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UNDERSTANDING REGIONAL DISPARITY IN FOREIGN DIRECT INVESTMENT FLOWS TO INDIA

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ABSTRACT

 $oldsymbol{\gamma}$ ince 1991 India has opened its economy to foreign Direct \mathcal{O} Investment (FDI), by creating peaceful situation for foreign Investments in various industries. This has helped the country to gear up the speed of GDP growth rate remarkably. Over the couple of decades, governments led to minimize trade barriers, lesser restrictions on FDI inflow. As a result of these policies the net foreign capital inflow into India has increased from US\$ 459 billion (bln.) in 1991 to around US\$ 176 billion (bln.) in 2012. This increase has influenced strong regional absorption, thereby depriving a large number of Indian states from the benefits of a liberalised FDI regime. It has created adverse effects on the society and has given rise to disparity of income and wealth. Therefore, in this paper the researcher has attempted to examine the main factors affecting regional distribution of FDI flows in India. The results reveal that market size, agglomeration benefits and size of manufacturing and services base in a state have significant positive impact on FDI inflows. While the impact of quality of labor is unclear, infrastructure, however, has significant positive influence on FDI flows. The efforts may include special thrust on the manufacturing, services and the infrastructure sectors, or effective policy or a combination of both.

KEYWORDS: FDI, Regional Inequality, Infrastructure, Quality of Labor, Capital Flows, Emerging Market.

INTRODUCTION

In the process of globalization, foreign direct investment (FDI) has emerged as one of the most important form of capital flows to developing countries. It is one of the ways of financial integration. FDI is often preferred over other forms of capital flows by the policy makers as it is considered to be of a more stable nature and also it does not form a part of the host country's external debt stock. Apart from constituting a mode of finance, FDI also tends to enhance economic growth through spill over of technology and knowledge in the host country. There is, however, large inequality in the distribution of FDI flows within the emerging market and developing economies. While some countries like China, India and Brazil have attracted bulk of the FDI flows, most of the others have failed to achieve the same.

After the economic reforms India liberalized the FDI policies. Within few years India became one of the major recipients of FDI flows among the emerging market economies in the world (IMF's Global Financial Stability Report, April 2012,). Mauritius has emerged as the most important investor of FDI to India over the last decade.

Economically advanced states have attracted the huge share of FDI flows to India. Economically advanced six Indian states, viz., Maharashtra, Delhi, Karnataka, Tamil Nadu, Gujarat and Andhra Pradesh together accounted for over 70 per cent of FDI equity flows to India during the

period April 1991 to June 2012 reflecting distinct signs of FDI absorption at the state level. The FDI policy in India was liberalised in 1991 as a part of economic reforms to attract the foreign capital and also to obtain benefit of the spill-over of technology and knowledge. Therefore, it is necessary to get maximum advantage from the FDI flows and ensure that the rising FDI flows do not lead to an increase in regional inequality. Hence, an attempt has been made in this paper to identify the main determinants affecting regional distribution of FDI flows to India. In this paper the researcher has also attempted to list out the possible policy implications for the national and the state governments.

REASONS FOR INTER-REGIONAL DIFFERENCES

The FDI has moved from developed to other developed or developing countries preferably in sectors like mining, tea, coffee, rubber, cocoa plantation, oil extraction and refining, manufacturing for home production and exports, etc. Gradually their operations have also included services such as banking, insurance, shipping, hotels, etc. With regards to location choice, the Multi National Enterprises (MNEs) tend to set up their plants in big cities in the developing countries, where infrastructure facilities are easily available. Therefore, in order to attract FDI flows, the recipients countries/regions were required to provide basic facilities like land, power and other public utilities, concessions in the form of tax holiday, development rebate, rebate on undistributed profits, additional depreciation allowance and subsidized inputs, etc.

