



An Empirical Study of Foreign Direct Investment in Top Eight in INDIA

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ORIGINAL ARTICLE



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Received on : 20/02/2021

Revised on : -----

Accepted on : 27/02/2021

Plagiarism : 08% on 20/02/2021



Plagiarism Checker X Originality Report

Similarity Found: 8%

Date: Saturday, February 20, 2021

Statistics: 180 words Plagiarized / 2290 Total words

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AN EMPIRICAL STUDY OF FOREIGN DIRECT INVESTMENT IN TOP EIGHT IN INDIA
Abstract India has large potential to develop and grow globally due to their low labour cost and high population in term of manufacturing and consumption. But due to lack of capital, skilled labour, technology, economy of scale, management skill govt policy and many more factors restricted to come out from the position.

Abstract

India has large potential to develop and grow globally due to its low labour cost and high population in term of manufacturing and consumption. But due to lack of capital, skilled labour, technology, economy of scale, management skill govt policy and many more factors restricted to come out from the position. Further make in India campaign give the boost and motivate the investors worldwide through policy changes reduction in business doing barriers for their smooth growth. India has only 2.1% on global trade in term of export and 2.6% in term of import. To increase the investment to boost the export from the vision of make in India the top eight sector viz. service, construction, telecommunication, pharmacy, software & hardware, chemical, and at some level automobile and chemical sector which have range to tap the untapped market. FDI in the mentioned sector works as catalyst to accelerate the economy.

Key Words

Foreign, investment, skilled labour, telecommunication, reduction, construction.

Introduction

There are various growth driver in India related to economic growth. The huge population and their rising demand and income open the various door of development regarding various demand of consumer and producer goods. We have high population but some constraints limits our development due to lack of skilled labour, research & development, technology, patents, skilled labour, economy of scale, management, policy and capital

requirement etc. But due to government policy to encourage the external finance as investment in India by foreign direct investment (FDI), Foreign Institutional Investors (FII'S), Foreign portfolio investors (FPI'S) by creating non-debt, and non volatile source and their return depend upon the growth strategy of the organisation through make in India campaign give a boost to Indian economy. Several economic¹ indicators is witnessed for the growth like mining, manufacturing, service sector etc. The PM statement to the people of the world "come and makes in India come and manufacture in India go and sell worldwide but manufacture here." The main focus of the India is developing 25 sectors by make in India programme after considering the global position in various competitive segments. With the new and emerging driver of country that determine the future outlook related to productivity and growth of the country and competitive ecosystem which ponder the degree of complexness of growth and productivity drive. For any country the main growth indicator are infrastructure, macroeconomic stability, product market, market size, labour, financial system etc.

The present article consider the top eight sector where the maximum FDI's inflow received by equity inflow.

Review of Literature

Many research articles have been published regarding FDI's inflow in India and their growth indicator in Indian economy ecosystem.

Kumar, M. (2017). Foreign direct investment in Indian market. In Outward Foreign Direct Investment (FDI) in Emerging Market Economies (pp. 258–293). IGI the article express the study about the determinants of FDI's that host country business cost, host country institutions and infrastructure, trade agreement and multilateral trade openness attract the FDI'S investors in the host country.

Sutradhar D³, Vol 13 No 4 (2014): Artha Journal of Social Sciences, according to this study the growth of FDI in services sector may be attributed to the changing pattern of global FDI and also the liberalization and globalization policies pursued by India. Since 2000, the high inflow of FDI has resulted in the growth of new services viz., financial and non-financial services, telecommunication, computer software and hardware, hotel and tourism, construction activities and real estate.

⁵Kpmg India, as per the study, the rising population of middle class is the big market of real estate business and according to their income slab and home requirement unit at their purchasing price the affordable house will witness the key growth driver in this sector.

Need of the Study

India is a developing country and populated area which attracts both all durable and non-durable goods to the global manufacturer, but due to low labour cost and third market size in global index attract the investors to invest. The various factors which motivate the FDI'S , FII'S , FPI'S in different sector to invest and earn profit in a particular area or sector as per their analysis. The study concentrate on a top eight sector where maximum FDI'S invested and whether interest of the investors are increases or decreases in last ten year or they interested in the new sector for their progressive growth.

