AN EXAMINATION OF INFLOW OF FOREIGN DIRECT INVESTMENT IN INDIAN INDUSTRIAL SECTORS

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Abstract

Inflow of foreign direct investment into India has developed rapidly since the liberalization of policy regime. FDI plays a very essential role in the development of Indian economy. Indian economy has gained lot FDI across different industrial sectors during the last two decades. The majority of FDI inflow can be observed in the services sector than the manufacturing sector. The study considers 18 years period of time from 2000-01 to 2018-19. The study used FDI through equity contribution, reinvested earnings and other capital as inflow of FDI in India. The study considered inflow of FDI in major industries and measured the growth of FDI in industrial sector in India. The study evaluated FDI through growth trend and panel regression model. Findings revealed that various foreign companies have contributed huge direct investment every year. Findings also stated that inflow of FDI mainly happened in service sector, computer software and hardware, telecommunications, construction development and trading. In conclusion, it was found that there is a positive influence of inflow of FDI on economic development of the nation.

Key words: *Foreign Direct Investment, Indian Economy, Inflow, Growth, Sector-wise FDI.*

1. Introduction

In the past two decades, Foreign Direct Investment (FDI) has become increasingly important in the developing countries with an increasing number of developing countries having successfully attracted considerable and increasing amounts of inward FDI. With national interests in mind, policy makers have designed an FDI policy that aims to use FDI as a means of acquiring advanced technology and mobilizing foreign exchange resources. Over time and according to economic and political regimes, there have also been changes in FDI policy. The potential benefits of foreign direct investment in the host economy are that it facilitates the use and exploitation of local raw materials and introduces modern management and marketing techniques. Due to the intense care of foreign direct investments, better products and services are available to national clients. After several reforms, India opened its doors to FDI inflows and adopted a more liberal foreign policy to restore the confidence of foreign investors. Furthermore, as part of the new foreign investment policy, the Indian government has established the Foreign Investment Promotion Board (FIPB), whose main function is to invite and facilitate foreign investment.

Foreign direct investment has become an important source of foreign capital flows and an important source of external financing for developing countries like India. FDI is linked to globalization, which can be summarized as the opening of markets, the transfer of technology, capital and people. Another main aspect of globalization is multilateralism. It should be noted that the first cannot be effective without the second. One of the main objectives of international economic reform was to promote multilateralism. The economic basis of multilateralism lies in the efficiency of allocation. This means that economies can export to the best destinations and import the most efficient sources. In this sense, FDI involves the importation of capital from a variety of sources, since it can be more efficient than bilaterally restricted. The facade of this fact would be to export capital where it can be used more efficiently by combining capital with other resources in an optimal way. The basis of these capital transfers is to make a profit for both the local economy and the host economy.

India is the fastest growing economy introduced by liberalization, privatization and globalization (LPG) in 1991 and part of it; India has selectively relaxed the regulatory framework for foreign direct investment. FDI plays an important role in the Indian economy as it is a non-volatile, debt-free, long-term source of capital. It acts as a stimulant for competition, savings, innovation, and capital formation that lead to job creation, industrial growth, and economic development. There are dichotomous views on the impact of foreign direct investment on economic growth. Many studies have considered that it generates many positive impacts, while some emphasize its impact on stunting. But for a developing economy like India, it can function as an additional source of finance. Therefore, there is a reason to study the growth, trends and structure of FDI in India, on one hand, and to analyze the performance of FDI as a relationship between foreign direct investment and the economic growth of the Indian economy, on the other hand. In this regard, it is very important to examine the relationship between foreign direct investment and India's economic growth, which will be useful for policymakers to assess and implement appropriate policies.

