approval requirements may act as a speed breaker for potential foreign investors as they may have to show that their intention is not to collude or undertake predatory pricing or any such anti-competitive practice. If the government makes necessary amendments and CCI’s jurisdiction is enhanced to include all prominent pharma acquisitions by MNCs, it will ensure competition in the pharma industry in a transparent manner. With regards to the public interest concern, the Government can come-up with alternative public polices like public procurement of generic goods and fixing the price of essential drugs. CCI, however remains a recently established institution. Its expertise is limited to the competition aspect of the industry. It remains untested, as of now. Government of India has taken a very optimistic decision to allow CCI to be the watchdog over all the mergers and 43 acquisitions in the pharma industry, but it must ensure that it brings about necessary amendments to the Competition Act 2002 and widen the scope of the commission.

II. OBJECTIVES

• To get the information about the foreign direct investment data
• To find out the effect of FDI and Nifty pharma index on pharma sector
• To analysis of top pharma companies in pharma sector
• To find out the growth and opportunities in pharmaceutical industry
• To analysis the challenge faced by the industry
• To analysis covid 19 impact

III. PROBLEM STATEMENT

Aitkin & Harrison (1999) argue that FDI can have negative effects on the domestic firms’ productivity, which may be large enough to offset the positive impact from FDI. The so-called “market stealing effect” refers to when foreign firms enter a host economy and their technology advantages take over the domestic market shares. The MNCs’ advantages draw demand away from the domestic firms’ products; hence the domestic firms’ productivity decreases. Examples of studies that show negative spillover effects are Aitkin & Harrison (1999) and Haddad & Harrison (1993)
Lack of capabilities in the innovation space The report states that the government needs to invest in research initiatives and talent in order to grow India’s innovation.

Quality compliance scrutiny India has experienced the highest number of FDA inspections since 2009; therefore, continued investment into upgrading quality standards will divert capital away from other areas of development and distract from growth, says the alliance.

A lack of a stable pricing and policy environment The challenge posed by frequent and unexpected changes to domestic pricing policy in India have created an uncertain environment for investments and innovations.

IV. LITERATURE REVIEW

Tamma Koti Reddy (2013) studied on Foreign Direct Investments in Indian Pharmaceutical Industry they stated that, Although India has substantially liberalized its foreign investment policy, the foreign direct investment inflows had been much below the targets until recently. Market leaders in pharma industry should raise their expenditure towards Research &Development. Academic collaboration would help the pharma industry with regard to Drug development.

Dr. Nishikant C. Dhande, Prof. Anshuman Vijay Magar studied that A Study of Foreign Direct Investment in Indian Pharmaceutical Industry, they implement that The foreign direct investment route is the fastest, safest and most effective mode of bringing in the most modern technology in India. India is hub of Generics, which will attract huge inflow of FDI in next few years.

Ronny Thomas, K. Narayanan and Vinish Kathuria studied that FDI and R & D in the Pharmaceutical Sector in India, he stated that Expenditure on research and development (R&D) is identified as an important source for promoting innovation and technological learning in developed as well as developing countries. Further, the scope of investment in R&D has increased with the progressive liberalization and increased flow of cross-border investment.

Annika Bergman (2006) studied on FDI and spillover effects in the Indian pharmaceutical industry. This is a study of FDI and spillover effects in the pharmaceutical industry in India. Horizontal productivity spillover effects of MNCs, to the domestic Indian pharmaceutical firms, are analyzed and potential transmission channels through which spillover effects might occur are studied. The pharmaceutical industry is severely technological and capital intensive and India is one of very few developing countries that have a comparative advantage in the industry.

Dr. Gulshan Akhtar study on Problem and Prospect of FDI inflows in Indian Pharmaceutical Industry, As FDI comes with financial and managerial resources, access to large markets, technical assistance and strategic assets, such as brand name, which give the host firms domestic and international comparative advantages. It has been noticed that there has been ample opportunity for the concentration of FDI in the sector particularly export and profitability of the sector.

Reji K. Joseph & K.V.K. Ranganathan Study on Trends in Foreign Investment in Healthcare Sector of India This indicates that the hospitals and clinics in India have been using private equity investments which only look for substantial profits and have no long term commitment for their expansion. This raises serious concerns for public at large in a country like India where the public investment in healthcare is low and out of pocket spending on healthcare is pushing millions of people into poverty.
Dr. Vikarant Sopan Yadav he studies about an analytical study of foreign direct investment in pharma sector of India. However, present policies on FDI in India need a relook. Government in India should also make sure that excessive foreign investment does not hamper the local business and companies (especially one involved in Generic medicine), market and the pricing of medicines in India. The startup policies of current NDA government, Pharma Vision 2020 and its proper implementation are important in this regard.