Therefore, it emerges that while globalisation suggests that the location and ownership of production should become geographically more dispersed, other economic forces are working towards a more pronounced geographical concentration of such activity both within particular regions and countries. In the above theoretical backdrop, a survey of the empirical literature has been carried out highlighting selected country's experiences and the experiences in Indian context.

REVIEW OF LITERATURE

Internationally, there is a host of literature analysing the inter-country differences in FDI flows. Those studies have identified a number of factors affecting the location choice of the foreign direct investors. However,

many of those determinants are country-specific and would not apply to state/provincial level movement of FDI flows. The literature on regional distribution of FDI flows within a country is relatively scarce. There are few analytical studies on interstate differences in FDI flows in India.Goldar (2007) in his econometric analysis of plant location across 100 largest cities in 17 states of India revealed that city-size was an important factor influencing location decisions of industrial plants. The presence of a metropolitan city in a state also had a favourable influence, which probably captured the advantage in 'headquartering' the country operations of the MNEs. Morris (2007) argued that in India, the regions with the metropolitan cities had the advantage in 'headquartering' the country operations of MNEs and therefore, attracted bulk of the FDI flows. Nunnenkamp and Stracke (2007) found significant positive correlation of FDI with per capita income, population density, per capita bank deposits, telephone density, level of education and per capita net value added in manufacturing in India. Ramachandran and Goebel (2002) pointed out that Tamil Nadu had emerged as one of the most favoured investment destination in India on account of a number of advantages viz., pro-active policies of strong and stable government, transparent decision making process, sound diversified industrial infrastructure, sufficient power situation, huge availability of skilled manpower, high proportion of English speaking population. FDI in Tamil Nadu is dominated by investments in the IT sector.

The reasons for Inter-Regional Differences and the review of literature suggest that size and growth of the local market, the level of industrial activity, the growth of the services sector, the availability and quality of physical infrastructure, labor market conditions and quality of labor, policy environment and tax incentives, business climate and the presence of agglomeration economies most important determinants of the regional distribution of FDI flows within a country include.

FDI FLOWS TO INDIA

In the recent years FDI flows to India have picked up significantly and India have emerged as the second largest attracting FDI flows among the emerging market economies after China in 2008 and 2010 (Table 1).

Table 1 Emerging Market External Equity Financing						
	(in million US dollars)					
	2008	2009	2010	2011		
Sub-Saharan Africa	884	1,237	2,841	1,476		
Central and Eastern Europe	1,105	3,836	7,502	3,733		
Commonwealth of Independent	4,087	1,258	6,998	11,164		
States						
Russia	2,850	956	5,454	10,794		
Developing Asia	21,441	61,078	86,923	38,013		
China	11,974	39,854	45,448	23,499		
India	6,008	16,223	26,179	7,016		
Indonesia	2,213	1,286	6,317	2,229		
Malaysia	660	3,604	5,818	2,972		
Pakistan	109	—	93			
Philippines	125	0	960	596		
Thailand	257	111	1,991	1,554		
Middle East and North Africa	3,832	917	1,695	182		
Latin America and the	12,719	15,416	27,139	18,983		
Caribbean						
Argentina		—	73	3,576		
Brazil	10,435	12,963	24,633	9,029		
Chile	—	32	1,214	2,340		
Colombia	—	619	296	3,598		
Mexico	2,127	1,567	662	441		
Total FDI Flows	44,067	83,740	1,33,098	73,552		
Note: — indicates that the figure is zero or less than half of the final digit						
shown						
Source: Global Financial Stability Report, April 2012, International Monetary						
Fund						

The increase in FDI flows to India has been accompanied by strong regional absorption in the top six states, viz., Maharashtra, New Delhi, Karnataka, Gujarat, Tamil Nadu and Andhra Pradesh accounted for over 70 per cent of the FDI equity flows to India between 2008-09 and 2011-12. The top two states, i.e., Maharashtra and Delhi accounted for over 50 per cent of FDI flows during

this period. Maharashtra alone accounted for over 30 per cent of FDI flows to India during the same period. Although remarkable growth rates achieved by most of the Indian states as well as aggressive investment promotion policies pursued by various state governments, the concentration of FDI flows across a few Indian states continues to exist.

