# Dynamics of Foreign Direct Investment (FDI) Location in India: An Empirical Analysis

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#### Abstract

In the era of globalization, foreign direct investment [FDI] is considered as an important mechanism for channelising transfer of capital and technology and thus perceived as a potent factor in promoting economic growth in the host of the countries. As a result there is a tremendous growth in the global flow of FDI in the last two and half decades. India is no exception to this trend. After opening up of the economy to the global market, there is a rapid increase in FDI inflows to the country. However, the bane of FDI inflows to the country is that foreign investment flows have largely concentrated in the few states. Economically advanced states have attracted the lion's share of FDI flows. The top 6 states viz.Maharashtra, Delhi, Karnataka, Tamilnadu, Gujarat Andhrapradesh together accounted over 70% of FDI equity flows to India in the post liberalization period and they continue to do so even now also. Against this backdrop the present paper tries to give an overview of dynamics of location of FDI in India. Understanding the dynamics of interstate variations in FDI inflows is very much important for balanced regional development in the country.

**Key Words:** Foreign Direct Investment, Spatial distribution, Dynamics, Inequalities

#### I. INTRODUCTION

In the era of globalization, foreign direct investment [FDI]is considered as an important mechanism for channelizing transfer of capital and technology and thus perceived as a potent factor in promoting economic growth in the host of the countries. As a result there is a tremendous growth in the global flow of FDI in the last two and half decades.FDI inflow which was US\$158.70 billion in 1991 increased to US\$1700 billion in 2015.India is no exception to this trend. After opening up of the economy to the globalmarket, there is a tremendous growth in FDI inflows to the country. The annual inflow of FDI which was just Rs.174 crores (US\$97 million) in 1991 has increased toRs.2, 94,258 crores (US \$45,148 million) in 2015-16.As per the IMF's Global Financial Stability

Report 2012, India has emerged as one of the major recipient of FDI inflows among the emerging market economies in the last few years.FDI Intelligence's the FDIReport 2016 found India as the largest recipient of FDI in 2015 replacing China in the world.

Generally speaking FDI refers to capital inflows from abroad that are invested in the production capacity of the host country. Foreign direct investment is an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy other than that of the foreign direct investor (Hymer-Kindleberger).FDI inflow has helped the poor underdeveloped countries to overcome the chronic problem of shortage of capital. Besides this FDI inflows have helped to bridge the gap between desired and actual level of capital stock, especially when domestic investment is not sufficient to push the capital desired stock to the (Noorbaksh,et.al.2001).In addition FDI also brings in better technology and management practices to the host country which make the economy more competitive through spillover effects (Craves, Globerman)

In order to reap the benefit of flow of foreign capital and also to mitigate the domestic compulsions Indialiberalized its investment policy in 1991. Since then there is a tremendous growth in FDI inflows into the country . However, the bane of FDI inflows to the country is that foreign investment flows have largelyconcentrated in the few states. Economically advanced states have attracted the lion's share of FDI flows .The top 6 statesviz.Maharashtra, Delhi, Karnataka, Tamilnadu, Gujarat and Andhrapradesh together accounted over 70% of FDI equity flows to India in the post liberalization period and they continue to do so even now also. Against this backdrop the present paper tries to give an overview of dynamics of location of FDI in India. Understanding the dynamics of interstate variations in FDI inflows is very much important for balanced regional development in the country [SuhitaChatterjee et.al 2013] and to formulate appropriate policy measures to diffuse the capital inflows in the country on equal foot.

# II. REVIEW OF LITERATURE

Huge inflow of FDI in the post liberalization period has drawn the attention of academicians and policy makers in large scale; as a result several studies have been carried on the diverse aspects of FDI inflows in to the country. However, the studies which have analysed the location of FDI in India are reviewed here.