Objective of the Study

1. To analyze the growth of mentioned sector considered in study.
2. To study the trend of selected sector considered in study.
3. To study the FDI'S inflow in different sector.

Research Methodology

This study is based on secondary data only. The data has been collected from magazine, journals, articles, government websites, hand book, FDI'S reports, newspaper, action plan and from the different websites. The study is based on data which is available in websites in form of excel, pdf, etc.

Scope of the Study

Rational behind the study of impact in the given sector of FDI'S in Indian industrial growth in the past ten year and new growth driver factor which stimulate the sector considered from make in India campaign. Limitation of the study considered the ten year average inflow of FDI'S from 2007-08 to 2017-18. Selection of the first eight sector is based on the highest average inflow of FDI'S in past ten year out of the 25 sector. The data has been collected for last ten year. The eight sector witness the highest inflow of FDI'S in the time frame mentioned. The sector mentioned gets a rich input through technology, patents, funding, skill, management to make presence globally.

Hypothesis

H01: There is no significant growth among the different eight sectors in respect of FDI'S inflow.

H02: There is significant growth among the different eight sectors in respect of FDI'S inflow.

Limitaion

Study is limited to the only growth of metallurgical, computer software & hardware, construction, tele-communication, chemical, service, pharmacy & drugs segments. Not any variable or factors considered in the study of the research.

Data analysis and intrepretation FDI'S Equity inflows

This is the study about the trend of inflow of FDI'S in India through equity flow in the ten year. The rate of growth is not follow a fixed trend, there is variations in the flow of FDI'S both in year basis and sector wise. For the metallurgical industries where the FDI'S continue in down fall in two year after 2007-08, it take continue growth in 2010-11 and 2011-12 and then again take a down turn for next three year and again it up by 215% in year 2016-17. The pattern of FDI'S in this sector was in crisscross condition. There is not any linear trend show the FDI'S inflow in this sector.

The computer software and hardware are also not follow trend, in 2008-9 it increased by 11.65% and after that continuous decrease by 43.51% , 10.56% in year 09-10 and 10-11and decline in 2012-13 by 38.98% after that there is contiguous growth find in next three year by 131.76% , 1.3.86% and 157.15% respectively 2013-14,2014-15and 2015-16 and in last year a decline visible by 38.15% in 2016-17. There is not any constant growth or decline find in this sector.

The tele-communication sector give a rise by 102% in year 2008-09 and there a little decline 0.37% and 34.45% in 2009-10 and 2010-11 respectively after that 20% growth find in 2011-12 and a sharp decline of 84.79% in 2012-13 in next two year it follow a triple and double growth rate 330% and 121.5% in year 2013-14 and 2014-15 respectively again it decline by 54.25% in 15-16 and return back by four times growth 320% in 2016-17. As per in quantitative term the growth is 4.5time in FDI'S from year 207-8 to 2016-17.

The automobile industries show a continuous steady growth in three year 07-08, 08-09, 09-10 respectively by 75.28%, 7.5% and 5.11% respectively but a sharp decline visible in 2011-12 by 28.97% and it touches the growth 66.55% in 12-13 and little decline by 1.3% in 13-14. The year witnesses the growth of 79.64% in14-15 and there is continuous decline in next two year by 7.29% and 36.31%. From 2007-08 to 2016-17 the growth in quantitative term is 2.45 time with

not a remarkable pattern in the sector.

The chemical industries show a zigzag pattern in FDI'S inflows through equity mode the year 2008-09 show a growth of 178.66% and a 43.31% decline in 2009-10 again it peak a growth of 543.38% and 71.62% growth in 2010-11 and 2011-12 respectively again in next five year an up and down pattern follow in FDI'S inflow ,from 2012-13 to 2016-17 the growth are -92.62%, 169.29%, -3.05%, 92.7%, -5.25% respectively.

The drug and Pharma industries FDI'S inflow is not in a normal pattern, huge variations find in this sector, its growth sometimes very high and sometimes at very high decline. In 2008-9 it show a growth of 1147.76% and next two year decline by 94.98% and 1.74% respectively 2009-10 and 2010-11 again it show a high growth 1443.74% in year 2011-12 and decline by 65.24% in year 2012-13. In next two year it show positive growth by 13.87% and 17.07% in 2013-14 and 2014-15. Again a down fall takes place by 49.64% in year 2015-16 with the improvement of 13.67% in 2016-17. In quantitative term in the last ten year the time limit factor taken under consideration is only 2.52 times growth fold takes place after huge up and down between the periods.

