

AN EMPIRICAL STUDY ON FDI IN INDIA WITH REFERENCE TO SELECT SECTORS

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Abstract : Foreign Direct Investment (FDI) is effective employment of funds into the host country in the form of investment in various sectors. Over the past, Foreign Direct investment has been a key instrument of attracting International Economic integration which in turn helps in transfer of technology, financial resources and managerial skills. FDI generates enormous benefits to the host country which leads to economic growth. The present study focuses on FDI in India and the contribution in select sectors. An attempt has been made to evaluate FDI inflows in select sectors for a period of five years. Five sectors are considered for the study, construction development, automobile, drugs & pharmaceuticals, telecommunications and information and broadcasting, the entire study is based on secondary data. Statistical tool two way Anova has been used and inferences were drawn.

Key words: Foreign Direct Investment, inflows, construction development, automobile, drugs & pharmaceuticals, telecommunications and information and broadcasting.

I. INTRODUCTION

Foreign direct investment (FDI) in India is one of the major monetary source for economic development. Foreign companies would invest directly in fast growing Indian businesses to take advantage and benefits of cheaper wages and ever encouraging business environment. Economic liberalization started in India in the year 1991. Over the period the government has brought various encouraging policies by enhancing FDI limits in various sectors. Now, FDI is allowed in many sectors like Infrastructure, Construction Development, Automobile Industry, Drugs and Pharmaceuticals, Telecommunications, Information and Broadcasting (Including Print Media), service, Agriculture & Animal Husbandry, Plantation, Mining, Petroleum & Natural gas, Defence Manufacturing, Civil Aviation etc.,.

The Gross inflows of FDI in to the country are enhancing the growth of Indian economy. The study is considered to study select sector wise gross FDI equity inflows in to the country for the past five years.

The scope of the study is confined to the gross inflows of FDI in India. The data considered for the study is five years. The time period is 2012-13 to 2016-17. The sectors considered for the study are such as Construction Development which includes Townships, housing, built-up infrastructure and construction-development projects, Automobile Industry, Drugs and Pharmaceuticals, Telecommunications, Information and Broadcasting (Including Print Media).

Objectives of the study:

To study the Gross inflows of FDI of select sectors in India for the period of five years

To compare the gross inflows of FDI of select sectors for the select period.

Research methodology:

The entire study is based on secondary data. The time period considered for the study is from 2012-13 to 2016-17. Sectors considered for the study are Construction Development which includes Townships, housing, built-up infrastructure and construction-development projects, Automobile Industry, Drugs and Pharmaceuticals, Telecommunications, Information and Broadcasting (Including Print Media). statistical tool two way Anova was used to analyze the data and infer the results.

Hypotheses:

H01: There is no significant difference in the Foreign Direct Investment in selected sectors over the past five years.

H11: There is a significant difference between the Foreign Direct Investment in selected sectors over the past five years.

H02: There is no significant difference between the various years in select sectors with regards to the Foreign Direct Investments.

H12: There is a significant difference between the various years in select sectors with regards to the Foreign Direct Investments.

Review of literature

Dr.Karnika Gupta & Ishu Garg (2015) the paper was undertaken mainly to examine the time lag required for FDI to make its utmost impact on economic growth of the country like India the factors considered for the study are Gross domestic product and FDI. It is proven that there is need for the continuous increase in FDI in order to bring economic growth.

Shalini Aggarwal, Ankush Singla, Ritu Aggarwal (2012) the study focused on the comparison and sectorwise ranking based on inflows of FDI in various countries for the period of ten years(2000-2011). The results showed that Mauritius invested highly in India which is followed by Singapore, Japan, USA and other countries.

Dr. M. Sumathy & L.S. Sridhar (2014) the study covers FDI inflows exclusively in service sector. Based on the time series data of GDP in service sector and FDI, it is shown that there is a relationship between GDP and FDI inflows.

Dr. Priyanka Banerji (2017) the study shows about the impact of Make in India policy on FDI. The study proves that the initiative make in India lead to tremendous increase in inflows of FDI major portion of the inflows are through automatic route.

Rose (2016) an attempt was made to study the specific service sector which attracted more contribution, employment, and income. The results of the study stated that in the 2014, India's services sector growth was at the rate of 10.3% was noticeably higher than China which was at 8.0%.