Table 2 FDI Equity Inflows to Indian States								
2008-09	2009-10	2010-11	2011-12	2008-09	2009-10	2010-11	2011-12	
(US \$ million)				(Per cent to Total)				
12,431	8,249	6,097	9,553	45.5	31.9	31.4	26.2	
1,868	9,695	2,677	7,983	6.8	37.5	13.8	21.9	
2,026	1,029	1,332	1,533	7.4	4.0	6.9	4.2	
2,826	807	724	1,001	10.3	3.1	3.7	2.7	
1,724	774	1,352	1,422	6.3	3.0	7.0	3.9	
1,238	1,203	1,262	848	4.5	4.7	6.5	2.3	
489	115	95	394	1.8	0.4	0.5	1.1	
0	224	416	130	0.0	0.9	2.1	0.4	
29	169	302	38	0.1	0.7	1.6	0.1	
44	54	451	123	0.2	0.2	2.3	0.3	
82	128	37	471	1.3	0.5	0.2	1.3	
343	31	51	33	0.3	0.1	0.3	0.1	
0	48	112	140	0.0	0.2	0.6	0.4	
9	149	15	28	0.0	0.6	0.1	0.1	
42	11	8	1	0.2	0.0	0.0	0.0	
0	0	5	24	0.0	0.0	0.0	0.1	
4,181	3,148	4,491	12,782	15.3	12.2	23.1	35.0	
27,332	25,834	19,427	36,504	100.0	100.0	100.0	100.0	
22,113	21,757	13,444	22,340	80.9	84.2	69.2	61.2	
14,299	17,944	8,774	17,536	52.3	69.5	45.2	48.0	
	2008-09 12,431 1,868 2,026 2,826 1,724 1,238 489 0 29 44 82 343 0 9 42 0 42 0 4,181 27,332 22,113 14,299	Table 2008-09 2009-10 (US \$ m) 12,431 8,249 1,868 9,695 2,026 1,029 2,826 807 1,724 774 1,238 1,203 489 115 0 224 29 169 44 54 82 128 343 31 0 48 9 149 42 11 0 0 4,181 3,148 27,332 25,834 22,113 21,757 14,299 17,944	Table 2 FDI Equit 2008-09 2009-10 2010-11 (US \$ million) (US \$ 0,097 12,431 8,249 6,097 1,868 9,695 2,677 2,026 1,029 1,332 2,826 807 724 1,724 774 1,352 1,238 1,203 1,262 489 115 95 0 224 416 29 169 302 44 54 451 82 128 37 343 31 51 0 48 112 9 149 15 42 11 8 0 0 5 4,181 3,148 4,491 27,332 25,834 19,427 22,113 21,757 13,444 14,299 17,944 8,774	Table 2 FDI Equity Inflows to2008-092009-102010-112011-12(US \$ million)12,4318,2496,0979,5531,8689,6952,6777,9832,0261,0291,3321,5332,8268077241,0011,7247741,3521,4221,2381,2031,26284848911595394022441613029169302384454451123821283747134331513304811214091491528421181005244,1813,1484,49112,78227,33225,83419,42736,50422,11321,75713,44422,34014,29917,9448,77417,536	Table 2 FDI Equity Inflows to Indian States2008-092009-102010-112011-122008-09(US \$ million)9,55345.51,8689,6952,6777,9836.82,0261,0291,3321,5337.42,8268077241,00110.31,7247741,3521,4226.31,2381,2031,2628484.5489115953941.802244161300.029169302380.1444544511230.282128374711.33433151330.30481121400.0914915280.04,1813,1484,49112,78215.327,33225,83419,42736,504100.022,11321,75713,44422,34080.914,29917,9448,77417,53652.3	Table 2 FDI Equity Inflows to Indian States2008-092009-102010-112011-122008-092009-10(US \$ million)2011-122008-092009-1012,4318,2496,0979,55345.531.91,8689,6952,6777,9836.837.52,0261,0291,3321,5337.44.02,8268077241,00110.33.11,7247741,3521,4226.33.01,2381,2031,2628484.54.7489115953941.80.402244161300.00.929169302380.10.744544511230.20.282128374711.30.53433151330.30.10481121400.00.2914915280.00.64211810.20.0005240.00.04,1813,1484,49112,78215.312.227,33225,83419,42736,504100.0100.022,11321,75713,44422,34080.984.214,29917,9448,77417,53652.369.5	Table 2 FDI Equity Inflows to Indian States2008-092009-102010-112011-122008-092009-102010-1112,4318,2496,0979,55345.531.931.41,8689,6952,6777,9836.837.513.82,0261,0291,3321,5337.44.06.92,8268077241,00110.33.13.71,7247741,3521,4226.33.007.01,2381,2031,2628484.54.76.5489115953941.80.40.5022444161300.00.92.129169302380.10.71.6444544511230.20.22.382128374711.30.50.23433151330.30.10.30481121400.00.20.6914915280.00.60.14211810.20.00.0005240.000.00.01005240.000.00.011810.220.000.00.0005240.000.00.011810.220.000.0	