Bajpai and Sachs (2000) in their study 'Foreign Direct Investment in India: issues and problems' found that FDI in India has moved to the reform oriented states "fast moving reformers have tended to attract higher investments, both from foreign and domestic investors" Padhi, Satyaprasad (2002) notes that the initial level of manufacturing influenced the location of FDIinflows in India. Therefore, the states with good infrastructure base have succeeded in attracting more FDI than their counterparts. Morris (2004) on the other hand states that FDI in India has concentrated in the states with largest and best cities and attributed the modest FDI in Gujarat to its inability to develop a city like Bangaluru.Based on the examination of states wise approvals of FDI during 1991-2001 Singh and Srinivasan (2004) concludes that variations in FDI across states could be influenced by specific policy initiatives and narrowlyfocused government investments in infrastructure. By studying the new projects that were implemented or were under implementation during 1992 to early 1998Chakravorty (2002)concludes that FDI preferred the coastal and metropolitan districts.Goldar,Bishwanath (2007)inhis "Location of plants of foreign companies in India" opines that by and large the same set of factors influenced the location decisions of plants of local companies as that of foreign companies. Nunnenkamp and Stracke's(2007)study finds significant positive correlation of FDI with percapita income, population density, percapita bank deposits, telephonedensity, level of education and percapita net value added in manufacturing. However, Agarwal (2005) was of the opinion that rigid labour markets in Indian states has acted as a obstacle in the flow of FDI.Lall and Mengistae's (2005)study found that the local business environment had significant bearing on location decisions. Ramachandran and Goebel(2002)in their study points that Tamilnadu has emerged as one of the most favoredinvestment destination in India on account number a advantages viz. strong and stable government with proactive policies, investor friendly decision making process, sound and transparent diversified industrial infrastructure ,comfortable power situation, abundant availability of skilled manpower etc.Mukherjee,Atri(2011)in her paper "Regional inequality in FDI flows to India: the problems and prospects "concludes that the growth of FDI flows to the country has been accompanied by strong regional

concentration thereby depriving a large number of Indian states from the benefits of a liberalisedFDI regime. Her analysis reveals that market size, agglomeration effects and size of manufacturing and services base in a state have significant positive influence on FDI flows.

Thus, thereview of studies which analysed the distribution location aspect of FDI in the country reveals that although India received good quantum of FDI inflows in the post liberalisation period, it is accompanied by strong concentration of FDI in few pockets of the country. To alter this tendency both central and state governments have undertaken several policy measures in the last 25 years. Does this alter the above tendency? Ifso, what are the dynamic changes that have taken place in the location of FDI inIndia? This paper intends to find answer to these questions with the objective of proposing an effective policy measures.

#### III. OBJECTIVES OF THE STUDY

The main objectives of the study are as follows,

- 1. To study the trends of FDI inflows into the country.
- 2. To study the dynamics of FDI location in India.
- 3. Identify the factors influencing the FDI location.
- 4. To suggest suitable policy measures for the equitable distribution of FDI in the country.

### IV. HYPOTHESES OF THE STUDY

The study keeps following hypotheses for the purpose of analysis.

- 1. A fairly strong concentration of FDI in relatively few states can be observed in the country since the beginning.
- 2. There is no change in the spatial concentration of FDI over a period of time.

#### V. DATABASE AND METHODOLOGY

Present study is based on the secondary data. The required data has been extracted from various issues of Reserve Bank of India bulletins, SIA newsletters, FDI factsheets and other publications of Department of Industrial Policy and Promotion (DIPP) Govt.of India. To study the trends of FDI inflows the time period taken is 1991 to 2015. Since, the systematic data on states wise FDI inflows is available from 2000 onwards; the time period from 2005 to 2015 is taken for analysis of dynamics of state wise location of FDI . Compiled data is arranged in tables, percentage method and graphs are used to analyse the data, so that

meaningful inferences can be drawn.GIS technique has been used to show the dynamics of location of FDI in India in the post liberalization period..

capital received boost only after the introduction of New Economic Policy (NEP) in 1991. Following table shows trends of FDI inflows to India in the post liberalisation period.

# VI. TRENDS IN FDI INFLOWS TO INDIA

Though India welcomed foreign capital to achieve rapid industrialization after independence, the flow of foreign

Table-1: Trends of FDI inflows to India (1990-1991 to 2015-16)

Year	FDI inflows(Rs.crores)	Annual growth (in %)				
1990-91	174	81.60				
1991-92	316	81.60				
1992-93	965	205.37				
1993-94	1838	90.46				
1994-95	4126	124.48				
1995-96	7172	73.82				
1996-97	10015	39.64				
1997-98	13220	32.00				
1998-99	10358	-21.64				
1999-00	9338	-9.84				
2000-01	18406	97.10				
2001-02	29235	58.83				
2002-03	24367	-16.65				
2003-04	19860	-18.49				
2004-05	26,947	35.68				
2005-06	39,457	46.42				
2006-07	1,02,652	160.16				
2007-08	1,39,421	35.81				
2008-09	1,90,645	36.68				
2009-10	1,57,819	-17.21				
2010-11	1,32,358	-16.13				
2011-12	1,54,961	17.07				
2012-13	1,46,954	-5.16				
2013-14	1,86,830	27.13				
2014-15	2,15,893	15.55				
2015-16	2,94,258	36.29				

Source: Compiled from Factsheet on FDI, RBI for various years.