2. Statement of the Problem

It is widely observed that foreign direct investment mitigates the imbalance between savings and investment and provides a technology used for the production of goods and services. FDI in retail is still an issue of great importance to India. The liberalization of trade policies in recent decades has led India to become an investment-friendly country. FDI in this country has taken on crucial importance in the context of this liberalization. FDI inflows have clearly proven to be very beneficial for the overall development of the Indian economy. On many fronts, it is beneficial for India; in investment, taxes, job creation and farmers set prices at a certain level. The retail sector can be a major contributor to India's gross domestic product. It improves organized retail and increases consumer interest in the market. Consumers with an improved standard of living are looking for several options for trading under one roof.

FDI also accelerates growth by creating jobs in the host country and sharing management knowledge and skills through bottom-up and top-down integration in recipient countries. Investing in the learning and innovation of local companies can also have indirect productivity effects for the host economy. FDI inflows, which seek long-term returns, promote economic development through technology transfer when they have a high degree of absorptive capacity in terms of human capital and a useful trade regime in the beneficiary country. The growth and protection of the domestic sector are important factors in increasing national savings. The idea of this study is to analyze the protection measures of unorganized retail trade, which is one of the most important but less specific components of our economy. FDI is one of the most powerful instruments to channel economic growth in any country that cannot be ignored. Fostering FDI is also important to accelerate the economic growth of any country. As a part of the globalization process, rapid development is taking place in various parts of the world, raising the question of the attractiveness of FDI for economic growth and development in emerging and developing economies.

3. Review of Literature

Foreign direct investment could bring about deterioration in the balance of payments in developing countries like India (Kaur, Yadav & Gautam, 2013). Dash & Parida (2013) reported about passing a beneficial effect of FDI on growth, after controlling for trade. Apart from these parameters of balance of payments, trade and growth, few other factors also contributed to the inflow of foreign direct investment. These factors include human capital, per capita income, gross domestic product, government consumption, foreign exchange and trade distortions (Siddiqui & Ahmed, 2017). Foreign direct investment is considered to be the life blood and an important vehicle for economic development as far as the developing nations are concerned. The important effect of foreign direct investment is its contribution to the growth of the economy (Srivastava & Srivastava (2017).

Foreign direct investment can increase the level of competition in the host country through reduction in entry barriers and the market power of existing firms (Agarwal & Khan, 2011). Foreign direct investment is the key to global economic integration, providing financial stability, driving economic growth and improving social welfare (Nguyen et al, 2019). Sharma and Khurana (2013) under the new foreign investment policy through Foreign Investment Promotion Board were constituted by Government of India. Its main function was to invite and it facilitates foreign investment through single window system. Duggal (2017) disclosed that foreign direct investment is an investment involving a long term link that reflects a lasting interest and control of a resident entity in one financial system on an entity resident in an economy other than that of the foreign direct investor.

4. Research Methodology

The study is conducted with the use of secondary data. It has been collected from Reserve Bank of India, Department of Industrial Policy & Promotion, and Centre for Monitoring Indian Economy (CMIE). The study used 18 financial years' data from 2000-01 to 2018-19. The study considered fifteen major sectors such as services sector, computer software & hardware, telecommunications, construction development, trading, automobile, chemicals and pharmaceuticals. Moreover, it considered infrastructure, power, hotel & tourism, metallurgical, miscellaneous, food processing and information & broadcasting. The study used growth trend estimation on FDI, graphical presentation and panel regression for analysis of data. Therefore, fixed effect model and random effects model has been used for estimating panel data.

5. Objectives of the Study

The study has been commenced with the following objectives. These are:

1. To measure the inflow and growth rate of foreign direct investment in India.
2. To evaluate the sector-wise inflow of foreign direct investment in India.
3. To estimate and compare the growth of foreign direct investment and growth of industrial sector in India.

6. Results and Discussions

6.1. Inflow and Growth Rate of FDI

The total inflow and growth of rate of foreign direct investment for the period from 2000-01 to 2018-19 are considered. It consists of four facets of FDI i.e., equity investment from FIPB / RBI/ Acquisition route and unincorporated bodies, reinvested earnings, other capital and total FDI. In addition to that relative share of each year's foreign direct investment with total FDI is computed and annual growth of FDI is also estimated and presented in the Table-1.