Note: 1. FDI equity inflows include 'equity capital component' only.

2. Maharashtra includes Maharashtra, Dadra & Nagar Haveli and Daman & Diu.

3. Delhi includes New Delhi and part of UP and Haryana.

4. Tamil Nadu includes Tamil Nadu and Pondicherry.

5. West Bengal includes West Bengal, Sikkim, and Andaman & Nicobar Islands.

6. Chandigarh includes Chandigarh, Punjab, Haryana and Himachal Pradesh.

7. Madhya Pradesh includes Madhya Pradesh and Chhattisgarh.

8. Kerala includes Kerala and Lakshadweep.

9. Uttar Pradesh includes Uttar Pradesh and Uttaranchal.

10. Assam includes Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura.

Source: Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India.

VARIABLES Market Size:-

Above analysis revealed that the size of the local market, generally represented by the scale and growth of a region, is as one of the most important influencing determinants of location choice of FDI where potential demand for a foreign product is. Larger potential for local sales of foreign goods is the main attraction foreign investors. Local sales are generally more profitable than exports especially in large countries. Therefore, large and growing domestic market continues to remain a major determinant of market-seeking FDI flows. In this study, an attempt has been made to test the hypothesis that size of the local market has important implications for regional distribution of FDI flows to India. In this paper, per capita net state domestic product (NSDP) and population density of each state this two indicators are used to indicate the 'size of the local market'.

Industrial Linkages:-

It is often argued that a well established industrial base of regions is major attractive to foreign investment (Luo et al 2008). The sectoral orientation of FDI flows in India also reveals that the services sector has attracted a large share of FDI flows in the recent period (Table 3). It may be observed that financial and nonfinancial services alone accounted for 19 per cent of the cumulative FDI flows to India since April 2000. Taking into account telecommunication, computer hardware & software, construction and other services activities, the services sector in India has attracted around 50 per cent of FDI flows during the same period.

Quality of Labor:-

The theory suggests that criteria paribus, efficiency seeking foreign firms is expected to prefer lower wage locations to minimise their cost of production. However, foreign investors have started attaching importance to local labor quality. Since higher wage levels reflect higher labor productivity or higher quality of human capital, therefore, an investing firm which is looking for high quality and skilled labor may be attracted by the higher wage rate. It has been observed that higher the production technology level and technological content in the product, labor quality would assume higher importance. In this paper, wages per worker in Indian states have been used as an indicator of labor cost. Quality of labor is generally judged in terms of educational qualification of the workforce. To assess the quality of labor, literacy rate and per capita number of educational institutions for higher studies (Higher Education) in each state have been considered in the analysis.