The Union Cabinet has approved number of amendments to Foreign Direct Investment (FDI) Policy 2018. Key amendments approved 100% FDI under automatic route for Single Brand Retail Trading (SBRT), Construction Development, Foreign airlines and power exchanges. allowed investing up to 49% in Air India under government approval route. FIIs/FPIs allowed investing in Power Exchanges through primary market

Data Analysis:
Sector wise gross FDI equity inflows in to the country for the past five years
(AMOUNT IN US\$ MILLION)

SECTOR/YEARS	2012-13	2013-14	2014-15	2015-16	2016-17	TOTAL
METALLURGICAL INDUSTRIES	1466.23	567.63	359.34	456.31	1440.18	4289.69
MINING	57.89	12.73	684.39	520.67	55.75	1331.43
POWER	535.68	1066.08	707.04	868.8	1112.98	4290.58
NON-CONVENTIONAL ENERGY	1106.52	414.25	615.95	776.51	783.57	3696.8
COAL PRODUCTION	0	2.96	0	0	0	2.96
PETROLEUM & NATURAL GAS	214.8	112.23	1079.02	103.02	180.4	1689.47
BOILERS AND STEAM GENERATING PLANTS	20.05	0.17	1.33	77.91	53.91	153.37
PRIME MOVER (OTHER THAN ELECTRICAL GENERATORS)	184.6	212.78	230.7	159.13	286.88	1074.09
ELECTRICAL EQUIPMENTS	195.87	134.31	574.83	444.88	2230.69	3580.58
COMPUTER SOFTWARE & HARDWARE	485.96	1126.27	2296.04	5904.36	3651.71	13464.34
ELECTRONICS	38.24	132.58	96.84	208.39	83.97	560.02
TELECOMMUNICATIONS	303.87	1306.95	2894.94	1324.4	5563.69	11393.85
INFORMATION & BROADCASTING (INCLUDING PRINT MEDIA)	404.04	428.52	254.96	1009.34	1516.68	3613.54
AUTOMOBILE INDUSTRY	1537.28	1517.28	2725.64	2526.82	1609.32	9916.34
AIR TRANSPORT (INCLUDING AIR FREIGHT)	15.89	45.95	74.56	361.25	83.4	581.05
SEA TRANSPORT	64.62	20.49	333.22	429.3	735.06	1582.69
PORTS	0	0.31	1.9	0	0	2.21
RAILWAY RELATED COMPONENTS	29.85	236.93	129.73	73.99	87.57	558.07
INDUSTRIAL MACHINERY	503.83	477.38	716.79	568.26	329.3	2595.56
MACHINE TOOLS	101.39	64.52	24.06	126.38	23.89	340.24
AGRICULTURAL MACHINERY	95.41	48.78	72.35	16.44	15.19	248.17
EARTH-MOVING MACHINERY	5.1	34.44	30.11	97.66	52.23	219.54
MISCELLANEOUS MECHANICAL & ENGINEERING INDUSTRIES	89.45	288.13	186.69	274.57	245.24	1084.08
COMMERCIAL, OFFICE & HOUSEHOLD EQUIPMENTS	24.33	21.13	33.39	36.68	7.44	122.97
MEDICAL AND SURGICAL APPLIANCES	83.02	173.48	145.93	173.26	479.71	1055.4
INDUSTRIAL INSTRUMENTS	0.58	0.53	0.85	7.42	0.8	10.18
SCIENTIFIC INSTRUMENTS	73.28	45.08	32.34	6.36	76.66	233.72
MATHEMATICAL, SURVEYING AND DRAWING INSTRUMENTS	6.71	0	0	0	0	6.71
FERTILIZERS	42.55	20.65	225.32	20.93	0.89	310.34
CHEMICALS (OTHER THAN FERTILIZERS)	292.16	786.76	762.76	1469.95	1392.8	4704.43