From the above table it can be inferred that there is a tremendous growth of FDI since liberalization of the economy with certain ups and downs here and there. On the eve of liberalizationFDI inflows into the country was just Rs.174 crores(US\$4029 millions)which steadily increased to Rs.39,457 crores in 2005-06. Since then theFDI inflows increased rapidly and stood at Rs.2, 94,258crores in 2015-16. The analysis of annual growth of FDI to the country shows significant growth with wide variations over the years. Annual growth of FDI in the year 1991-92 was to the tune of 81.60 percent, since then it increased rapidly recording highest growth rate of 205.37% in 1992-93 and 124.48 %in 1994-95.But, after the 1994-95 FDI growth

slackened significantly before hitting the negative growth rate of 21.64% in 1998-99 and 9.84 in 1999-2000.Again after 1998-99 FDI inflows increased significantly in the next two years before recording negative growth rate in 2002-03 and 2003-04 consecutively. In the year 2004-05 FDI inflows recorded significant positive growth and reached highest rate of 160.16 in 2006-07. But, after that again FDI growth rate is slow and even negative in the years of 2009-10, 2010-11 and 2012-13. Thus, in the post liberalisation though there is a tremendous increase in the volume of FDI inflows to the countryits growth is not steady.

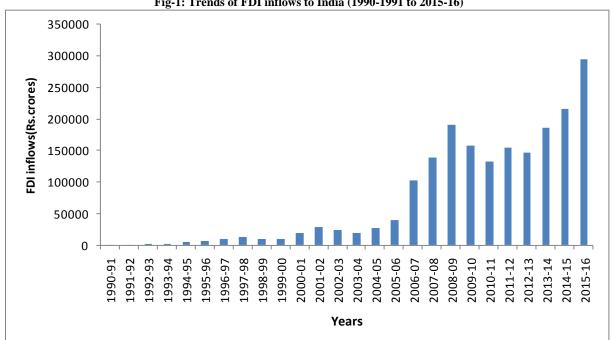


Fig-1: Trends of FDI inflows to India (1990-1991 to 2015-16)

# VII. DYNAMICS OF FDI LOCATION IN INDIA

Although India saw rapid increase in the FDI inflows in the post liberalization period, distribution of FDI in the country is not uniform.FDI inflows concentrated in the few pockets of the country whereas the vast areas are

denied of the benefits of itsflow. The quick look into the following table (Table-2) helps us to understand the dynamics of FDI location in the country in the post liberalization period.

Table-2: Dynamics of FDI location in India (2005 to 2015)