Table 3 Sectoral Orientation of FDI Equity Flows to India							
	2008-09	2009-10	2010-11	2011-12	Cumulative Inflows (April '00 -April '12)	Percentage of Total Inflows (April '00 -April'12)	
			(US \$ million	i)			
Services Sector (Financial & non-financial)	6,138	4,353	3,296	5,216	33,428	19	
Construction Development			1,227	731	21,088	12	
Telecommunications	2,558	2,554	1,665	1,997	12,560	7	
Computer Software & Hardware	1,677	919	780	796	11,286	6	
Drugs & Pharmaceuticals		213	209	3,232	9,659	6	
Power	985	1,437	1,272	1,652	7,444	4	
Automobile Industry	1,152	1,208	1,299	923	6,965	4	
Metallurgical Industry	961	407	1,098	1,786	6,374	4	
Total						62	
Source: Department of Industrial Policy and Promotion (DIPP), Government of India.							

The explanatory variables considered in this context are the per capita mining output, per capita manufacturing output and per capita services output of each state.

Infrastructure:-

It is commonly argued in the economic literature that development and availability of better infrastructural facilities have a positive effect on the location choice of FDI firms. Dunning (1993) suggested that natural resource(include oil, mineral, raw materials and agricultural products) seeking FDI looks for foreign locations that possess natural resources and related transport and communication infrastructure, physical and human infrastructure, tax and other incentives together with the macroeconomic environment and institutional framework of the host country tend to play a more decisive role. Availability of transportation facilities to reach the nearest port or output markets have historically been considered as an important determinant of setting a business in a particular place. Most commonly used variables to represent transport infrastructure includes the presence of major ports, close to the coast location, availability and quality of road and rail network. Apart from transport, physical infrastructure in the form of availability of power, telephone density, access to finance, availability of civic amenities and degree of urbanization were also found to be important in the economic studies.

Agglomeration Benefits:-

The clustering of firms, which is also known as the "agglomeration" factor has emerged as an important determinant of regional distribution of FDI flows within a www.epratrust.com

country during the last two decades. The reduction in spatial transaction cost due to liberalisation of cross-border market and the changing characteristics of the economic activity has favoured the spatial bunching of firms engaged in related activities, so that each may benefit from the presence of the others, and of having access to localised support facilities, shared service centers, distribution networks, customised demand pattern and specialised factor inputs. In this study, one period lagged value of per capita stock of FDI in a state has been considered as independent variable to capture these agglomeration effects. A positive and significant coefficient of this variable means the presence of agglomeration benefits.

Policy Environment:-

The local policy environment is mainly characterised by policies towards foreign direct investment, tax structure and investment incentives provided by the local government to attract FDI. Over the past few decades, many local governments all over the world have been actively involved in improving the policy environment for promoting their countries as attractive destination for foreign investors. Those governments have adopted a host of measures viz., liberalisation of laws and regulations for the admission and establishment of foreign investment projects, provision of guarantees for repatriation of investment and profits, establishing mechanism for the settlement of investment disputes and extending tax incentives to facilitate and attract foreign investment flows to their countries.

In India, there is increasing competition to attract FDI flow in to state, many of the states are simplifying the

rules and procedures for setting up and operation of the industrial units. Single Window System has been opened in most of the states. Most of the states provide various kinds of incentives for attracting investment in the new industrial units as well as the existing ones. The incentives may be sector-specific or region specific. Based on the above analysis, a list of explanatory variables selected for the study is presented in Table 4.