PHOTOGRAPHIC RAW FILM AND PAPER	0	0	0.75	0	0	0.75
DYE-STUFFS	0	0	54.89	3.32	10.7	68.91
DRUGS & PHARMACEUTICALS	1123.46	1279.34	1497.74	754.26	857.39	5512.19
TEXTILES (INCLUDING DYED,PRINTED)	103.89	198.86	197.42	230.13	618.95	1349.25
PAPER AND PULP (INCLUDING PAPER PRODUCTS)	5.09	26.86	116.21	85.21	197.61	430.98
SUGAR	12.26	3.08	27.77	105.85	15.92	164.88
FERMENTATION INDUSTRIES	107.21	814.58	225.38	202.36	110.86	1460.39
FOOD PROCESSING INDUSTRIES	401.46	3982.89	515.86	505.88	727.22	6133.31
VEGETABLE OILS AND VANASPATI	108.39	21.55	148.34	34.22	108.45	420.95
SOAPS, COSMETICS & TOILET PREPARATIONS	160.07	108.44	177.22	193.26	92.6	731.59
RUBBER GOODS	642.18	370.54	284.51	296.15	262.76	1856.14
LEATHER,LEATHER GOODS AND PICKERS	46.7	6.14	34.21	17.13	2.3	106.48
GLUE AND GELATIN	0	0.97	21.44	0.82	90.6	113.83
GLASS	209.16	43.09	41.82	25.78	51.69	371.54
CERAMICS	4.33	150.09	35.29	51.21	15.4	256.32
CEMENT AND GYPSUM PRODUCTS	12.38	254.01	208.99	19.69	2130.1	2625.17
TIMBER PRODUCTS	29.17	6.16	8.97	53.17	10.23	107.7
DEFENCE INDUSTRIES	0.41	0.82	0.08	0.1	0	1.41
CONSULTANCY SERVICES	142.32	285.85	458.13	517.47	261.14	1664.91
SERVICES SECTOR (Fin.,Banking,Insurance,Non Fin/Business,Outsourcing,R&D,Courier,Tech. Testing and Analysis, Other)	4832.98	2225.1	4443.26	6889.46	8684.07	27074.87
HOSPITAL & DIAGNOSTIC CENTRES	256.86	684.58	567.85	742.35	747.38	2999.02
EDUCATION	172.2	262.09	78.86	230.78	160.12	904.05
HOTEL & TOURISM	3259.05	486.38	777.01	1332.69	916.13	6771.26
TRADING	717.8	1343.39	2727.96	3845.32	2338.4	10972.87
RETAIL TRADING	22.31	11.3	168.72	262.24	450.94	915.51
AGRICULTURE SERVICES	161.47	91.01	59.95	84.65	76.43	473.51
DIAMOND,GOLD ORNAMENTS	52.61	42.56	280.18	58.54	123.92	557.81
TEA AND COFFEE (PROCESSING & WAREHOUSING COFFEE & RUBBER)	0.27	5.86	1.43	1.12	1.6	10.28
PRINTING OF BOOKS (INCLUDING LITHO PRINTING INDUSTRY)	14.34	113.78	72.58	122.81	53.17	376.68
COIR	0.15	0.54	1.36	0	0	2.05
CONSTRUCTION (INFRASTRUCTURE) ACTIVITIES	283.89	485.37	870.25	4510.71	1860.73	8010.95
CONSTRUCTION DEVELOPMENT: Townships, housing, built-up infrastructure and construction-development projects	1332.49	1226.05	769.14	112.55	105.14	3545.37
MISCELLANEOUS INDUSTRIES	229.49	468.74	765.88	668.77	296.4	2429.28
Grand Total	22423.58	24299.33	30930.5	40000.98	43478.27	161132.66

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

FDI equity inflows in five selected sectors for the past five

(AMOUNT IN US\$ MILLION)

SECTOR/YEARS	2012-13	2013-14	2014-15	2015-16	2016-17	TOTAL
CONSTRUCTION DEVELOPMENT	1332.49	1226.05	769.14	112.55	105.14	3545.37
AUTOMOBILE INDUSTRY	1537.28	1517.28	2725.64	2526.82	1609.32	9916.34
DRUGS & PHARMACEUTICALS	1123.46	1279.34	1497.74	754.26	857.39	5512.19
TELECOMMUNICATIONS	303.87	1306.95	2894.94	1324.4	5563.69	11393.85
INFORMATION & BROADCASTING	404.04	428.52	254.96	1009.34	1516.68	3613.54