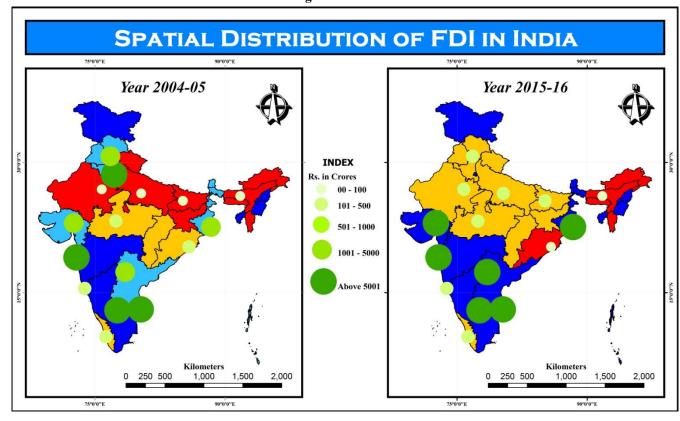
RBI's Regional offices	States Covered	2004-05	2005-06	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Cumulative FDI inflows from 2005 to 2015
New Delhi	Delhi,Part of UP & Haryana	22,076.08 (25.77)	31,860.89 (23.42)	45,182.9 9(22.74)	54537.25 (16.12)	91077.15( 19.40)	12184 (13.76)	37403 (21.50)	17490 (14.34)	38190 (25.88)	42,252 (22.34)	69,129 (36.18)	4,61,382.36 (21.60)
.Mumbai	Maharashtra,Dadra&Nagarhaveli, Daman&Diu	17,978.76 (20.99)	33,886.08 (24.91)	51444.9 6 (25.90)	114287.54 (33.77)	168442.62 (35.89)	27669 (31.25)	44664 (25.67)	47359 (38.84)	20595 (13.96)	38,933 (20.58)	33,756 (17.66)	5,99,015.96 (28.05)
Bangalore	Karnataka	6,456.13 (7.54)	9,275.33 (6.82)	14089.7 5 (07.09)	23742.71 (7.02)	29789.25 (6.35)	6133 (6.92)	7235 (4.15)	5553 (4.55)	11422 (7.74)	21,255 (11.23)	21,883 (11.45)	1,56,834.17 (07.34)
Chennai	Tamilnadi,Puducherry	5,203.10 (6.07)	10,395.62 (7.64)	13021.1 2 (06.55)	18836.70 (5.57)	23819.42 (5.07)	6115 (6.90)	6711 (3.85)	15252 (12.51)	12595 (8.53)	23,361 (12.35)	28,023 (14.66)	1,63,332.96 (07.64)
Ahmedabad	Gujarat	2,793.23 (3.26)	4,431.99 (3.26)	5608.80 (02.82)	22939.08 (6.78)	27927.48 (5.95)	3294 (3.72)	4730 (2.71)	2676 (2.19)	5282 (3.58)	9416 (4.97)	9,507 (4.97)	98,605.58 (04.61)
Hyderabad.	Andhra Pradesh	2,737.33 (3.20)	5,254.80 (3.86)	8400.33 (04.23)	14603.31 (4.32)	20043.49 (4.27)	5753 (6.49)	4039 (2.32)	6290 (5015)	4024 (2.72)	8326 (4.40)	5,051 (2.64)	84,552.26 (03.95)
Chandigadh	Chandigarh,Punjab,Haryana,HP	1,477.59 (1.72)	1,562.45 (1.15)	1754.72 (0.88)	1754.72 (0.52)	1987.79 (0.42)	1892 (2.13)	624 (0.35)	255 (0.20)	562 (0.38)	234 (0.12)	149 (0.07)	10,498.55 (0.49)
Kolkotta.	Westbengal,Sikkim&Andaman& Nicobar Islands	1,243.88 (1.45)	`1,532.17 (1.13)	3136.63 (1.58)	5287.46 (1.56)	5506.61 (1.17)	426 (0.48)	1817 (1.04)	2319 (1.90)	2659 (1.80)	1464 (0.77)	5759 (3.01)	31,150.75 (1.45)
Panaji	Goa	484.37 (0.57)	835.25 (0.66)	854.90 (0.43)	1104.64 (0.33)	1844.88 (0.39)	1376 (1.55)	181 (0.10)	47 (0.03)	103 (0.06)	211 (0.11)	117 (0.06)	7,159.04 (o.33)
Kochi	Kerala,Lakshadweep	298.99 (0.35)	393.44 (0.29)	486.07 (0.24)	837.73 (0.25)	1396.41 (0.30)	167 (0.18)	2274 (1.30)	390 (0.31)	411 (0.27)	1418 (0.74)	467 (0.24)	8.539.64 (0,39)
Bhuvaneshwar	Orissa	261.66 (0.31)	365.26 (0.27)	395.52 (0.20)	395.52 (0.12)	794.60 (0.17)	68 (0.07)	125 (0.070	285 (0.23)	288 (0.19)	56 (0.02)	34 (0.01)	3068.56 (0.14)
Bhopal.	Madhyapradesh ,Chattisgarh	163.37 (0.19)	238.31 (0.18)	442.86 (0.22)	565.47 (0.17)	841.73 (0.18)	2093 (2.36)	569 (0.32)	1208 (0.99)	708 (0.47)	601 (0.31)	365 (0.19)	7795.74 (0.36)
Guwhati	Assam,arunachalpradesh,Meghala ya,Mizoram	41.74 (0.05)	41.74 (0.03)	52.38 (0.03	228.85 (0.07)	262.26 (0.06)	37 (0.04)	05 (0.00)	(0.02)	04 (0.00)	29 (0.01)	42 (0.02)	770.97 (0.03)
Jaipur	Rajasthan	17.79 (0.02)	248.65 (0.18)	326.32 (0.16)	2007.20 (0.59)	2201.99 (0.47)	149 (0.16)	161 (0.09)	714 (0.58)	233 (0.15)	233 (0.12)	268 (0.14)	6559.95 90.30)
Patna	Bihar,Jarkhand	2.74 (0.00)	3.34 (0.01)	1.78 (0.00)	1.78 (0.00)	1.78 (0.00)	25 (0.02)	123 (0.07)	41 (0.03)	09( 0.00)	68 (0.03)	272 (0.14)	549.42 (0.02)
Kanpur	Uttarpradesh,Uttarakandh	0.03	55.65 (0.04)	71.66 (0.04)	71.66 (0.02)	220.70 (0.05)	514 (0.580	635 (0.36)	167 (0.13)	150 (0.10)	679 (0.35)	432 (0.22)	2,996.7 (0.14)
States uncovered		24,436.86 (28.51)	35,650.00 (26.21)	53388.4 5 (26.87)	77183.11 (22.79)	93206.44 (19.86)	20543 (23.20)	62652 (36.01)	21833 (17.90)	50283 (34.08)	37,544 (19.85)	15811 (8.27)	4,92,530.86 (23.06)
Total		85,673.65 (100)	1,36,030.97 (100)	198659. 24(100)	338384.73 (100)	469364.60 (100)	88520 (100)	173946( 100)	121907 (100)	147518 (100)	1,89,197 (100)	1,91,063 (100)	21,35,313.47 (100)