	Table 4 List of Explanatory Variables Selected for the Study							
	Type of factor	Expected Sign						
А.	Market size	1. Per capita NSDP (PCy);	+					
		2. Population Density (PD):	+					
B.	Industrial	3. Per capita manufacturing output (MANP);	+					
	Orientation	4. Per capita mining output (MINP);	+					
		5. Per capita services output (SERP);	+					
С.	Infrastructure	6. Road route density (ROAD);	+					
		7. Railway route density (RAIL);	+					
D.	Quality of Labor	8. Wages per worker (WAGE);	-					
		9. Literacy rate (LIT);	+					
		10. Per capita number of higher educational institutes	+					
		(EDUP);						
E.	Policy	11. State's own tax revenue as per cent of NSDP (TAX)	-					
	Environment							
F.	Agglomeration	12. Per capita FDI stock (STOCKP)	+					
	benefits							

There may be many other factors having an influence on foreign firms' investment decision. However, in the absence of consistent and uniform cross-sectional as well as time series data, these factors have been left out of the empirical analysis carried out in the study.

ECONOMIC RESULTS OF THE STUDY

The empirical analysis carried out in this paper is based on state level panel dataset of India over the period 2000-01 to 2010-11 covering 31 states and union territories of India. Multiple sources have been used to obtain the data on the various explanatory variables used for the empirical analysis which is already mentioned in food notes and references.

Table 5 Regional Inequality among India States								
States	Per	Area	Per	Population	Rail	Literacy	Annual	State's
	Capita	('000	Capita	Density	Route	Rate	Wages	Own Tax
	FDI Flows	SqKm)	NSDP	(Persons	Density	(Per	per	Revenue
	(Rs)		(Rs)	per sq. km)	(Km per	cent)	Worker	as per
					1000		(Rs)	cent to
					sq. km)			NSDP
	2010-11	2011	2010-11	2011	2008-09	2011	2009-10	2010-11
A & N Island	0.0	8.2	76,883	46	0.0	86.3	65,831	Na
Andhra Pradesh	679.5	275.0	62,912	308	18.9	67.7	61,007	8.9
Arunachal Pradesh	0.0	83.7	55,789	17	0.0	67.0	Na	2.6
Assam	11.9	78.4	30,569	397	29.1	73.2	49,332	6.3
Bihar	2.4	94.1	20,708	1,102	37.3	63.8	43,362	5.2
Chhattisgarh	0.0	135.1	41,167	189	8.8	71.0	82,983	8.0
Delhi	7,274.0	1.4	1,50,653	11,297	123.7	86.3	69,820	6.7
Goa	9,424.7	3.7	1,68,572	394	18.7	87.4	1,26,788	7.3
Gujarat	545.5	196.0	75,115	308	27.2	79.3	76,316	7.8
Haryana	655.6	44.2	94,680	573	35.1	76.6	90,347	7.2
Himachal Pradesh	0.0	55.6	65,535	123	5.1	83.8	65,255	7.6
Jammu & Kashmir	0.0	222.2	37,496	124	1.1	68.7	57,579	8.3
Jharkhand	0.0	79.7	29,786	414	24.7	67.6	1,49,847	6.4
Karnataka	1,003.3	191.7	60,946	319	15.7	75.6	83,219	10.5
Kerala	50.0	38.8	71,434	859	27.0	93.9	54,994	8.9
Madhya Pradesh	288.3	308.2	32,222	236	16.1	70.6	82,730	8.8
Maharashtra	2,462.3	307.6	83,471	365	18.2	82.9	1,03,406	7.8
Manipur	0.0	22.3	29,684	122	0.0	79.9	35,356	3.0
Meghalaya	0.0	22.4	50,427	132	16.0	75.5	72,652	3.5
Mizoram	0.0	21.0	48,591	52	0.1	91.6	Na	2.1
Nagaland	0.0	16.5	52,643	119	0.8	80.1	19,880	2.0
Orissa	16.2	155.7	40,412	269	15.3	73.5	91,921	6.3
Puducherry	0.0	0.2	98,719	2,598	22.9	86.6	73,191	9.9
Punjab	83.0	50.3	69,737	550	42.4	76.7	59,388	8.5
Rajasthan	33.5	342.2	42,434	201	17.1	67.1	65,995	6.7
Sikkim	0.0	7.1	81,159	86	30.9	82.2	58,900	4.6
Tamil Nadu	847.7	130.0	72,993	555	31.6	80.3	68,422	10.0
Tripura	0.0	10.4	44,965	350	14.4	87.8	22,267	3.8
Uttar Pradesh	25.8	240.9	26,355	828	36.1	69.7	68,048	7.7
Uttarakhand	0.0	53.4	66,368	189	6.5	79.6	78,353	6.6
West Bengal	46.6	88.7	48,536	1,029	43.8	77.1	71,626	4.9