In service sector there is continuous three year decline viz. 2008-09, 2009-10, and 2010-11 by 11.49%, 32.49%, and 21.04%, respectively again it show positive growth in 2011-12 by 58.25% and again turn to decline in two year rallies by 7.34% & 53.96% in 2012-13 & 2013-14 and again three year pick a positive momentum for FDI'S inflow in this sector by 99.69%, 55.05%, and 26.05% respectively 2014-15,2015-16 & 2016-17. As per in quantitative term , in last ten year there is only 24% growth find from 2007-08 to 2016-17. There is instability in pattern.

In construction segment three year show a positive growth in year 2008-09, 2009-10, and 2011-12 and in rest of the year was in complete decline phase. In quantitative term, in the period 10 year of study FDI'S inflow decline by 97.7% in this sector.

Table 1: FDI'S Equity inflow in highest average inflow in top eight sector

Sector	Metallurgical	Software & hardware	Telecommunication	Automobile Ind.
2007-08	1175.75	1382.25	1260.70	656.10
2008-09	959.94	1543.34	2548.63	1150.03
2009-10	419.88	871.86	2539.26	1236.29
2010-11	1098.14	779.81	1664.5	1299.41
2011-12	1786.14	796.35	1997.24	922.99
2012-13	1466.23	485.96	303.87	1537.28
2013-14	567.63	1126.27	1306.95	1517.28
2014-15	359.34	2296.04	2894.94	2725.64
2015-16	456.31	5904.36	1324.4	2526.82
2016-17	1440.18	3651.71	5563.69	1609.32
Sector	Chemical	Drugs & Pharmacy	Service sec.	Construction
2007-08	233.7	340.35	6986.17	3887.33
2008-09	651.22	4246.76	6183.49	4657.51
2009-10	365.94	213.08	4174.53	5466.13
2010-11	2354.4	209.38	3296.09	1663.03
2011-12	4040.71	3232.28	5215.98	3140.78
2012-13	292.16	1123.46	4832.98	1332.49
2013-14	786.76	1279.34	2225.1	1226.05
2014-15	762.76	1497.74	4443.26	769.14

2015-16	1469.95	754.26	6889.46	112.55
2016-17	1392.8	857.39	8684.07	105.14

(Source: <https://data.gov.in/catalog/foreign-direct-investment-fdi-equity-inflows>)

TABLE 1 show the FDI'S equity inflow in average top eight sector of ten year from 2007-08 to 2016-17 which consists the construction, tele-communication, service sector, drug and Pharma, chemical, software hardware, automobile and metallurgical sector. The sectors are selected on the basis of highest average inflow of FDI'S in the time period of study.

Table 2 : Growth percentage in FDI'S equity inflow among the sectors from 2007-08 to 2016-17

Sector	Metallurgical	Hardware	software Telecomm.	Automobile	Chemical	Pharmacy	Drugs service sec.	construc.
2007-08	-	—	—	—	—	—	—	—
2008-09	-18.36%	11.65%	102.16%	75.28%	178.66%	1147.76%	-11.49%	19.81%
2009-10	-56.26%	-43.51%	-0.37%	7.50%	-43.81%	-94.98%	-32.49%	17.36%
2010-11	161.54%	-10.56%	-34.45%	5.11%	543.38%	-1.74%	-21.04%	-69.58%
2011-12	62.65%	2.12%	19.99%	-28.97%	71.62%	1443.74%	58.25%	88.86%
2012-13	-17.91%	-38.98%	-84.79%	66.55%	-92.77%	-65.24%	-7.34%	-57.57%
2013-14	-61.29%	131.76%	330.10%	-1.30%	169.29%	13.87%	-53.96%	-7.99%
2014-15	-36.69%	103.86%	121.50%	79.64%	-3.05%	17.07%	99.69%	-37.27%
2015-16	26.99%	157.15%	-54.25%	-7.29%	92.71%	-49.64%	55.05%	-85.37%
2016-17	215.61%	-38.15%	320.09%	-36.31%	-5.25%	13.67%	26.05%	-6.58%

Table 2 shows the percentage changes in FDI'S equity inflow in eight sectors in ten year by moving year base. The percentage calculated with previous year base as compared to current year data. The calculation is based on TABLE 1 data. The year considered among 2007-08 to 2016-17.