Table-1: Inflow and Growth Rate of FDI from 2000-01 to 2018-19

(Amount in USD Million)

S. No	Year	Equity		Reinvested Earnings +	Other Capital +	Total FDI Inflows	Relative Share % (year wise)	% Growth
		FIPB Route/ RBI's Automatic Route/ Acquisition Route	Equity Capital of Un-incorporated Bodies					
1	2000-01	2,339	61	1,350	279	4,029	0.66%	-

2	2001-02	3,904	191	1,645	390	6,130	1.01%	52%
3	2002-03	2,574	190	1,833	438	5,035	0.83%	-18%
4	2003-04	2,197	32	1,460	633	4,322	0.71%	-14%
5	2004-05	3,250	528	1,904	369	6,051	0.99%	40%
6	2005-06	5,540	435	2,760	226	8,961	1.47%	48%
7	2006-07	15,585	896	5,828	517	22,826	3.74%	155%
8	2007-08	24,573	2,291	7,679	300	34,843	5.71%	53%
9	2008-09	31,364	702	9,030	777	41,873	6.87%	20%
10	2009-10	25,606	1,540	8,668	1,931	37,745	6.19%	-10%
11	2010-11	21,376	874	11,939	658	34,847	5.71%	-8%
12	2011-12	34,833	1,022	8,206	2,495	46,556	7.63%	34%
13	2012-13	21,825	1,059	9,880	1,534	34,298	5.62%	-26%
14	2013-14	24,299	975	8,978	1,794	36,046	5.91%	5%
15	2014-15	30,933	978	9,988	3,249	45,148	7.40%	25%
16	2015-16	40,001	1,111	10,413	4,034	55,559	9.11%	23%
17	2016-17	43,478	1,223	12,343	3,176	60,220	9.87%	8%
18	2017-18	44,857	664	12,542	2,911	60,974	10.00%	1%
19	2018-19	44,366	693	13,570	5,746	64,375	10.56%	6%
Total		**4,22,900**	**15,465**	**1,40,016**	**31,457**	**6,09,838**	**100.0%**	**-**

Source: RBI Bulletin

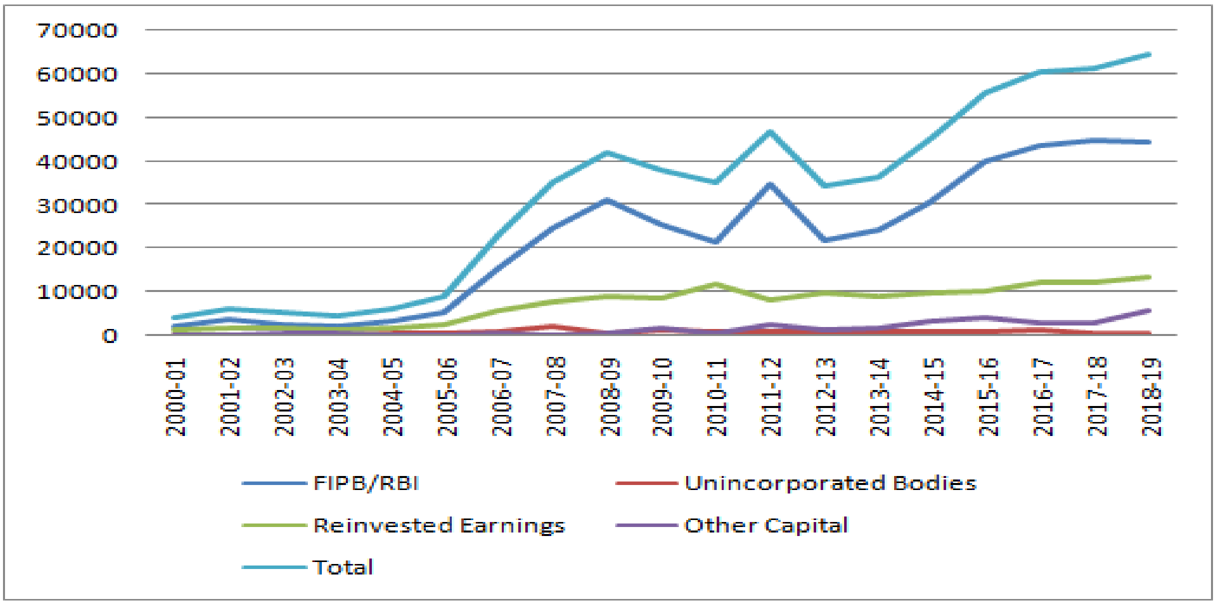
Table-1 exhibits the inflow of foreign direct investment in India from 2000-01 to 2018-19. During the year 2000, government had initiated significant changes in the foreign direct investment policy regime and it becomes a progressively more attractive and investor pleasant destination. The inflow of foreign direct investment in the nation grew enormously in the post liberalization reforms after 1991; therefore it is the cause for remarkable increase with 52% in the year 2001-02. The total FDI was 4,029 $ million in 2000-01 and 6,130 $ million in 2001-02. The relative share of FDI was just 0.66% and 1.01% during the year 2000-01 and 2001-02. The inflow of foreign direct investment was inconsistent and failed to attain growth and it was declined to 18% and 14% during the financial year 2002-03 and 2003-04. The reason for decline in inflow of foreign direct investment during post 2001 was influenced by earthquake in Gujrat, attack of terrorist on Parliament of India and attack of terrorist on WTO. The total FDI was 5,035 $ million in 2002-03 and 4,322 $ million in 2003-04. The relative share of FDI was just 0.66% and 1.01% during the year 2002-03 and 2003-04.