Note: Na indicates not available.

Source: The Census of India 2011; the CSO, GoI; the DIPP, GoI; the Reserve Bank of India; the CMIE; and the author's own calculations.

In terms of per capita FDI flows can be observed significant regional disparity across the Indian states and various geographic and socio-economic indicators considered in the study. The land size of across the states varies from 3,42,240 square km in the largest state of Rajasthan to only around 300 square km in the union territory of Puducherry. Population density in the national capital region of Delhi is as high as 11,297 persons per square km as compared to only 17 persons per square km in the north eastern hill state of Arunachal Pradesh. Per capita NSDP varies between Rs. 1,68,572 in Goa and Rs. 20,708 in Bihar reflecting wide regional disparity in income. Kerala has the highest literacy rate of 94 per cent, whereas Bihar has a literacy rate of only 64 per cent. While Delhi has the best rail connectivity in India followed by West Bengal, there is hardly any railway network in the north eastern hill states of India and the Andaman and Nicobar Island. Wage rates also vary substantially across the states with annual wages per worker being the highest in

Jharkhand (Rs. 1,49, 847) and the lowest in Nagaland (Rs. 19,880). There is also significant difference across the states in terms of taxation. The State's own tax revenue as a per cent of NSDP is the highest for Karnataka at 10.55 per cent and the lowest for Nagaland at 2.03 per cent.

The estimation results indicate that the signs of estimated coefficients for most of the explanatory variables are in accordance with the a priori expectation with only a few exceptions. As regards the market size, the coefficient of state per capita NSDP is positive and significant at 1 per cent level in Model 1. Per capita NSDP has an explanatory power both as an indicator of regional purchasing power and the level of economic development in a state. The coefficient of population density is positive and significant at 1 per cent level in Model 1, Model 2 and Model 3. This clearly indicates that the FDI flows to India are market seeking in nature.

The estimation results confirm that economic structure of a state are reflected in terms of industrial

orientation plays an important role in attracting FDI flows. For example, per capita manufacturing output, this is an indicator of the level of industrial activity in a state, has a strong positive influence on FDI flows. This supports the view that new investments move to regions with strong industrial linkages. Similarly, the coefficient of per capita services output is positive and significant at 1 per cent level in Model 2 indicating states which have higher services sector activity attract higher FDI flows. This is in confirmation with the trend observed in the sectoral distribution of FDI flows to India. The impact of per capita mining output on FDI flows is, however, insignificant though its coefficient is positive in Model 4.

The impact of quality of labor, wages seem to have a negative impact on FDI flows, the coefficient of annual wages per worker being significant in Model 1 and Model 2. This is in line with the theoretical expectation that FDI flows are attracted by lower cost of labor. In comparison to cost of labor, the impact of quality of labor on FDI flows seems to be less important. The variable representing per capita number of higher educational institutes in a state has a positive impact on FDI flows but lacks statistical significance (Model 3). In the same model, the coefficient of literacy rate is negative, indicating the level of basic education in a state has little role to play in attracting FDI flows. This reflects the fact that some of the states with very high literacy rates viz., Andaman & Nicobar Islands, Himachal Pradesh, Mizoram, Puducherry, Sikkim and Tripura do not attract much FDI flows.