Harshvardhan Jain & Mayank Rautela (2018) research on FDI in Indian Pharmaceutical Sector But policy should be such to minimize or even remove all objections or disadvantages from FDI inflows into a country. It is also needed because 100% FDI is allowed in this sector which “poses direct threat to the entire health and IPR framework of our country in terms of access and affordability of medicines, domination and elbowing out of our pharmaceutical industry, undue demand and pressure on TRIPS arrangements”17 as per parliament committee report.

V. RESEARCH METHODOLOGY

Source/s of Data

Secondary source we collect data from Internet searches or libraries, for extensive research survey, various published sources like printed books, online journals, research thesis, dissertations and various online websites were used like RBI, Make In India, Pharma industry, etc

Data Collection Method

Existing data Research Journals – like Economic times, Business Standard, Financial Chronicle, Financial Express newspapers, Outlook Money, Money Today, Wealth Insight magazines, research journals are intended for an academic or technical audience, not general readers. A journal is a scholarly publication containing articles written by researchers, professors, and other experts.

Date Collection Instrument

Archival documents and government sources. Gathering and using data contained in website articles tools which help in study depth of pharmaceutical industry.

Sample Design

In below Graph 1.2 all data which mentioned in graph are taken from RBI site, in which there are top 8 Different sector like Service, ITsector, Telecommunications, Trading, Constructions Development, Automobile, Chemicals, Drugs & Pharmaceuticals Sector etc. Which Explained about how FDI inflown Invested into different sector also into Pharma sector.
VI. LIMITATIONS

- Acquisition of domestic firms in the name of FDI may result into domination of foreign firms and it make the domestic firms into mere manufacturing units.
- Foreign Direct Investments are one of the reasons for exchange crisis at times. With inflation contributed by them, exports have dwindled resulting in heavy fall in the value of domestic currency.
- Inflation in the Economy: The presence of FDIs has also contributed to the inflation in the country. They spend lot of money on advertisement and on consumer promotion.
- Convertibility of Currency: FDIs are insisting on total convertibility of currencies in under-developed countries as a prerequisite for investment. This may not be possible in many countries as there may not be sufficient foreign currency reserve to accommodate convertibility.

VII. FDI INTO PHARMACEUTICAL SECTOR

Foreign direct investments (FDI) have played a significant role in developing the Indian pharma sector, and it has resulted in access to global capital markets and financial resources, access to larger consumer markets, generation of new employment opportunities, increase in research and development and increase in net foreign exchange earnings.

FDI in Brownfield projects (under automatic and approval route) will be subject to compliance with the conditions that:

(a) the production level of National List of Essential Medicines drugs and / or consumables and their supply to the domestic market at the time of induction of FDI is to be maintained over the next five years at an absolute quantitative level;
(b) the research and development expenses in value terms is to be maintained for the next five years at an absolute quantitative level as at the time of induction of FDI; and
(c) the relevant investee company shall provide all information pertaining to the transfer of technology, if any, along with induction of foreign investment into the investee company to the Ministry of Health and Family Welfare, Department of Pharmaceuticals.

This legislative framework is with a view to protect the domestic pharma industry, ensure that the supply of essential medicines is not adversely impacted, and increase research and development.

To attract larger FDI in the pharmaceutical sector, the government reviews FDI policy on an ongoing basis with a view to liberalize and simplify it progressively and improve the country's investment climate by providing ease of doing business, Mandaviya said.

Also, various measures are taken under 'Make in India' initiatives facilitating investment, fostering innovation and thereby promoting robust business environment in the country, he added.
VIII. DATA ANALYSIS AND INTEREATION

Graph 1.1 FDI Inflows by Financial year (All Sector wise)

FDI policy is an enabling policy which is uniformly applicable in the country. Government has put in place a liberal and transparent policy for Foreign Direct Investment (FDI), wherein most of the sectors are open to FDI under the automatic route. The Government reviews the FDI policy and makes changes from time to time, to ensure that India remains an attractive & investor friendly destination.