The inflow of foreign direct investment was enormous from 2004-05 to 2006-07. The total FDI was 6,051 $ million in 2004-05, 8,961 $ million in 2005-06 and 22,826 $ million in 2006-07. The relative share of FDI was just 0.99% in 2004-05, 1.47% in 2005-06 and 3.74% during the year 2006-07. The growth of FDI was 40% in 2004-05, 48% in 2005-06 and 155% in 2006-07. FDI policies were approached in a rationalized way during this period. Moreover, the procedures were simplified to raise full equity capitalization in certain sectors and other removal of other restrictive conditions supported more in this regard. Thereafter, inflow of

FDI was increased to 34843 $ million in 2007-08 and 41,873 $ million in 2008-09. The relative share of FDI was 5.71% in 2007-08 and 6.87% in 2008-09. The growth of FDI was 53% in 2007-08 and 20% in 2008-09. But during 2009-10 total FDI was decreased to 37,745 $ million and in 2010-11 and it was decreased to 34,847 $ million. There was a negative growth of 10% and 8% found in 2009-10 and 2010-11 with the relative share of 6.19% and 5.71% respectively.

The inflow of FDI was increased to 46,556 $ million in 2011-12 with growth of 34% and relative share of 7.63% in total FDI from 2000-01 to 2018-19. Subsequently, FDI was decreased to 34,298 $ million in 2012-13 with a negative growth of 26% and relative share of 5.62%. The FDI inflows was estimated at 36,046 $ million in 2013-14, 45,148 $ million in 2014-15 and 55,559 $ million in 2015-16. Similarly, FDI inflow was estimated at 60,220 $ million in 2016-17, 60,974 $ million in 2017-18 and 64,375 $ million in 2018-19. It clearly shows a decreasing trend during the last five year period. The relative share of FDI roughly touched one-tenth in every year during this period. FDI investments could not raise much due to the financial volatility triggered by subprime crisis in 2008 and further the Euro crisis in 2012-13. From 2014-15 onwards, the revival signs started emerging for FDI with the positive growth in inflow of FDI. In this manner, the annual inflow of equity through FIPB/RBI/Acquisition route and unincorporated bodies are presented in the figure-1. Further, reinvested earnings, other capital and total foreign direct investment inflows are presented.