The impact of infrastructure on FDI flows to India is positive. The railway connectivity has a strong positive impact on FDI flows in Model 2 and Model 4. The positive contribution of road transportation, however, lacks statistical significance in Model 1. This is shown the same results of the earlier studies.

Table 6 Regression Results								
Explanatory Variables	Model Specification 4	Model Specification 3	Model Specification 2	Model Specification 1				
С	-5380.34 ***	-510.27	-3249.58 **	-597.49				
	(-4.59)	(-0.13)	(-1.98)	(-0.58)				
РСҮ				0.05 ***				
				(4.23)				
PD		4.98 ***	3.83 ***	4.02 ***				
		(8.04)	(5.79)	(5.86)				
MANP		0.14***						
		(2.69)						
MINP	0.09 (1.58)							
SERP			0.11 ***					
			(7.02)					
ROAD				0.01 (0.02)				
RAIL	260.86 ***		128.86 **					
	(4.99)		(2.4)					
WAGE	-0.01		-0.04 ***	-0.03 **				
	-0.99		(-3.97)	(-2.54)				
LIT		-21.11						
		(-0.41)						
EDUP		0.08						
		(0.05)						
TAX		-296.15 **	-286.44 **	-294.01 **				
		(-2.30)	(-2.42)	(-2.39)				
STOCKP	0.27 ***							
	(17.83)							
Total pool (balanced)	310	310	310	310				
observations								
R-squared	0.73	0.55	0.60	0.56				
Adjusted R-squared	0.70	0.49	0.55	0.50				
Note: Figures in the par 10% level, respectively.	rentheses represent the re	spective t values. ***, ** a	and * denote significance	e at 1%, 5% and				

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The coefficient of state's own tax revenue as per cent of NSDP is negative and significant in Model 1, Model 2 and Model 3, which supports the argument that FDI prefer states with lower tax rates.

One period lagged value of per capita FDI stock has a strong positive impact on FDI flows, indicating the importance of agglomeration effects (Model 4). This confirms that cumulative FDI flows in a state has important demonstration effect on decision making of new FDI entrants, i.e., new foreign investment tends to enter into areas with already high levels of FDI flows. There are, however, cases, where MNEs have shown investment interest in states with lower FDI penetration.

IMPLICATIONS

The findings of the current study reveal that FDI to India has increased significantly in the last decade. However, the growth in FDI flows has been accompanied by strong regional attention. It has also found out in this study that significant disparity the regional distribution of FDI flows in India. Therefore, we need to design the national FDI policy in such a way that a sizable portion of FDI flows to India move into the laggard states. The indirect way is to provide a boost to the overall economy of the less advanced states, with special thrust on the manufacturing, services and the infrastructure sectors so

that they themselves become attractive to foreign investors.

- 1. Set of policies may be considered in the Indian context to direct part of the FDI flows to the states, which are not receiving much of FDI flows at present.
- 2. It is essential for the less industrially developed states to catch up with the developed ones to attract larger share of FDI flows. The National Manufacturing Policy (NMP), recently announced by the Government of India is a welcome step and may help in this direction if properly implemented.
- 3. The services sector has attracted a large share of FDI flows to India in the recent period. The econometric analysis also reveals that services sector has a significant positive impact on FDI flows. Therefore, the manufacturing policy in India needs to be complemented by a compatible services policy.
- 4. It is essential for the central and the state governments to take coordinated policy efforts towards creating a more favorable policy environment by simplifying the land acquisition procedure and reducing the delay in the approval mechanism.

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 There has been a clash in liberalising FDI in retail, insurance, pension and aviation sectors in India. It is necessary for the policy makers should have to take care in formulating its FDI policies so as to reduce the regional disparity rather than frustrating it.

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