Graph 1.2 SECTOR-WISE FDI EQUITY INFLOWS FROM APRIL 2000 TO DECEMBER 2019

Source: Reserve Bank of India
Make in India initiative has been reviewed and is now focusing on 27 sectors under Make in India 2.0. Department for Promotion of Industry and Internal Trade is coordinating action plans for 15 manufacturing sectors while Department of Commerce is coordinating 12 service sectors.

**Graph 1.3 Exports and Import in Pharmaceutical Sector since 2010-11**

Indian pharma exports are destined to more than 200 countries including highly regulated markets of US, West Europe, Japan and Australia. India exported pharmaceuticals to the tune of Rs. 1,33,910 core with a recorded growth of 10.72% in 2018-19. Drug formulations & Biological was the third largest among the principal commodities exported by India during 2018-19. India exports largely to USA, UK, South Africa and Russia. Imports of drugs during 2018-19 was of Rs. 35,000 crore with bulk drugs and intermediates comprising 63% of the total pharmaceutical imports followed by Drug Formulations and Biologicals (36%). India imports largely from China, USA, Italy and Germany. The country has had surpluses in pharmaceutical trade as shown in the table below.

![Graph showing exports and imports of pharmaceuticals from 2010-11 to 2018-19](image)

*Source: DGCIS KOLKATA*

The Annual Turnover of the Indian Pharmaceutical Industry was estimated to be about Rs. 2,58,5341 Crore during the year 2018-19. The share of export of Bulk Drugs, Drug Intermediates and Drug Formulations, Biologicals was Rs.1,28,0282 Crore for the year 2018-19. Indian pharmaceutical industry supplies a significant percentage of global supply of medicines including vaccines, APIs and finished products. India accounts for 20% of global exports in generics. India’s Pharma exports mainly consist of Drug Formulations and Biologicals up to 77% followed by Bulk drugs and intermediates up to 21%.
Graph 1.4 Foreign direct investment equity inflows in the drugs and pharmaceuticals sector in India from financial years 2015 to 2020

Source: Statista

The drugs and pharmaceuticals sector in India saw a foreign direct investment equity inflow worth 414 million U.S. dollars as of December in the fiscal year 2020. This was a considerable increase compared to the previous fiscal year's 266 million dollar FDI inflow. In fiscal year 2015 its show highest growth in FDI in pharmaceuticals sector. The pharmaceutical industry was valued at $ 36.7 bn in 2018. The country’s pharmaceutical industry is expected to expand at a CAGR of 22.4% over 2015–20 to reach USD $55 bn. India’s pharmaceutical exports stood at USD $17.27 bn in FY18 and have reached USD $15.52 bn in FY19 (up to January 2019). The Pharmaceutical industry in India accounts for about 2.4% of the global Pharmaceutical industry in value terms. Indian companies received 304 Abbreviated New Drug Application (ANDA) approvals from the US Food and Drug Administration (USFDA) in 2017. The country accounts for around 30% (by volume) and about 10% (value) in the USD $70-80 bn US generics market
Graph 1.5 NIFTY PHARMA index return in Pharmaceutical sector

NIFTY Pharma Index captures the performance of the pharmaceutical sector. The Index comprises of 10 companies listed on National Stock Exchange of India (NSE). NIFTY Pharma Index is computed using free float market capitalization method, wherein the level of the index reflects the total free float market value of all the stocks in the index relative to particular base market capitalization value. NIFTY Pharma Index can be used for a variety of purposes such as benchmarking fund portfolios, launching of index funds, ETFs and structured products.

Graph 1.6 Top 10 listed pharmaceutical companies in India by market capitalization as of June 2020

<table>
<thead>
<tr>
<th>Company</th>
<th>Market Capitalization 2020 (INR crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkem Laboratories</td>
<td>27,807</td>
</tr>
<tr>
<td>Abbott India</td>
<td>33,915</td>
</tr>
<tr>
<td>Zydus Cadila Healthcare</td>
<td>37,422</td>
</tr>
<tr>
<td>Lupin Ltd</td>
<td>41,747</td>
</tr>
<tr>
<td>Torrent Pharmaceuticals</td>
<td>42,753</td>
</tr>
<tr>
<td>Aurobindo Pharma</td>
<td>46,043</td>
</tr>
<tr>
<td>Cipla</td>
<td>51,645</td>
</tr>
<tr>
<td>Divi's Laboratories</td>
<td>61,282</td>
</tr>
<tr>
<td>Dr. Reddy's Laboratories</td>
<td>66,596</td>
</tr>
<tr>
<td>Sun Pharma</td>
<td>116,415</td>
</tr>
</tbody>
</table>
Presently, India is the largest provider of generic medicines, occupying a market share of 20 percent with respect to global supply by volume and fulfils nearly 60 percent of global demand for vaccines. Indian pharmaceutical companies even supply nearly 80 percent of antiretroviral drugs (used in combating AIDS) in the international markets.