Figure-1: Inflows of FDI



Source: RBI Bulletin

Figure-1 reveals that equity through FIPB/RBI route is the major contributor in FDI than equity capital unincorporated bodies, reinvested earnings and other capital. Inflow of total foreign direct investment shows increasing trend from 2013-14 to 2018-19.

6.2. Sector-wise Inflow of FDI

There are various indicators that reflect the eminence of foreign direct investment inflows into the nations, and predominantly changes in sector-wise composition are one among them. It is highly important for a nation to examine the influence of FDI in each of its sectors. Therefore, the growth of modern and advanced technology may attract new investments and consolidate such industry to achieve huge success. It is evident that there has been a main transformation in the inflow of FDI composition after the liberalization. Foreign direct investment has gradually shifted from manufacturing industries to service based sector. Furthermore, various sectors had been opened up for foreign direct investment at different points of time. In this way, the study particularly examines the variation in FDI inflows into various sectors. Sector-wise inflow of FDI is presented in Table-2.

Table-2: Sector-wise Inflow of FDI

(Amount in USD Million)

S. No	Sectors	Inflow of FDI	% of Total Inflows
1	Services	74,149.38	22.65%
2	Software and Hardware	37,237.89	11.38%
3	Telecommunications	32,825.79	10.03%
4	Construction Development	25,045.80	7.65%
5	Trading	23,021.12	7.03%
6	Automobile	21,386.65	6.53%
7	Chemicals	16,581.98	5.07%
8	Pharmaceuticals and Drugs	15,982.82	4.88%
9	Infrastructure	14,805.17	4.52%
10	Power	14,315.77	4.37%
11	Hotel and Tourism	12,351.18	3.77%
12	Metallurgical Industries	11,301.13	3.45%
13	Miscellaneous Industries	10,883.35	3.32%
14	Food Processing Industries	9,076.05	2.77%
15	Information & Broadcasting	8,384.74	2.56%
Total		**3,27,348.82**	**100.00%**

Source: RBI Bulletin

Table-2 depicts sector-wise inflow of foreign direct investment in India. The services sector consisting of banking and financial services, insurance, research and development, courier service, technology and non-financial service has the highest growth rate in terms of inflow of FDI. This sector has received an inflow of 74,149.38 $ million during the period 2000-01 to 2018-19. It represents 22.65% of total inflow of FDI among fifteen sectors during this period. The service sector has rendered a prominent role in making enhanced economic performance both in the domestic economy and host country economy. It has also helped the integration of the nation with world economy through the flow of capital and trade particularly in the information and technology platform. Followed by, software and hardware has registered a net inflow of 37,237.89 $ million FDI in this period. The relative share of software and hardware sectors consists of 11.38%. Development of information technology has offered significant growth in attracting FDI to both software and hardware sector. Telecommunications sectors has attracted a net inflow of 32,825.79 $ million in this period. It characterizes 10.03% of total inflow of FDI to the nation during this period.

Construction development sector involved in building township, housing projects, and construction development projects in the nation. It sizeably attracts 25,045.80 $ million as inflow of FDI during this period and it represents 7.65% among this group. The trading industry has been able to contribute 23,021.12 $ million as inflow of FDI during this period. Over the years the sector attracts nearly 7.03% of total FDI during this period. Automobile industry gets huge foreign direct investment across various operators from different foreign destinations. Automobile manufacturers have not installed manufacturing plants and it contributes considerable infrastructure development, employment and GDP to the nation. It 21,386.65 $ million and indicates 6.53% of total FDI. Chemical industry has received an inflow of 16,581.98 $ million in this period with a relative share of 5.07%. Pharmaceutical and drugs industry has registered a net inflow of 15,982.82 $ million FDI with relative share of 4.88% in this period. Infrastructure has a received inflow of 14,805.17 $ million FDI and it represents 4.52% as its relative share of total FDI among these sectors. Power sector shows inflow of 14,315.77 $ million FDI and it shows 4.37% as its share in total FDI.