Source: Compiled from Fact Sheet on FDI,RBI and other official sources.

The analysis of state wise location of FDI inflows in the study period reveals that the states which attracted more FDI in the initial years of liberalisation continue to do so even after quartercentury. That means the states which were the favorite locations for the foreign investors have remained so now also. The top 5 states viz. Delhi, Mmaharashtra, Karnataka, Tamilnadu and Gujarat which were attracting 3/4of FDI inflows to the country in 2005 have continued to dominate the scene throughout the decade and even they have strengthened their position 2011 onwards. The flow of FDI to these five states stood at 57.88^% in 2011, 72.33% in 2012, 59.69% in 2013, 71.47% in 2014, 82.48 in 2015 of the total FDI inflows to the country. The cumulative FDI

inflows to these 5 states in the decade 2005-2015 stood at 69.54% of total FDI flows to the country in the decade. On the other hand, the states which lagged behind in the initial stages viz.Kerala, Orissa, Madhyapradesh, Rajasthan, Bihar, UttarPradesh continues to remain same even now also. The combined FDI inflows of these states in 2005was less 1% of total FDI received by the country, in 2015 the status of these states continues to be the same with combined share of these states being 0.96%. The cumulative inflow of FDI to these laggard states in the decade stands at megre 0.99% of total FDI received by the country in the decade.

Fig-2



In the above map size of circles indicate the spatial distribution of FDI in the post –liberalisation period. Larger the size, higher is the concentration of FDI in particular state. A quick look at the maps during two periods shows that there is no change in the spatial distribution of FDI in India in the post-liberalization period. The statesviz.Maharashtra, Karnataka, Gujarat, Tamilnadu, Andhrapradesh, Delhi where much of FDI went in the early years of liberalisation continue to hold that position even after the decade.

## VIII. CONCLUSION

Thus, from the above analysis it can be concluded that though India is marching ahead in attracting foreign investment in the post liberalisation period. The geographical distribution of FDI within the country is skewed one. Then, what are the factors leading to the high concentration of FDI in fewpockets? The review of literature reveals that there is no single factor which could lead to the attraction of FDI to a particular state or region. Existences of MNC's to the reform measures initiated by the stateshave influenced the flow of FDI to

particular states or the regions. This, leads to the conclusion that capital liberalisation policies have thrust only on attracting foreign investment rather than taking care of its distribution in the country side by side. The result is the accentuation of regional disparities in the postliberalisation period. The states which have succeeded in attracting FDI are marching ahead in the economic development by reaping the benefits of FDIinflow. Whereas, the states lagging behind in this process have been unable to see any remarkable changes in their economic conditions even though country is reaping the benefits globalization. Therefore, it is high time that central government being in charge taking economic policy decisions shall focus on the policy measures that result in the fair distribution of FDI in the country. State governments at the same time should create conducive environment for the foreign investors to invest. In this context it is thought that following policy measures maybe worthwhile and result inthe fair distribution of FDI in the country.

- Govt.ofIndia should undertake the survey to identify the potentiality of each state or regions to attract FDI. The potential may be in the form of strong concentration of manufacturing activities, abundancy of natural resources, highly skilled labour force, locational advantages i.e. ports, airports, railways and road connectivity etc.
- Secondly, government should devise the policy based on this potentiality inculcating attractive elements. So that foreign investors feel to invest in a particular state or the region.
- 3. The state governments on their part should initiate reform measures to create conducive environment for the inflow of FDI.

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