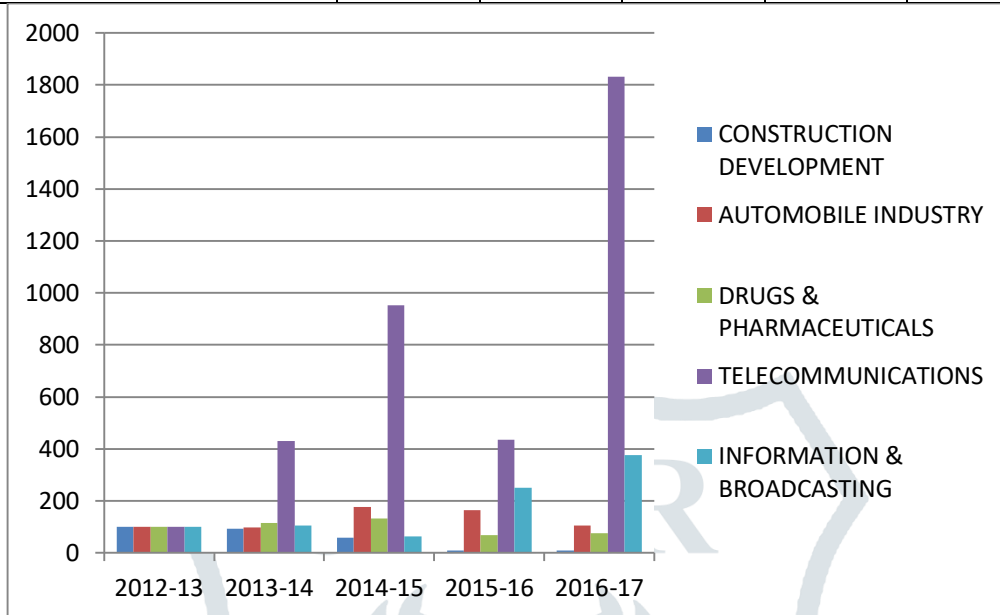


Figure 4.2 Bar graph of the five selected sectors

It is observed that among the select sectors, telecommunications sector received highest inflows in the past five years (i.e., 11393.85 US\$ MILLION). In case of construction development sector received lowest FDI inflows in the past five years. (i.e., 3545.37 US\$ MILLION) .

Anova: Two-Factor Without Replication						
SUMMARY	Count	Sum	Average	Variance		
CONSTRUCTION DEVELOPMENT	5	266.071	53.21421	1943.218		
AUTOMOBILE INDUSTRY	5	645.0575	129.0115	1483.618		
DRUGS & PHARMACEUTICALS	5	490.6441	98.12882	731.4359		
TELECOMMUNICATIONS	5	3749.58	749.9161	458263.1		
INFORMATION & BROADCASTING	5	894.352	178.8704	17143.11		
2012-13	5	500	100	0		
2013-14	5	840.7464	168.1493	21510.06		
2014-15	5	1384.133	276.8265	145244.3		
2015-16	5	925.6095	185.1219	28152.93		
2016-17	5	2395.216	479.0433	590674.8		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	1655347	4	413836.7	4.452905	0.013111	3.006917
Columns	431276.5	4	107819.1	1.16014	0.364865	3.006917
Error	1486981	16	92936.33			
Total	3573605	24				

The summary of the all the analysis is presented as follows.

Hypotheses Conclusion

S. No.	Null Hypothesis	P Value	Decision
1.	H01: There is no significant difference in the Foreign Direct Investment in selected sectors over the past five years.	0.013111	Rejected (Significant)
2.	H02: There is no significant difference between various years with respect to Foreign Direct Investment.	0.364865	Accepted (Not Significant)

The hypotheses taken for the study have been tested using Two-way ANOVA tool. The output is given in Tables 4.3. It is observed that there is no significant difference between the Foreign Direct Investment in selected sectors over the past five years and also there is a significant difference between various years with respect to Foreign Direct Investment.

It is observed that there is a significant difference between various years in respect to FDI and the highest score is given in year 2016-17 with respect to mean (479.0433) and followed by 2014-15 (276.8265), 2015-16 (185.1219), 2013-14 (168.1493), 2012-13 (100), and the significant difference FDI inflows in sectors can be observed where the highest score is given to Telecommunication sector with a mean of (749.9161) followed by Information and Broadcasting (178.8704), Automobile Industry (129.0115), Drugs & Pharmaceuticals (98.12882), Construction Development (53.21421). There is no significant difference in the FDI in the select sectors and there is no significant difference in various years with regards to the FDI.

Conclusion:

Foreign Direct investment is considered as one of the major source of non- debt financial resource for the economic development of the country. India has become the most attractive emerging market for investments. Annual FDI inflows are also expected to rise at a rate of 75 billion dollars over the next five years.

References:

- Dr.KarnikaGupta & IshuGarg (2015) Foreign Direct Investment and Economic Growth in India an Econometric Approach, Journal of Management Sciences and Technology 2(3), June-2015 (ISSN-2347-5005).
- Shalini Aggarwal, Ankush Singla, Ritu Aggarwal (2012) Foreign Direct Investment in India, IJCEM International Journal of Computational Engineering & Management, Vol. 15 Issue 5, September 2012 ISSN (Online): 2230-7893.
- Dr. M. Sumathy & L.S. Sridhar (2014) FDI Flows in Service Sector, IRJBM Volume No – VII October - 2014 Issue – 10, ISSN 2322.083X.
- Dr. Priyanka Banerji(2017) Impact of Make in India launch on FDI, IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 19, Issue 7. Ver. III (July 2017), PP 25-35.
- Grace Antony Rose(2016) FDI, Service Economy and Challenges in Services Marketing With Special Reference to Services Sector in India, IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668 PP 16-19.