Hotel and tourism sector attracts 12,351.18 $ million FDI in this period and it indicates 3.77% as its share in total FDI received by the country in this period. Metallurgical industries attract 11,301.13 $ million FDI and it indicates 3.45% as its relative proportion in total FDI gained by the nation in such period. Miscellaneous industries attract 10883.35 $ million FDI in this period and it indicates 3.32% as its share in total FDI generated by the nation in this period. Food processing industries has registered 9.076.05 $ million FDI during this period. The relative share of food processing industries shows 2.77% in total inflow of FDI in this period. Information and broadcasting attract 8,384.74 $ million FDI and it indicates 2.56% as its relative proportion in total FDI gained by the nation in such period

6.3. Growth of FDI and Industrial Sector

The growth trend of FDI in industrial sectors has been evaluated with panel regression. The study used fixed effect model and random effects model for estimating panel data. Fixed effect facilitates the exploring of relationship between predictor and outcome variables within the individual entities. The postulation of fixed effect is that some features within an individual variable can make a bias or impact on the outcome variables. Fixed effect models assists in controlling the effect and it is based on the assumption of the correlation between error term and predictor variables. Moreover, fixed effect helps to reduce the effect of such time invariant features from the predictor variables and make sure to measure net effect of such prediction. India is the best destination for FDI in services sector than manufacturing industry. The main reason for such debate is supported that Indian manufacturing firms are globally competitive than service sector firms. There are various reasons that hamper the performance of manufacturing firms. It includes rising labour costs and raw material costs. Rise in education boosts the service based firms and also it attracts global players to put their investment in services sector.

Table-3: Panel Regression – Random Effect Model

Sector GDP	Coefficient	SE	z statistic	P value
Sector FDI	0.014	0.004	4.95	0.000
Constant	5915.623	2425.994	2.46	0.017
R2	0.341			
Chi-square	25.243			
Prob. > Chi-Square	0.000			

Table-4: Panel Regression – Fixed Effect Model

Sector GDP	Coefficient	SE	t statistic	P value
Sector FDI	0.014	0.003	4.83	0.000
Constant	5915.783	359.357	16.36	0.000
R2	0.329			
Chi-square	23.561			
Prob. > Chi-Square	0.000			

In order to select the most effective model in such situation, Hausman test has been conducted between fixed effect and random effect, its results are as follows.
Test hypothesis: H_0 = there is no systematic difference in coefficients of two model.

Chi-Square = (b_1-b_0) $[(Var(b_0) – Var(b_1))$ ^ $(b_1)]$ (b_1-b_0) = 0.00
Prob. > Chi-Square = 0.9956

Results of the Hausman Test lead to rejection of the fixed effect model. Therefore, its rejection leads to accept the random effect model at 5% significant level. The results of random effect model shows that the influence of sector based foreign direct investment is positive; it means that if the foreign direct investment inflow increases than the growth of the respective sector is also found positive.

7. Conclusion

India has become the most attractive and emerging market internationally. The gross FDI attracted from 2000-01 to 2018-19 was 609838 $ million from various countries across several industries. The inflow of FDI over the years has assisted the nation in technology development, upgrade of skills, effective infrastructure and high level of employment generation. Foreign companies have supported the nation in transforming its economic structure, fetching more investors and have gained superior investment in many innovative sectors. Further, it supported to access huge amount of FDI inflows in different sectors from this period. Therefore, service sector is the major and preferred sector in attracting high FDI inflows in the nation. It is followed by computer software and hardware, telecommunications, construction development, trading and automobile industry. Moreover, chemicals, pharmaceuticals and drugs, construction, power, hotel and tourism attract considerable inflow of FDI to the nation. In addition to that, metallurgical industries, miscellaneous industries, food processing industries, and information and broadcasting are the major sectors attracting FDI in the nation. The study concluded that there is a positive influence of inflow of FDI on economic development of the nation.

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