Table 3 : Descriptive Analysis of the eight sectors

Sector	Metallurgical	software hardware	Telecomm.	Automobile	chemical	Drugs Pharmacy	service sec.	construction
2007-08	-	--	--	--	--	--	--	--
2008-09	-18.36%	11.65%	102.16%	75.28%	178.66%	1147.76%	-11.49%	19.81%
2009-10	-56.26%	-43.51%	-0.37%	7.50%	-43.81%	-94.98%	-32.49%	17.36%
2010-11	161.54%	-10.56%	-34.45%	5.11%	543.38%	-1.74%	-21.04%	-69.58%
2011-12	62.65%	2.12%	19.99%	-28.97%	71.62%	1443.74%	58.25%	88.86%
2012-13	-17.91%	-38.98%	-84.79%	66.55%	-92.77%	-65.24%	-7.34%	-57.57%
2013-14	-61.29%	131.76%	330.10%	-1.30%	169.29%	13.87%	-53.96%	-7.99%
2014-15	-36.69%	103.86%	121.50%	79.64%	-3.05%	17.07%	99.69%	-37.27%
2015-16	26.99%	157.15%	-54.25%	-7.29%	92.71%	-49.64%	55.05%	-85.37%
2016-17	215.61%	-38.15%	320.09%	-36.31%	-5.25%	13.67%	26.05%	-6.58%

Table 3 show the descriptive information related to eight sectors based on ten years data. It consist the mean, median, standard deviation, standard error, variance of the data, peak of bell that is kurtosis, and maximum and minimum of among the ten year of each sector of FDI'S equity inflows.

Table 4 : Two-way anova of different sectors

Parameter	Metallurgical	software & hardware	Telecomm	Automobile	chemical	Drugs & Pharmacy	service sec.	construction
Mean	972.954	1883.795	2140.418	1518.116	1235.040	1375.404	5293.113	2236.015
Median	1029.040	1254.260	1830.870	1408.345	774.760	990.425	5024.480	1497.760
Standard err.	159.634	535.215	451.764	206.674	374.414	424.479	608.259	607.443
S.D (σ)	504.808	1692.499	1428.603	653.561	1184.000	1342.322	1923.483	1920.905
sample variance	254831.277	2864554.230	2040907.899	427141.794	1401856.704	1801827.570	3699786.765	3689874.951
Kurtosis	-1.383	3.088	3.555	0.285	3.003	1.369	-0.286	-1.153
Skewness	0.179	1.822	1.551	0.922	1.725	1.460	0.189	0.564
Minimum	359.340	485.960	303.870	656.100	233.700	209.380	2225.100	105.140
Maximum	1786.140	5904.360	5563.690	2725.640	4040.710	4246.760	8684.070	5466.130

The Table 4 show the two way ANOVA without replication in the flow of FDI'S for ten year in eight sectors from year 2007-08 to 2016-17. On interpretation of the test results, I conclude that the Null hypothesis is true. There is not any remarkable changes takes place in the Growth of FDI'S inflow into eight sectors. The study shows that p-value is more than 5% that is 0.21 or 21% in case between the sectors. There are not any significant changes in the FDI'S inflow. The critical value of F critical is always be more than F value, but in between the year F value is more so the Null hypothesis is true.

Finding and Suggestion

FDI'S is fuel for economic growth and development in Indian economy. India's growth is directly dependent on the FDI'S due to lack of capital, technology, management etc.

Except in construction sector rest of the segment attract the FDI'S investor but not in heavy manner in last ten year.

Conclusion

To encourage the economy, government initiates the Make in India campaign in 25th September 2014 in 25 sectors. The FDI'S not only able to give fund only but also provide set of skill, high level technology and innovative tools to win the race economy of scale at worldwide. The sector selected for the research in the ten years of time where the make in India comes between that times. The selected tele-communication and service sector give a positive signal after the campaign but the rest sector does not show a significant growth. There is not any constant growth and decline shown by any particular sector a huge up and down seen in the period. As per quantitative term, construction sector shown a big downfall in given time frame.

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