IX. FINDINGS

- Increasing competition in pharmaceutical sector also attracts foreign investors. Increase in healthcare spending such as Healthcare insurance policy, life insurance policy results in growth in pharmaceutical industry which attracts investment.
- Medical Tourism, pharma packaging, biopharma and bio-generics are some of the emerging segments which may increase the growth of pharmaceutical industry.
- Production cost of pharmaceuticals is also cheap in India.
- As a result of large population, there are wide patterns of disease which attracts the pharmaceutical firms.
- Increase in demand of medicines domestically as a result of better literacy rates as compare to earlier.
- Pharma Vision 2020’ by the Government’s Department of Pharmaceuticals aims to make India a major hub for end-to-end drug discovery.
- The sector received cumulative Foreign Direct Investment (FDI) worth US$ 16.54 billion between April 2000 and June 2020. Under Union Budget 2020-21, allocation to the Ministry of Health and Family Welfare stands at Rs. 65,012 crore (US$ 9.30 billion), whereas, Rs. 6,429 crore (US$ 919 million) has been allocated to health insurance scheme, Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY). In November 2019, the cabinet approved the extension/renewal of extant Pharmaceuticals Purchase Policy (PPP) with the same terms and conditions, while adding one additional product, namely Alcoholic Hand Disinfectant (AHD), to the existing list of 103 medicines till the final closure/strategic disinvestment of pharma CPSUs.
- Government expenditure on healthcare increased to Rs. 3.24 lakh crore (US$ 45.96 billion) in FY20, growing at a CAGR of 18% from FY16. As per Economic Survey 2019-20, Government expenditure (as a percentage of GDP) increased to 1.6% in FY20 from 1.2% in FY15 for health. FDI increased to 74% in existing pharmaceutical companies and 100% in new projects.
- India plans to set up a nearly Rs. 1 lakh crore (US$ 1.3 billion) fund to provide boost to companies to manufacture pharmaceutical ingredients domestically by 2023.

X. CONCLUSION

The Indian Pharmaceutical Industry has shown great potential and continues to grow consistently. Though, since health is an important subject, the industry continues to be regulated. Multiple Ministries continue to regulate the pharmaceutical industry such as the Health Ministry, Chemicals and Fertilizers Ministry, Science and Technology Ministry, Food Ministry etc. However, the Indian generic drug sector is robust and is establishing its presence in foreign markets. Given that the regulatory framework has been streamlined further in the last couple of years, Indian generic companies have been seeing an increasing number of foreign investments. The new drug sector is also expected to record a healthy growth owing to significant industry wise increase in R&D expenditure and proposed new drug launches. Thus, the Indian pharmaceutical sector continues to be an attractive destination for multinational pharmaceutical companies and investors.
XI. BIBLIOGRAPHY

[1] FDI in Indian Pharmaceutical Sector, H Jain, M Rautela - Available at SSRN 3153434, 2018 - papers.ssrxn.com
[3] FDI flows into the Indian pharmaceutical industry: An analysis of trends and constraints, IG Tripathy, SS Yadav, S Sharma - 2011 - npnr.niscair.res.in
[8] Future of Pharmaceutical industry in India, RASHI SHARMA, HEALTH EXPRESS, SEP 14 2020
[9] Investment climate in India has improved considerably since the opening up of the economy in 1991.
[12] Indian pharmaceutical industry and its growth Nishith Desai Associates
[13] Indian Pharmaceuticals Industry Analysis, Jan, 5 2021
[14] An analytical study of foreign direct investment in pharma sector of India, Dr. Vikarant sopan yadav.
[16] Foreign Direct Investments in Indian Pharmaceutical Industry, Dr. Tamma Koti Reddy
[17] FOREIGN DIRECT INVESTMENT IN INDIAN PHARMACEUTICAL INDUSTRY.
[18] Problem and Prospect of FDI inflows in Indian Pharmaceutical Industry.
[21] A STUDY OF FDI AND INDIAN ECONOMY, By Sapna Hooda